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Open Access and Closed Discourses

Constructing Open Access as a 'Development' Issue

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Submitted for the Degree of Doctor of Philosophy

Department of Information Science
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Declaration

I grant powers of discretion to the University Librarian to allow this thesis to be copied in whole or in part without further reference to me. This permission covers only copies made for study purposes, subject to normal conditions of acknowledgement.

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Abstract

This thesis investigates the connection between open access – the free online availability and distribution of scientific and scholarly publications – and the 'developing world' from a post-development perspective. It takes a discourse analytical approach, drawing predominantly on Michel Foucault's understanding of discourse. It aims to answer the following questions:

- Which notions of science, of development and progress, of knowledge as well as of information and technology are capitalised on in the open access debates and in which way are they shaped as a consequence?
- Which discursive effects can be established, what are the results and of which kind are they?

The thesis is divided into six chapters, chapters 2 to 5 are grouped into two parts.

In the introduction (chapter 1) the general problem space is outlined, the connection between the open access movement and the 'developing world' is established; the research approach is briefly sketched, followed by a presentation of the research questions. Furthermore, the relevance of the study for Library and Information Science is discussed.

Chapter 2 introduces the notion of discourse. It contains a discussion of the Foucauldian concept of discourse in relation to the notions of knowledge, truth, and power, as well as resistance, governmentality, and pastoral power. The manifestation of discourse in language is discussed with reference to Michel Pêcheux. The way in which discourses are dispersed unevenly in society is examined. It concludes with a presentation of the concept of the discursive procedure, which forms the basis for the analyses.

Chapter 3 introduces post-development theory, specifically focusing on development discourse. It presents and problematises the concept of development, of poverty and ignorance, as well as of science. The historical foundations of development discourse and the role of science and technology in it are examined.

Chapter 4 investigates the representation of open access in its relation to development. It is based on a corpus consisting of 38 articles and similar publications and 5 statements and declarations. The latter are also examined from a genre perspective. The following discursive procedures are identified: (1) Leaving a blank or defining the undefinable: The elusiveness of the 'developing world', (2) Technologism and technological determinism, (3) Economism, (4) Scientific centralism and scientism, (5) Temporal distancing. It concludes with a discussion of the guiding metaphor, the divide.

Chapter 5 investigates how open access is debated in the context of development. It draws on a two-week long email debate organised by a development institution in 2006. 146 postings by 49 participants are included in the analysis. The following discursive procedures are identified: (1) Technologism, (2) The role of the profession: mediation, translation, and control, (3) Rural people and the lack of education, (4) Developmentalism and anti-developmentalism: Positioning oneself in and against development. It concludes with a discussion of the guiding metaphor, the barrier, as well as of identity construction.

The concluding chapter 6 is concerned with providing a sum-up of the analyses with a view to answering the research questions. It considers a possible future for the open access movement in its relation to the 'developing world' and concludes with a brief discussion of issues relevant for future research.

The main findings suggest that the 'developing world' is constructed around the coordinates provided by mainstream development thought. Open access is inserted into its discursive repertoire as a problem of development, a tool for its delivery, and its measure. The dominant understanding of information adheres to a sender/receiver model. However, ruptures occur in significant places. This requires a partial re-positioning of the way in which development is framed and of open access' role in it.

1 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, 2002)

These sentences open the *Budapest Open Access Initiative* which with 'open access' gave in 2002 a name to a new phenomenon in scientific publishing and scholarly communication that had emerged in the preceding decade. As 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, such as universities and research libraries (cf. Tenopir & 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 (cf. White & Creaser, 2004); 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 open access. Superficially, open access 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 *Budapest Open Access Initiative*, quoted above, would have it and has more, or everything, to do with the symbolic capital publications accrue (cf. Cronin, 2005, pp.117 et seq.; Herb, 2007). Secondly, in comparison to print, the internet has the potential to make the distribution of documents

relatively inexpensive. Numerous definitions of what constitutes open access 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 open access journals or through the archiving of material published elsewhere in open access 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, data sets.

In many ways, the primary relevance of open access might not lie with what is considered the centre of the system of science and its actors. In its core open access is about extending access to scientific information and documents, 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 not least 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 open access 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. This perception is not least enforced and maintained by the way in which bibliometric and scientometric studies often represent the interlinking of articles as a factual representation of the interlinking of knowledge (cf. Cronin, 2005, pp.71 et seq.). Despite the emergence of post-kuhnian science studies and strong voices of criticism (cf. Felt et al., 1995, pp.122 et seq.), not least and in particular from feminist quarters (e.g. Haraway, 1991a, 1991b; Harding, 1991, 1998, 2006), perceptions of linear progress and the simple cumulative nature of science and specifically scholarly publishing still contribute significantly to the terminology in which many current debates – especially in Library and Information Science and Librarianship – are couched (cf. Frohmann, 2004). Also, the open access debates seem to draw to a considerable degree on this idea of science and are largely rooted in an understanding of science and scholarly communication that adheres to this depiction. They rely to a large degree on what Bernd Frohmann (2004, p.46) calls "epistemological models of science's formal literature". Moreover, while they claim to pose a challenge to the scholarly publishing system, they never appear really to break away from its main tenets (cf. Esposito, 2004), and in turn from the central tenets of science and academic research itself. To establish how this surfaces is one of the central intentions of this thesis.

Yet at the same time, as the opening sentences of the *Budapest Open Access Initiative,* quoted at the outset, illustrate, open access 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 *Budapest Open Access Initiative*, 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 (cf. 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 open access. Furthermore, by definition, being part of a discipline means having access to what is considered a field's core literature, through formal or informal channels, even if it is the paradox of science's 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, the most interesting aspects of open access lie less with the scientific community at what is considered the centre of science, but with its margins and fringes, that is with types of documents that do not form part of the official and formal literature (cf. Esposito, 2004) 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'.

The 'developing world's' role in the open access debates and the way it is depicted is particularly interesting. In it the issue of science and progress re-appears in a new light that links into the continuation of an established theme and brings it together with newer images of networking, openness, globalisation, or an information society. This is achieved in particular ways and leads to the very question that lies at the outset of this thesis, namely how the 'developing world's' 'information needs' and its need to be connected to the system of science are negotiated and constructed in the open access debates, and how the strategies leading to these constructions reveal a number of interests and conflicts.

Before proceeding it is necessary to briefly clarify the use of the terms 'developing world',

'developing country' or related concepts for the time being. It is important to note that when speaking about 'developing countries' in the given context this does not necessarily mean to imply certain individual countries, categorised as such according to one of the various available classifications. Since it is one fundamental aspect of my project to establish how notions of development and the 'developing world' are negotiated within the open access debates, such an emphasis would deter from the processes at play in these constructions. One way to perceive of 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 & Wigen 1997, p.ix)

As such they will here be understood as relating to a particular historical and epistemological position. They are elements of popular and wider political or economical 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 'developing' and 'developed countries' and similar terms will be surrounded by single quotation marks throughout. [1]

1.1 Open Access for the 'Developing World'

1.1.1 Emerging Issues

Significantly the coinage of the term open access itself in 2002 took place in the context of a development initiative in the wider sense of the word. The *Budapest Open Access Initiative* 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', or to be more precise, "areas of the world where

1 This concept of meta-geography of course also applies to other related notions such as 'Centre' and 'Periphery', 'First' and 'Third World', or most obviously, I believe, the 'North'/'West' and the 'South'. These are sometimes used interchangeably with the dichotomy 'developing' and 'developed world', sometimes in opposition to it. However, they are equally the result of discourse, political or economical. I will not surround the term *development* itself with quotation marks, as is often done. The main reasoning behind this is to keep the text reader friendly.

the transition to democracy is of particular concern"[2] (OSI-about, no date). Since then the Soros Foundation has developed into one of the main funding bodies behind open access and it has financed countless workshops and conferences and sponsored such highly visible projects as for instance the 'Directory of Open Access Journals' (DOAJ) and the 'Open Access Newsletter'. It is intriguing in this context that the Soros Foundation's Open Society Institute is specifically dedicated to promotion and financial support of the furthering 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-FAQ, no date). 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. Furthermore, science is of course based on the very claim that it has the monopoly to truth. This particular modernist view of science and of its universality has come under considerable attack already by Thomas Kuhn (1996 [1962]) and later also with regard to its role in the process of colonialism and later of development. It has been associated with the destruction of other knowledge systems, and in particular those that have been relegated to a status of *indigenous* knowledges (cf. Harding, 2006; Marglin, 1996; Nandy, 1988, 1992). Without going into further detail, at the very least it seems intriguing that one of the prime organisations behind the open access movement, is for one located in the wider field of development initiatives, and furthermore that it had been set up in the very name of one of the most prominent philosophers of science.

In the vicinity of librarianship open access emerged, and is frequently still discussed, 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, and here especially in Africa (Muthayan, 2004; Willemse, 2002), which during the same time have also undergone severe 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. For the time being, it should suffice to present them with a broad brush. They allude to many of the relevant issues that underlie the debates and which will re-appear continuously throughout this thesis. Thus, a brief sketch will allow to gain

2 including the United States (OSI-about, no date)

an overview over what is at issue and also what is thought to be so. This will serve to introduce the major factors considered relevant in the literature on open access as well as to point to some conflicts. It will also allow highlighting some of the problematic aspects that need to be considered in more detail.

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. Arunachalam, 2003; Cockerill, 2008; Chan & Costa, 2005; Chan & Kirsop, 2001; Chan, Kirsop & Arunachalam, 2005; Deschamps, 2003; Durrant, 2004; Ghosh & Das, 2007; Ramachandran & Scaria, 2004; Scaria, 2003; Smart, 2004; Weitzman & Arunachalam, 2003;). 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 these usually more prestigious material (e.g. Durrant, 2004; Scaria, 2003; Smart, 2004). Furthermore, at times concern is voiced with regard to the so-called author-pays model, in which the publishing costs are covered by publication fees, and which could potentially disadvantage authors from 'developing countries' even more than subscription based journals (cf. Horton, 2003a). 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 open access is perceived of as having the potential to enable or to intensify (e.g. Chan & Costa, 2005; Chan, Kirsop & Arunachalam, 2005; Deschamps, 2003; Durrant, 2004; Smart, 2004).

A further connection between open access and the 'developing world' is made via what has been termed the '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. In some instances it also forced libraries to restructure their budget in a way 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 (e.g. Chan & Costa, 2005; Chan, Kirsop & Arunachalam, 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 open access they would still be used by readers in libraries, which had cancelled their subscriptions, or which had never subscribed to them (e.g. Chan & Costa, 2005). Of course, this also applies to journals that independent of the serials crisis, are excluded from collections and bibliographic databases, which usually show considerable bias against publications from 'developing countries' (e.g. Narvaez-Berthelomet & Russel 2001;

Sancho 1992). More generally, open access is perceived of as potentially extending readership and reach of scientific publications from the 'developing world' and thus as increasing its visibility and impact (e.g. Arunachalam, 2003; Davison et al., 2005; Deschamps, 2003; Durrant, 2004; Kirsop, Arunachalam & Chan, 2007; Rajashekar, 2004; Ramachandran & Scaria, 2004; Smart, 2004; Scaria, 2003; Tenopir, 2000; Weitzman & Arunachalam, 2003). Whereas it is at times somewhat vague as to what this impact is and how it would manifest itself.

Famously, the move to provide free online access to a large part of its scientific journals was undertaken at a nationally and internationally orchestrated level by Brazil in form of the SciELO programme (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. Based on a very stringent policy and a strict system of control, which measures quality largely by reference to the mainstream international bibliographic databases, SciELO provides a methodology as well as an online platform for making available the full-text of selected scholarly journals from the region (Marcondes & Sayão, 2003). Most of the SciELO journals are concurrently published in print. Although SciELO includes literatures spanning from psychology via literature, linguistics and the arts to engineering, by far most of its journals are in medicine and health related areas. Its main funding bodies are large organisations active in health politics and its methodology was originally developed in cooperation by BIREME (Latin America and Caribbean Centre on Health Sciences Information), PAHO (PanAmerican 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 open access 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 open access 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 open access debates. Furthermore, the biggest free-access initiative, HINARI (Health Internetwork Access to Research Initiative), 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. Moreover, HINARI is also funded by the WHO. Although not considered to be open access in the actual sense of the word - which requires unrestricted free access for everyone, while here it is granted only to certain groups and dependent on a country's GNP – 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 open access 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 open access in general – for instance, BioMed Central, the biggest commercial open access publisher is situated in this field – the potential of open access for medicine and health care in the 'developing world' is still often emphasised separately (e.g. Cockerill, 2008; Chan & Costa, 2005; Chan, Kirsop & Arunachalam, 2005; Godlee et al. 2004; Smart, 2004; Weitzman & Arunachalam, 2003). Furthermore, despite voices of criticism, not only are notions of the 'developing world' often still primarily entangled with images of suffering and disease (cf. Escobar, 1995a; Nandy & Visvanathan, 1990), also, as Ashis Nandy and Shiv Visvanathan (1990, p.145) maintain,

> the language of modern medicine has contributed handsomely to the language of 'development'. Pathology, sickness, treatment, diagnosis, and cure have all been important terms in that part of the language of the body politic which constituted the main discourse on development.

Correspondingly, not only are many of the open access 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 still draw on this vocabulary and almost invariably enforce the perception of the poor, diseased and weak peoples of a global 'South'.

In short, open access is said to benefit researchers in 'developing countries' in their function as readers, with an interest to have as much of the current ('western') literature available as possible, as well as in their role of authors, with the aim to disseminate their findings and papers as widely as possible. Other beneficiaries are said to be teachers, students, doctors and health care workers, and as a consequence the people of the 'developing world' in general, and ultimately the economy of the respective countries. Open access is thought to benefit the 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.

1.1.2 Open Access as a Movement

Since the *Budapest Open Access Initiative* was issued in 2002 the number of charities, development agencies, and funding bodies that became, at least to certain degree, involved in the politics of open access has increased steadily.

Concurrently, the number of initiatives, petitions, declarations, and policy statements has

increased equally consistently (cf. chapter 4.2.2). They are also the documents setting out the definitions of open access, its conditions and requirements as well as its goals. These can be of a very all-encompassing nature and can come in a variety of guises.

Besides the *Budapest Open Access Initiative*, the most relevant and most cited ones 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 *Bethesda Statement* was the result of a meeting at the Howard Hughes Medical Institute in Chevy Chase in the USA, while the *Berlin Declaration* was originally issued by the German Max-Planck Society. The *Salvador Declaration* (SD, 2005), drafted on the occasion of the 9th World Congress of Health Information and Libraries in Brazil, was formulated specifically with 'developing countries' in mind.

The *Budapest Open Access Initiative's* envisioned effect of open access 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 (BOAI, 2002).

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" (BS, 2003). 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" (BD 2003). 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 open access. Here it is simply said to "[mean] unrestricted access to and use of scientific information" (SD, 2005).

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 powerful images that tie open access to specific discourses, and whose use in this context has implications. They also clearly highlight the fact that open access first and foremost has to be regarded as a movement. It is being tied to issues that position it in the realm of certain types of political engagement and it cannot be disconnected from the various institutional contexts from which it emerges. This perception is re-enforced by a closer look at the constantly growing literature on open access, which consists largely of opinion pieces, studies

carried out in the name of specific interest groups, how-to guides, and policy documents.[3] Furthermore, a variety of national and international organisations, charities, foundations, various funding bodies, and even governments have outlined policies, signed declarations, advanced policy statements or else got involved in the wider politics of scientific information that can be said to have one current focal point in open access. This reaches for instance from the already introduced Soros Foundation, to the Wellcome Trust in the UK, the International Federation of Library Association and Institutions (IFLA), the National Institute of Health (NIH) in the USA, or the Chinese Academy of Sciences as well as the the European Union, and the OECD.

Thus, the aims pronounced in the numerous open access petitions and mission statements and in the various reports and policy papers draw on discourses attempting to tie the need for open access to a number of factors that position it as an issue of ethical 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 ways. It is the aim of this thesis to examine how this is achieved and by doing so contribute to questioning some of the underlying reasons and consequences.

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The open access movement appears to tie heavily into long-established discourses, while at the same time it draws on and shapes current ideas about openness, the commons, an information society, and not least information inequality. In this sense, open access also provides a focal point for certain aspects of several wider developments that are particularly relevant in contemporary society and which cannot be disconnected from their histories and conditionalities. 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. Of course, these are grand themes and it would be presumptuous to aim at achieving a comprehensive investigation, neither do I pretend that I am in any position to attempt such a project. However, in its debates and documents and in the language it draws on, the open access movement brings these issues into close proximity to each other. Specifically, it ties into several discourses that contribute their pre-established meanings from other contexts and that are already bound up with strong agendas, most prominently science and development

3 See also the Electronic Scholarly Publishing Bibliography: http://web.bilkent.edu.tr/mirrors/sepb/models.htm [April 8, 2008]

as well as talk about what is commonly called an 'information society' or a 'idigital divide'. These are brought together in the open access debates and by disentangling them the issues they contain can be brought the fore. This allows also establishing more clearly how they interlink and act on each other and to which effect.

In particular, the notions of development and progress, of science and of knowledge as well as of information and also technology that are introduced and in turn also shaped in the ways open access is negotiated are interesting. This insofar, since these are much contested concepts and their use points most precisely to the conflicts that arise from the convergence of the well-established dominant discourses of science and development with counter-discourses also inscribed into them that aim to resist further marginalisation. For instance, this becomes particularly obvious when ideas about indigenous knowledge or local science filter through in the debates and their role in their relation to mainstream science becomes an issue in need of justification. A focus on the role of the notions knowledge, progress and development, science, information and technology within the open access debates and also on the at times shifting meanings that are assigned to them by different actors opens up a way to examine how the 'developing world's' needs for (scientific) information are constructed in these debates. This also allows to pinpoint the images and occasionally conflicting roles of 'developing countries' within the open access movement as well as to examine in which ways the roles that are carved out by actors from 'developing countries' themselves adhere to and reproduce these constructions and in which ways they attempt to open up points of resistance.

To some extent the representation of open access, specifically in relation to development, can be interpreted as a continuation of a data view of science. It 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 based on assumptions that are problematic for various reasons and which usually ignore the instrumental relationship science had with colonialism and that 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 a teleological or 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 already in the 19th century science was seen as a sign of civilisation (Escobar, 1995a, p.36) and

many, as Ania Loomba (2005, p.24) reminds us "equated the advance of European colonisation with the triumph of science and reason over the forces of superstition, and indeed", she adds, "many colonised people took the same view."

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The ideas of science and of societal change that arrive from these assumptions 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 (cf. 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 fundamental causal connection exists between scientific advances and mostly positive social progress and that more science and increased transfer of science and technology can only benefit society (cf. Harding, 2006, p.1 et seq.). Crucially, these perceptions still contribute to shaping the practices of these bodies. This becomes especially evident in the context of major international summits, one of the arenas where open access is debated. For example, in the context of the 'World Summit on the Information Society' the relevance of science and 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 open access quite easily found its way into the declaration of principles (WSIS, 2003a) as well as the plan of action (WSIS, 2003b). In their presentation of the "Facts of Open Access", the pre-summit working group on scientific information concluded:

> Support to Open Access and Open Archives would be a tremendous and practical achievement of the WSIS, generating savings in advanced countries, and allowing transition countries to access scientific knowledge crucial for a sustainable development. (WSIS-IS, no date)

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 World War II (Escobar, 1995a; Esteva, 1992; Rist, 2006). It has developed into a standard theme in the language of development institutions and to this day it appears in documents issued by these and similar organisations in ways that have changed surprisingly little since the 1940s. In certain ways, the role open access is assigned and the manner in which it is depicted in this context also has to be seen as a continuation of these themes and the policies connected.

1.2 Framing the Research Approach

The relation between science, knowledge, and development and thus the 'need' to be connected to the system of science is negotiated in various arenas and along very particular lines. As I mentioned before, as a topic it has been present in one form or another since the emergence of a specific development discourse in the 1940s and 1950s (cf. Escobar, 1995a; Esteva, 1992) and arguably it had its precursors in colonial times (cf. Grove, 1990; Pakdaman, 1994; Harding, 1998, 2006). It has seen a recent resurgence, frequently connected to the wider changes associated with the internet, but in particular also to the continued integration of markets and cultures, commonly referred to as globalisation. Globalisation has been said to have taken over from the more traditional, largely state-oriented concerns of development, in particular since the end of the cold war (cf. Mestrum, 2002; Rist, 2006). In some ways this gave way to a modification of development discourse and it certainly changed and decreased the role of states which dominated development practice earlier (cf. Hettne, 2002). Essentially however, it continues to operate along the same coordinates (cf. Tamas, 2004) and it remains a discourse and way of imagining the division of the world, which has become deeply ingrained in the collective imagination.

The institutional arenas, within which the open access debates take place, are associated with particular ways of speaking and are generative of certain discourses. To understand the significance of their assumptions and consequences, it is necessary to take these discourses seriously as acts of producing meaning through use and thus as shaping reality. This also means to continuously consider their historical, institutional, cultural, and political contingencies, in other words, the social places from which they are pronounced. It is however particularly crucial to consider their interconnectedness and the fact that discourses do not exist in isolation, but always only in relation to each other. The 'open access' movement arbitrates between different institutional settings and in its debates it has to be seen as uniting their various interests and ways of speaking.

Open access relates to a number of, what could be called, discursive strands that are relevant in this regard. It is particularly intriguing to observe how open access 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, open access 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, open access, more than just by virtue of its name, also ties into the current rhetoric of openness and the commons, which is represented most prominently

by the open source and free software movements. This brings it into the argumentative proximity of what is commonly perceived of as a counter movement, which positions itself in opposition to contemporary trends. Thus, open access ties into at least two discursive spaces, which, at least at the surface, seem to be if not fundamentally opposing, so 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 symbol and expression of 'western' dominance and its quite concrete consequences (e.g. Alvares, 1992a ; Harding, 2006; Loomba, 2005); and another, which stands for opposition and resistance. This provides for an interesting starting point, yet as I hope to be able to show, neither conflicts nor alliances lie always where they appear to at first. However, significantly this also indicates that notions of conflicting discourses that merely relate to opposing sets of arguments or standpoints are too simplistic to contribute to an understanding of the discursive structures and influences that are at play in these settings.

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To investigate the discursive systems within which open access's connection with development is situated, I draw predominantly on Michel Foucault's understanding of discourse (e.g. Foucault 1972a, 1972b, 1991) and employ it as a meta-theoretical framework. Foucault's theories open up a way which allows for a critical re-assessment of the normative and that which usually goes unquestioned. It lends itself particularly well since it incorporates a number of elements that are relevant in the given context. Especially the heterogeneity of discourse as well as its historical and institutional conditionalities and with it of knowledge and truth themselves are fundamental. In addition, Foucault's understanding of power as a productive practice, which always already incorporates resistance, as well as his conceptualisation of different forms of power techniques, enable to consider the relations of the various positions in the current negotiations beyond the limitations inherent in a mere oppressor/oppressed scheme. Moreover, the use of Foucauldian concepts has some tradition in Library and Information Science as well as in development theory. More specifically, Foucauldian theories form the basis for a number of critical approaches that have been subsumed under the name post-development (e.g. Escobar, 1995a; Ferguson, 1990; Rist, 2006; Sachs, 1992a). These are discourse analytical and post-structuralist approaches in general that have emerged since the early 1990s and which, in order to make visible the power structures within it, critically assess development by positioning it as a discourse and by focusing on its practices, specifically also language practices. This perspective allows contextualising open access' engagement with development and we will see that the connection between the two is in fact built on a long tradition.

However, while Foucault's concepts provide for the meta-theoretical framework, I supplement this by introducing elements of more linguistically oriented approaches to discourse and to its analysis. This serves to delineate more precisely the actual manifestation of discourse in language and to develop a suitable instrumentarium upon which to base the analysis of textual artefacts.

1.3 Research Questions

In short, the emphasis is on issues that lie behind expanding access to scientific literatures as they are shaped in sets of interdependent discursive procedures, and on the consequences that might lie beyond the seemingly narrow field of scholarly communication amongst scientists at what is considered the core of 'western' science. To clarify, the focus is not on an 'open access' discourse, but on ways in which pre-established discourses are drawn on in the open access debates when seen in relation to the 'developing world', and on how these alliances mobilise specific perceptions of development, science, knowledge, information and technology, which consequently lead of the shaping of certain ideas about the 'information needs' and also the knowledge of those that are seen as excluded. Thus, the questions that need to be addressed can be broken down as follows:

Which notions of science, of development and progress, of knowledge as well as of information and technology are capitalised on in the open access debates and in which way are they shaped as a consequence?

> Which discursive formations are drawn on to authorise the use of these notions and in which ways?
>
> Which discursive procedures can be identified that emerge from the convergence of specific statements?
>
> Which contexts and stakeholders dominate and in which ways contribute their specific institutional discourses and interests to the emerging discursive procedures?

Which discursive effects can be established, what are the results and of which kind are they?

> What are results and effects of the ways in which these notions are employed and where might the conflicts in these uses lie?
>
> How do they contribute to the ways in which the 'information needs' of the 'developing world' are constructed?
>
> And in turn, how do they shape the ways in which the information or knowledge of the 'developing world' and its people are constructed?

1.4 Contribution and Relevance for Library and Information Science

Issues of formal scholarly communication and in particular of serials are long-standing domains not only of librarianship, but also of LIS research (Borgman, 2000). Open access emerged from changes in the ways in which scholarly journals and articles are produced, used, archived, and disseminated in an online environment. As such, it has always been a concern of librarianship and as an issue and a possibility it arose as much from the scientific community as it did from the concerns of librarians, if not more so.

Some would go as far as suggesting open access was the librarians' way to get back at the publishers. Be this as it may, it is clear that from the beginning, courtesy of the so-called serials crisis, open access was an issue that librarians were strongly concerned with and to this day it has remained a key topic, which continues to be significant for the field. Thus, it is neither coincidence nor surprise that IFLA issued a statement in support of open access, that Lund University Libraries are one of the most active European institutions in the area, that the Salvador Declaration was issued at the World Congress on Health Information and Libraries, or that so many of the organisational signatories of the *Budapest Open Access Initiative* are libraries or library associations. Granted, numerous other institutions – not least publishing houses, universities, research laboratories, academies of science, to name just a few – are equally strongly involved in the movement, as are individuals who do not come from a library background. Yet, it seems safe to say that the link between librarianship and open access is a strong one and that for obvious reasons libraries and librarians are very active in the area. It is after all they who are responsible for purchasing journals, electronic or otherwise, and it is their budgets that have been eroded by price hikes and new licensing fees; as such their professional interests are also at stake in the movement and hence the debates.

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Most of the studies and literature on open access are motivated by internal factors. For instance, the views and opinions of authors and researchers are considered (e.g. Nicholas et al., 2005; Rowlands et al., 2004; Swan, 2006), the economics of open access are discussed and studied (e.g. Cockerill, 2006; Francke, 2005; Kaufman-Wills Group, 2005, Waltham, 2006), or the effect open access has on citation frequency and impact factors is investigated (Harnad & Brody, 2004; Kurz

& Brody, 2006; Testa & McVeigh 2004).[4] Most recently, Helena Francke (2008) produced a comprehensive study on the "(Re)creation of scholarly journals" by considering the case of open access journals and specifically "how document properties are used by the journals as a tool to emphasise their credibility" (Francke, 2008, p.23).

However, what is missing are more critical considerations of wider political and societal aspects. Specifically more critical engagements with open access in its relation to the 'developing world" are few and far between. John Willinsky (2006) acknowledges that a historical perspective which takes seriously the violence that ties colonialisms to missionary ideals of knowledge dissemination and the universality ideal should guide also the open access movement. He also points out that science has always been shaped by society and its politics (Willinsky, 2005). However, while he sees convergences between open science and open access, and other open movements for that matter, in terms of their resistance to restrictive intellectual property regimes, he appears to distinguish between open access and open science when it comes to science and research themselves (Willinsky, 2005). This seems reasonable at first glance, and depending on purpose it can also be useful. At the same time, since the open access movement is guided by certain views of science as well as of development, capitalises on and advances them, it seems to me that these should also be at issue. Ulrich Herb (2007) and Jean-Claude Guédon (2007) both take inspiration from Pierre Bourdieu's concept of the *field* to consider open access. Yet, while Herb – who considers the 'developing world' only in passing – successfully brings the interplay of the scientific field with other fields of power into focus and insists on the relevance of a variety of social, political, and cultural aspects, Guédon's (2007) focus is almost entirely on factors internal to the field of science. Hence, despite his focus on power, his analysis of open access and its potential for redressing the inequalities between central and peripheral science remains at the surface. That is, while he points us to the political conditionality and social construction – albeit he does not call it that – of the citation indexes used to measure centrality in scholarly publishing, he never extends this to the whole of science or research itself, since in his reading science appears to be the sum of its publications. Therefore, his main argument is essentially structured around notions of divides and barriers which open access will contribute to overcoming by integrating the periphery into the core. Having said that, Guédon's (2007) approach is also interesting since it is one of the few to consider the issue of power for open access and also since it points to the fluidity and social contingency of such concepts like centre and periphery,

4 See also Francke, H. (2008, pp.58-72) for a brief review of the literature on open access, considering these three and other areas.

mainstream and local science. Thus, his position is relevant for understanding the issue of power for open access from a perspective internal to the scientific field. Yet, it seems to me, that when we talk about the 'developing world' or the periphery for that matter the angle needs to be wider and gaze needs to go further back in history.

Hence, while all this is certainly relevant, what is lacking, it seems, is a consideration of the wider societal context of open access as an issue that is fundamentally also connected to the expansion of science, which in turn is historically not intimately entangled with the processes of colonialism and *developmentalism* (e.g. Harding, 2006; Loomba, 2005). This study is intended to widen the view and in doing so – and specifically by taking up a multi-disciplinary position – to provide an additional and critical backdrop upon which to consider open access; not least, by focusing on where open access is being positioned and where it positions itself. This is something which is tentatively suggested also by John Willinsky (2006, p.110), when he calls for the academic community to "pursue the principle of increased access to the knowledge it produces and to do so consciously against the backdrop of the ever-present past".

Consequently, this thesis is also intended to add to a discussion about the fundamental assumptions about 'information needs' of those that are defined as excluded (e.g. Haider & Bawden, 2007; Sundin & Johannisson, 2005; Tuominen, 1997; Yu, 2006) and thus to contribute to the ways in which notions of exclusion, lack, or deficiency could be problematised within LIS research.

Furthermore, discourse analysis and discourse oriented approaches more generally have become increasingly visible in Library and Information Science research (see chapter 2.1). They have developed into an important theoretical perspective which allows challenging hitherto often unquestioned relations of power. This opens the view to new questions that can be asked in different ways. This thesis is situated within this context. It is thus also intended as a theoretical and methodological contribution to this area of research within Library and Information Science. In particular, I try to integrate perspectives and contributions from other social sciences and the humanities as well as to adapt the notion of discourse with regard to the way in which discourses can function as authorisation tools.

1.5 Thesis Overview and Structure

In the following chapter (chapter two) the concept of discourse is introduced, in particular by outlining Michel Foucault's approach. In this context the uses discourse analytical approaches

have found in Library and Information Science are briefly sketched and some consideration is given to theoretical reflections on discourse that have emerged in the field. Subsequently Michel Pêcheux's work on the discursive formation is discussed and put in relation to the Foucauldian approach. This is followed by an outline of Dominique Maingueneau's concept of self-constituting discourses and the discourse of international organisations. This gives way to the conceptualisation of the discursive procedure which guides my own analyses.

Subsequently, in chapter three, I introduce post-development theory by focusing on its key arguments but also the chief criticisms it has been subjected to. This serves to introduce the major lines of arguments around which development is constructed as well as to highlight some of the elements and themes that are fundamental to development discourse. Specifically, I focus on the notions of development and 'underdevelopment' themselves as well as on poverty and ignorance. I furthermore consider the interdependence of science and development as well as a number of specifically European features of science, including the close connection between it and colonial expansion.

Finally, this critical, largely literature based investigation of development discourse and the specific role of science and technology within this discourse forms the backdrop upon which the investigation of the open access debates, as they are manifest in petitions, mission statements, policy papers, reports, and articles as well as in one email debate, is projected (chapters four and five). It leads on to the identification and investigation of a number of discursive procedures at play in the texts when they relate to the 'developing world'. I examine these in two instances: representation (chapter four) and debate (chapter five), whereas the distinction between the two is based almost entirely on the material underlying the analysis and it is thus chiefly a rhetoric one. However, as we will see, it is also not without consequences.

I conclude (chapter six) by summarising the procedures identified and by drawing the attention to the discursive effects. In the concluding chapter I also provide a consideration of a possible future for open access in its relation to the 'developing world' as well as a number of suggestions for possible future research.

PART I

So far we have outlined the problem space and developed the major lines along which the analysis will take place. We have also pinned down the most important questions that need to be addressed and hinted at the theoretical framework and terminology in which the analysis will be couched. The following two chapters are concerned precisely with presenting and also with developing these theoretical starting points and terms of engagement.

In chapter two I introduce and discuss the notion of discourse. In the course I also develop my own understanding of discourse and of its working, specifically also in view of the analysis of textual artefacts upon which this thesis is based. Thus, the considerations in the following chapter are also methodological considerations.

The subsequent chapter serves to present post-development theory in some more detail, in particular also by considering the criticism it is typically faced with. Furthermore, I will concentrate on some of the major concepts underpinning development discourse and on the role of science in it. In the context, I will emphasise a number of features that mark science out as a specifically European system of knowledge, not least by drawing the attention to the connections between science and colonialism. This is done specifically with a view to make visible some of the elements that we will also encounter in the literature and the debates surrounding open access and development.

Theory, method, and empirical investigation are closely interwoven in this thesis. This is something it shares with approaches starting from the concept of discourse. Thus, theory is here also method in the sense that it is primarily understood as a way of engaging with and providing a perspective for looking at the material and the topic.

2 DISCOURSE AND ITS ANALYSIS

The concept of discourse is rooted in a social constructionist tradition. It originates in the structuralism of Saussurian linguistics, or more precisely in the modifications structuralism underwent by the name of post-structuralism in the 1960s. While the structuralism of linguist Ferdinand de Saussure or ethnologist Claude Lévi-Strauss focussed on abstract and stable, rule-bound systems of differences, post-structuralist approaches began to emphasise the shifting relations of signs and introduced a strong focus on practices, in particular language practices.

The shifting relation of signs of course not only refers to the way in which signs relate to each other. Significantly, this shift also takes place, in a departure from the Saussurian paradigm, with regard to the way the notion of the sign itself is constituted. It includes the relation between signifier (signifiant) and signified (signifié) within the sign itself. Most importantly, the shifting relation between sign (signe) and referent (referént) and the way in which the sign shapes or engenders the referent is what is also at issue in discourse. Of course this has consequences for the ways in which signs are seen to relate to each other.

At their core all discourse analytical approaches privilege the role of language as a practice and assign it centre stage for the creation of knowledge and the negotiation of truths. The concept of discourse and its analysis are most intimately connected with the name of Michel Foucault. Despite a proliferation of different understandings of discourse, varying ideas for their analysis, modifications and also criticism of Foucault's approach, his is undeniably the most influential and it forms the basis for most subsequent understandings.

Fundamentally, discourse analysis examines language practice or more precisely language in use. Yet, as Bernd Frohmann (1994, p.120) points out, in contrast to some forms of linguistic analyses "these are not speech acts performed in the course of everyday conversation, but rather those performed by institutionally privileged speakers". That is to say, the focus is not on individual opinions, but on the functions individuals, or institutions, have or are seen to have within society and thus in and for discourse. He describes for example LIS-talk, as such a "set of serious speech

acts [...]. It is a species of talk at which conceptions about these things are at issue". Despite the fact that the use of the concept of the 'speech act' seems problematic in the given context – since it alludes to the like-named linguistic theory, in which 'speech acts' are quite narrowly defined – this assertion nonetheless captures neatly some of the fundamental underlying premise of discourse. The concept of discourse is based upon the, what could be called, Wittgensteinian premise, that the meaning of words arises from their use. Language practice does not merely communicate knowledge, it is constitutive of it. However, this does not mean that discourse is simply related to or shaped by its cultural and social surroundings. It is quite literally seen to *make* the very realities that are spoken about (possible).

This will become clearer in the following sketch of Foucault's understanding of the concept, which cannot be separated from his very specific views of power and knowledge and which are thus also given brief consideration. Subsequently, Michel Pêcheux's more directly linguistically oriented understanding of the discursive formation and a way in which we can think about discourse manifesting itself in language is discussed. This leads on to a consideration of the workings of what are considered dominant discourses and of how discourses can be demarcated. Finally, this gives way to the description of the discursive procedure, which is an attempt to synthesise specific elements of Foucault's and Pêcheux's approaches and which is at the centre of my own analysis.

Prior to the more detailed discussion of these theoretical groundings, however, I provide a brief sketch of some of the ways in which discourse analysis has been drawn upon and reflected on in Library and Information Science (LIS) research.

2.1 Discourse Analysis in Library and Information Science

Since the emergence of social constructionist and post-modern approaches in Library and Information Science research in the 1990s, Foucault's theories and in particular his concept of discourse, and with it his understanding of power, have found resonance in the field. Correspondingly, discourse analysis, Foucault inspired, but also taking cue from other theorists, has begun to establish itself in LIS research. Especially recently it has become quite visible and has more frequently been used as a framework or method. It was initially most prominently considered and described by Bernd Frohmann (1992, 1994) in the early 1990s. This has recently culminated in a special issue of Library Quarterly (2007, Vol.77, No.2) on discursive approaches to information seeking in context. The editors take rather wide view of discursive approaches of which discourse analysis is but one. Their intention is

> to open up a variety of constructionist approaches to the study of language in use: in other words the study of how people do things with words (Talja & McKenzie, 2007, p. 98)

Overall, in the LIS research literature three main approaches to discourse analysis can be made out. Firstly, some articles are solely dedicated to general theoretical considerations (e.g. Budd & Raber, 1996; Day, 2005; Radford, 2003; Radford & Radford, 2005; Talja et al., 2005) or concentrate on outlining possible fruitful approaches to discourse analysis for LIS research (e.g. Frohmann, 1994; Olsson, 1998, 1999).

Secondly, some employ discourse analytical methods for the qualitative analysis of interview data (e.g. Jacobs, 2001; McKenzie, 2003; Savolainen, 2004; Talja, 1999). These approaches, while producing very interesting results, tend to be rooted in discourse psychology. In this sense, they are somewhat removed from the aims of this investigation. Others, most prominently Sanna Talja (2001), combine the discursive analysis of interviews with that of documents. While interviews can of course also be considered documents, they still, when undertaken by the researcher doing the discourse analysis, differ from other documents in one specific way. The interviewer directly influences the outcome and form of the resulting 'document' in a way that she or he does not in cases of other documents that are a product of interactions between individuals or institutions in which the researcher does not partake. The latter are commonly considered *naturally* occurring discourses or documents.

Thirdly, a number of studies are based on the investigation of precisely these types of documents, i.e. those that are not the result of an interview or a situation which is influenced by the researcher, but occur prior to the analysis and independent of it. Most, yet not all, are informed by Foucault's understanding of discourse. Here, taking cue from Frohmann's (1994) initial 'programme', a strong tendency exists to turn inwards and analyses of the literatures of LIS and thus of the field's institutional or professional discourses predominate (e.g. Andersen & Skouvig, 2006; Day, 1998; Frohmann 1992; Hedemark et al., 2005; Tuominen, 1997). Still, within LIS some also draw on discourse analytical approaches to examine other related areas (e.g. Chan & Garrick, 2003; McNabb, 1999; Radford & Radford, 2001; Thoms & Thelwall, 2005).

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Bernd Frohmann (1994) was among the first to theoretically reflect on the potential of Foucauldian discourse analysis for LIS research. He proposes the analysis of the discursive terrain of LIS theory in order to investigate how the notions of information, information users and needs and similar concepts are constructed within the specific institutional settings of the field. This should enable to show how these constructions "enable specific institutional exercises of

power over the production, organization, distribution, and consumption of information" (Frohmann, 1994, p.176). In particular, he emphasises the relevance of investigating the contingencies of the institutional discourses that construct users and their needs. He also underlines the blurring of the boundaries between the classical dichotomy of research and practice, and maintains that a discourse analysis of information necessarily transgresses these already diffuse boundaries, in particular in the selection of its material for analysis.

The existing theoretical considerations of discourse analysis in and for LIS consist predominantly of overviews of existing discourse theories and of proposals for their applications within LIS research. The majority concentrate, following Frohmann's initial suggestion, on the potential of an analysis of those discourses constitutive of LIS itself, and in particular on highlighting power relations specific to the field as well as on addressing the theory adversity that LIS is sometimes accused of.

For instance, Gary Radford (2003) discusses the possibilities of a Foucauldian perspective to address LIS's supposed theory adversity. His proposal is a reaction to an earlier article by Wayne Wiegand (1999), in which the latter accuses LIS and librarianship to be plagued with "tunnel vision and blind spots" (Wiegand, 1999, p.3) as well as to be "trapped in its own discursive formations" (Wiegand, 1999, p.24). Specifically, Wiegand (1999) attests the field to be deliberately ignorant of the connections between knowledge and power. Foucault is among those whose theories he proposes as fruitful for addressing this perceived theoretical void. Following this suggestion Radford (2003) investigates the potential of Foucault's concept of the discursive formation to critically reflect upon LIS's institutional discourses as well as to promote reflective awareness within the field.

Within the context of a more general discussion of the possible significance of post-structuralism for information studies Ronald Day (2005) also addresses the applications Foucauldian discourse analysis has found in LIS. He takes issue with some of the uses it has been put to in the field, insofar as he sees them as adhering precisely to the kind of positivism and structuralism Foucault was critical of. However, while this might ring true in some instances, others and specifically those that concentrate on the discourse of LIS itself, have used discourse analysis and discourse oriented approaches in varying and often creative ways to challenge some of the field's underlying assumptions by way of bringing their contingencies to the fore. In the best cases, this enables to conceptualise the field's fundamental categories and relations in different, and ideally in more productive, ways.

For example, starting from a Foucauldian approach, Bernd Frohmann (1992) challenges some of

the assumptions expressed in the discourse of the cognitive viewpoint on information seeking and delivers one of the most critical and also densest realisations of discourse analysis in LIS. He examines the rhetorical devices contained in discursive strategies of certain key texts representative of the cognitive viewpoint in LIS theory. In particular, his criticism is directed against the privilege that is given to natural science as a frame of reference for theorising about information and that disqualifies the significance of social practice. He argues that the 'user centric' approach of the cognitive viewpoint is compromised by the discursive strategies contained in the approach and which de facto dis-empower users. Kimmo Tuominen (1997) builds on the work of Frohmann and equally bases his investigation on Foucault's concepts. He provides a critical assessment of the subject positions of the user and the librarian in subject-centred discourse. Mark Tyler Day (1998) combines various theoretical approaches in his discourse analysis of academic LIS literature on organizational change and anchors his results in a wide array of social theories. Sanna Talja's (2001) study of music library discourses is one of the most comprehensive, English-language, discourse analyses in LIS so far and it is also predominantly influenced by Foucault. She takes library policy statements as well as user interviews as her starting point for the identification of, what she calls dominant repertoires. Jack Andersen and Laura Skouvig (2006) investigate the discipline of knowledge organization by combining Foucault's understanding of discourse and power with Habermas' theory of the public sphere and come to interesting conclusions as to how knowledge organisation could be considered within a broader study of culture. The user is at the centre of Åse Hedemark's, Jenny Hedman's, and Olof Sundin's (2005) analysis. Yet, their investigation of user discourses in the field of contemporary Swedish public libraries has its starting point in post-Marxist discourse theory as developed by Ernesto Laclau and Chantal Mouffe. Laclau and Mouffe's (1985) notion of discourse is in many ways similar to Foucault's, yet they reject the idea of a division between the discursive and the non-discursive. Put simply, it can be described as an attempt to unite Marxist and post-structuralist elements. In their adoption of Laclau's and Mouffe's theory, Hedemark et al. (2005) particularly emphasise the need to not only consider what is immediately visible and they highlight that "[a] discourse is always constituted in relation to what it leaves out" (Hedemark et al., 2005).

This last remark is particularly significant since it points to the relevant role of ellipsis in discourse. It seems to me, that when considering the actual manifestation of discourse in language, two different types of ellipsis can be distinguished. Both are equally important for the way in which discourse operates. Firstly, there is that which is excluded and left out, since it is outside the possibility of a certain discourse and secondly that which is implied and thus omitted since it is taken for granted. The significance of this assertion will become clearer throughout the

following outline of the Foucauldian theory on discourse and in particular in relation to Michel Pêcheux and even more in my own analysis.

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Given this recent surge of discourse oriented approaches and the more general success of Foucauldian concepts in LIS theory, it is perhaps not surprising that criticism has been advanced. The most substantiated criticism so far has been voiced by John Buschman (2007), who in an article aptly entitled "Transgression or Stasis? Challenging Foucault in LIS Theory", launches a veritable attack on Foucault scholarship in LIS and on Foucault's theories in general. Some of his accusations are issues Foucault and Foucauldian theory is commonly being challenged with. Firstly, the failure to take seriously material aspects and the role of the economy, secondly, the position of the subject in discourse, and finally, relativism or even nihilism that he sees to arise from a Foucauldian focus on discourse in which the subject is understood as the effect of power. All of these are significant points, and they need to be taken as seriously in LIS research as in other fields. At the same time, Foucault's relevance arises precisely from the fact that he offers us a way to think about power, knowledge, and power relations without pre-supposing these until then so fundamental categories, that is the economy and the subject. Both are fundamental to the two schools he was almost writing *against* in France in the 1960s and 70s, Marxist materialism and psychoanalysis. Considering these, that is the subject and the economy, as changing and malleable constructions as much as any other category has in fact opened up ways to move away from an essentialist perspective that is in danger of becoming always only self-perpetuating. Specifically doing away with the idea of the economy as a fundamental and self-evident category can enable analyses precisely of its workings, its histories, its assumptions, and most importantly of its expressions that an analysis which puts it outside or before anything else has problems to deliver. Granted, there is a certain relativism inscribed into Foucault's work, yet to equal relativism with nihilism, as Buschman (2007) does, seems to be taking it a step to far. On the contrary, a Foucauldian perspective, at least in my reading, is far from nihilistic since it requires a strong focus on those that are marginalised, constructed as outsiders and whose knowledges are cast aside or at best hyphenated. If successful, the relations and assumptions based upon which such constructions occur can be rendered visible and this, while it can be called relative, in itself is already a step towards change. It seems to me, such a perspective can in no way be described as nihilistic. Especially not since analysing relations from a viewpoint that favours a relative, perhaps better a relating, perspective, does in no way mean that one cannot or should not take a position vis-à-vis the relations analysed or that it does not matter.

The problem of the subject is a different matter. It is true that there are certain limitations with

the Foucauldian understanding of the subject as an effect of power and we will return to these at various points. At the same time, understanding the subject as constructed in and through various discourses also liberates it as a category in a way that can aid our understanding of relations of power, for example those between the sexes, or when it comes to the relation between sanity and madness, as Foucault has done, and also, as will become apparent in our case, the relations between 'developers' and those to be 'developed'. When it comes to formulating resistance and hope however there are certainly shortcomings with Foucault's conception and this will play a role for us as well, specifically towards the end of the thesis.

Buschmann (2007) takes issue with a number of further points. Most importantly he accuses LIS Foucauldian theory, in particular discourse analysis, of being self-referential and of not considering sufficiently that they are part of the discourse and power structures they are criticising. This might be the case, at times. Yet, it seems to me, that this might be a problem with individual authors and cannot be related back to an inherent 'flaw' with Foucault's theory. A Foucauldian engagement with LIS, or any other field for that matter, necessarily always has to be aware of its part in the practices and narratives it analyses and of the way in which it furthers them. Whether this needs to be explicitly stated is a different matter. Buschman's (2007) criticism, I think, might be justified in individual cases, yet I disagree with the way in which he relates these shortcomings to general weaknesses with Foucault's theories.

The points taken up here tentatively, should become clearer in the following sections in which I introduce in more detail the most relevant Foucauldian concepts that will guide our investigation of open access in relation to the 'developing world'.

2.2 Foucault's Notion of Discourse

Discourse is a central concept in all of Foucault's earlier works. However, his most detailed explications can found in the "Archaeology of Knowledge" (Foucault 1972a). They are developed further in "The Discourse on Language" (Foucault 1972b) and subsequently also in "Politics and the Study of Discourse" (Foucault 1991a).

Foucault's thinking has changed over time and has been subject to various shifts. These are usually described with reference to an earlier so-called archaeological phase and a later genealogical one. Most of his writings on discourse are commonly said to originate in the archaeological period – hence the title "Archaeology of Knowledge" –, while the genealogical period was more relevant with regard to the formulation of his understanding of power, and

specifically the interlinking of power and knowledge. Having said that, in "The discourse on language" (Foucault 1972b) already introduces some of his genealogical concerns, while for example "Politics and the study of discourse" (Foucault 1991a) belongs to a series of lectures, from what are considered his genealogical times. Retrospectively it seems impossible, and I will try to highlight this throughout the following pages, to separate Foucault's notion of discourse from his conceptualisation of power and knowledge. In particular, if the aim is to operationalise Foucault's concepts and literally apply them as meta-theoretical tools rather than to comment on their genesis, it seems futile to attempt a clear delineation of his concepts according to the different periods in his work. In particular this is the case since the strength of the concept of discourse increases significantly by considering it in relation to the ways in which power and knowledge are seen as interdependent. Thus, without wanting to simplify Foucault's work, the basic understanding of discourse as a productive practice does remain consistent. Retrospectively the way he conceptualises power contributes to discourse in a way that makes it near impossible to separate them, at least for my purpose.

Therefore, in order to develop an appropriate apparatus of concepts and theoretical tools, I accept Foucault's offer to take his theories as a *tool-box* (cf. Mills, 2003, p.7) and I will attempt to undertake a synthesis of Foucault's approaches. Thus, the focus is neither on inconsistencies and shifts in his thoughts nor on works that emanated from one particular period, but on the interplay of the concepts he provides. I do this to establish a type of meta-theoretical backdrop upon which to consider some of the interests, strategies, and relations that underpin the current open access debates when they relate to the 'developing world' and its need for science and information.

Specifically, in addition to the notion of discourse itself, the focus will be on four concepts, which contribute to and underlie the understanding of discourse: statement, power, knowledge, and resistance. In the course a number of related concepts that emanate from their interplay will be introduced, in particular expert knowledge, truth, as well as governmentality and here specifically the notion of pastoral power.

However, before proceeding it is crucial to note that, while Foucault's work is interspersed with descriptions of discourse and, it could be added, of the often synonymously used discursive formation, he does not provide a single and conclusive definition, but several (cf. also Radford & Radford, 2005). However, all are founded on the premise that meaning arises from use, that rules apply for use, and that use in turn shapes reality.

Furthermore, while discourse analysis, intimately connected with the name of Foucault, is on

occasions referred to as a method, a Foucauldian 'method' as such, strictly speaking, does not exist. Foucault provides apparatuses of thought that enable new perspectives on that which is usually accepted unquestioned. In the words of Ronald Day (2005, p.590):

> Discourse analysis in Foucault's work is less a method and more a series of engagements with historical events and documents that identify techniques and structures through which power is captured, intensified, and directed toward certain productive and profitable ends.

Nevertheless, it is still possible to fruitfully utilise Foucault's concept of discourse as a tool, in particular by emphasising its conditions as well as by considering its consequences. In the quite pertinent words of Alastair Pennycook (1994, p.128):

> To think in terms of discourse in a Foucauldian sense is useful, I believe, because it allows us to understand how meaning is produced not at the will of a unitary human subject, not as a quality of a linguistic system, and not as determined by socio-economic relations, but rather through a range of power/knowledge systems that organize texts, create the conditions of different language acts, and are embedded in social institutions.

2.2.1 Discourse and Statement

On a very prosaic level discourse refers to 'what has been said'. Yet, discourses are more than simply groups of linguistic signs. They are productive, in the sense that as practices they "systematically form the objects of which they speak" (Foucault, 1972a, p.49). Through discourses realities are formed. Crucially, discourse can only be understood in the context of its emergence. Furthermore, it is seen as adhering to strict sets of rules and notably also as lacking agency, that is, as I have hinted at above when discussing John Buschman's (2007) criticism of Foucauldian theory in LIS, for Foucault discourses are institutional and largely anonymous and subject-less. Not unsurprisingly, this lack of agency is contested and, together with Foucault's refusal to talk in terms of ideology (e.g. Foucault, 1980e), it has routinely been criticised as precluding critical political analysis or intervention. The emergence of post-Marxist discourse theory for example, as exemplified in the work of Ernesto Laclau and Chantal Mouffe (1985) is to a degree the result of such dissatisfaction with Foucault's position on ideology. However, as I will develop in more detail later, Foucault's understanding of power and knowledge and their relation to discourse can be interpreted as not only standing in for this lack, but as providing a view that allows to think of ideologies, more fruitfully, as being part of the world and not as concealing it.

Discourses should neither be seen as monolithic and unchanging entities, nor, akin to language, as systems offering endless possibilities for combination. Rather they consist of limited numbers

of so-called statements, which relate to each other in shifting, yet clearly regulated ways. More precisely, these statements are notions or a combination of them, whose existence is based on reasons as well as conditions that are accounted for by the rules of the discourse which they form part of. Hence, a statement is the basic element of discourse, which in turn provides the rules that determine the identity of a statement.

Foucault (1972a) outlines two sets of procedures and characteristics, through which this identity is achieved. These can roughly be summarised as internal conditions and external limits. Some of these procedures are particularly relevant and they need to be considered in more detail. Among the first set, a statement's materiality is its most significant constitutive characteristic. In other words, a statement must have been realised and have a substance. Also, it must have been pronounced from a certain place, a certain position and at a particular time. Significantly this place of enunciation is positioned at an institutional rather than an individual level. The second group of limits are those imposed by surrounding statements. It is important to consider that a statement's position is neither fixed nor absolute. Rather, they exist in systems of dispersion, in their relations to other statements. These relations determine how and by which rules they can be employed and also in which formations they can appear. This contributes to a statement's stabilisation, as a consequence of which it becomes repeatable. Being repeatable is the statement's fundamental characteristic that makes it recognisable as such in the first place. In other words, meaning is a consequence of use and of iteration within a specific field of practice.

However, while the statement is the basic element of discourse, it is not simply constitutive of it. Rather, statement and discourse should be understood as constitutive of each other or as correlative. Thus, statements and their dispersion belong to a discourse, yet at the same time "the regularity of the statement is defined by the discursive formation itself" (Foucault, 1972a, p.117).

Foucault (1972b) describes three sets of procedures that regulate production, control, and organisation of discourse in society. Externally these are rules of exclusion, namely the taboo, the division into reason and madness, and the division between true and false. A second set of procedures, consisting of the commentary, the author, and disciplines, guarantees the internal delimitation. Finally, discourse is understood as controlled by an additional group of rules, which "relate to the conditions under which it may be deployed" (Foucault, 1972b, p. 224). These restrictions are implied in verbal rituals, in doctrines, and in social appropriation. Put simply, these rules determine who can speak truth, in which manner, under which conditions, in which capacity, and from which position.

In brief, in a Foucauldian sense, discourse refers to a socially constructed regime of knowledge

and truth that forms the social reality about which speaks. It is a productive practice, which obeys to specific rules, is generative of knowledge and related to a particular field of use which, through discourse, is related to other fields and to other practices.

2.2.2 Power, Knowledge, and Resistance

Foucault's conceptions of power and knowledge contribute significantly to his concept of discourse and especially to its analysis. In particular in his later writings, power is a central element and can be said to address the above mentioned lack of agency (e.g. Mills, 2003). In short, power is not perceived of as an exclusively oppressive force, which is held by an individual or a group and which is merely used to dominate the other. Rather it is understood as a non-localised and crucially as a productive function that traverses and circulates in a "net-like organisation" (Foucault, 1980a, p.98). Power is posited as constitutive of all relations in society and the "individual is an effect of power, and at the same time, or precisely to the extent to which it is that effect, it is the element of its articulation." It is important to note, however, that saying power is productive, does not have to mean to say it is positive. As Gayatri Spivak (1996, p.151) points out, in her reading of power/knowledge, "[t]here is no need to valorize repression as negative and production as positive".

Foucault introduces an understanding of power that allows looking beyond mere oppression. Specifically, this enables thinking about types of power relations that cannot be adequately grasped within oppressor-oppressed schemes. Neither can they exclusively be captured in expression like 'power of ', 'power over' or 'power to'; rather they are best understood as ways in which power expresses itself 'through' an agent. For Foucault (1998, p.95) "[p]ower relations are both intentional and non-subjective." They are directed in the sense that they are not free of goals and objectives, yet at the same time these do not result from a subject's conscious decision that is arrived at independently. Rather the subject is the result of discourses and power relations which determine it and its identity. Essentially, power is a matter of negotiation and repetition and there are no spaces free of power. In this sense domination is but one specific form or expression of power, as is state power. Sara Mills (2003, p.34) calls this the "bottom-up model of power, that is the way in which power relations permeate all relations within a society". The subject is characterised by these relations, it is placed in them and, in its identity, it is their result (Foucault, 2002a). Thus, despite the institutional character and the lack of agency that is to some degree inscribed into the Foucauldian notion of discourse, the subject re-emerges, not as the source of discourse, but as its carrier and as the effect of power.

Inextricably linked to this view of power is Foucault's understanding of knowledge. The close

connection Foucault sees between power and knowledge is most obvious in the idea of power/knowledge. Knowledge and power are seen as interwoven and interdependent, one constitutive of the other. One cannot be thought without the other. More precisely, the production of instruments for development, measurement, collection and distribution of knowledge are seen as constitutive of power, while at the same time organisation and circulation of these "apparatuses of knowledge" (Foucault, 1980a, p.102) are the effect of power. Foucault's understanding of knowledge is one that sees knowledge as much as discourse as being always contingent, interested and dependent on the place and the time from which it emerges.

> Knowledge and power are integrated with one another [...] It is not possible for power to be exercised without knowledge, it is impossible for knowledge not to engender power. (Foucault, 1980d, p.52).

This relationship applies to all forms of knowledge, including scientific, political, economical knowledges. What constitutes knowledge and what is excluded from it and relegated to the domain of beliefs, superstitions, or incomplete knowledges, is not a property inherent to the various types of knowing, but it is a consequence of power. Following this line of thought, knowledge does not exist in the singular. Equally, it is not possible to free science any more from the interests, agendas, histories and thus the power relations that are inscribed into it as an institution that generates knowledge than any other type of knowledge.

Significantly, through power, knowledges constitute themselves in relation to other knowledges, and in particular in relation to marginalised forms of knowledge. These are "subjugated knowledges" which are either disqualified or assigned marginal or lower positions, precisely by being refused recognition by the scientific discourse (Foucault, 1980a, p.82). This also gives way to a better understanding of 'truth', which is seen as the direct result of the power/knowledge link. Thus, what is at issue is how truth is produced, not of what it consists.

"Truth is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation and operation of statements" (Foucault, 1980e, p.133). These procedures find expression in a "'political economy' of truth" (Foucault, 1980e, p.131), which is the product of institutions and subject to strict mechanisms of control that determine the ways and the extent of circulation in society. As Sara Mills (1997, p.61) points out:

> [S]tatements are for him [Foucault] those utterances which have some institutional force and which are thus validated by some form of authority – those utterances which would for him be classified 'as in the true'.

Crucially truth is "the issue of a whole political debate and social confrontation" (Foucault, 1980e, p.133). This is also where Foucault's position on ideology has to be anchored. Ideology,

for Foucault, is a problematic notion since it is an oppositional one, i.e. ideologies exist in opposition to something and they are subordinated to their material or economical conditions. Put differently, the concept of ideology gives the impression of obfuscating the 'real world', of hiding or skewing the 'truth', yet by doing so it problematically has to be assumed that an essentially more real world exists and that ideologies are not part of it. Thus, what he proposes is not to think in terms of ideology and science, but to shift the focus and consequently the analysis to power and truth (Foucault, 1980e, p.132).

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This conception of power and knowledge as interdependent are fundamental for the notion of discourse. Discourse is seen as a result of the productivity of power. Thus, the examination of discourse enables the analysis of "the related effects of power" (Foucault, 1980a, p.71). Crucially, it also enables the analysis of resistance. As a result of the all-permeating and productive nature of power, resistance is always already inscribed into power. Foucault (1998, p.95) maintains: "Where there is power there is resistance, and [...] this resistance is never in a position of exteriority in relation to power."

It is important to note that they do not exist in mere opposition to each other and that resistance is not simply a reaction to power. Rather by claiming it is not exterior to power, power is seen to depend on the presence of resistance or more precisely, as Barry Hindess (1996, p.101) points out, for Foucault, "where there is no possibility of resistance there is no power" (cf. also Foucault, 2002a). Thus, power relations always also include points of resistance (Foucault, 1998). This relationship between power and resistance is expressed in discourse, which

> can be both, an instrument and an effect of power, but also a hindrance, a stumbling-block, a point of resistance, and a starting point for an opposing strategy (Foucault, 1998, p.101).

Therefore, and this seems particularly consequential in our context, the analysis of discourse constitutes an analysis of the effects of both power as well as resistance. Accordingly, Foucault also proposes the analysis of resistance as a means for the analysis of power, and as a way to comprehend power not from the inside, but by considering what hinders it (Foucault, 2002a). He describes certain types of resistance inscribed in power relations, as for example in the opposition between the sexes or within families or the power "of administration over the way people live" (Foucault, 2002a, p.329). These resistances give way to struggles that are directed against particular techniques and forms of power and its most immediate agents, rather than institutions, elites, or groups. At their core they question "the way in which knowledge circulates and functions, its relations to power. In short the regime of knowledge" (Foucault, 2002a, pp.331).

Seeing power as relational and distributed through networks quite simply makes resistance seem a more realistic proposition in that it does not necessarily have to be seen as targeted at one omni-potent *holder* of power, but as occurring on various levels, in varying forms, and at any time. There is, in the words of Foucault (1998, p.96), "a plurality of resistances, each of them a special case".

At the same time, while it can be stated with Sara Mills (2003, p.34) that the conceptualisation of the subject as result of discourse and effect of power allows us to consider the "more mundane and daily ways in which power is enacted" and thus, one could add, of resistance in a more appropriate way, there are also limits to the usefulness of understanding the subject in this way. These limits become especially obvious when considering and taking seriously the positions and identities of those that are marginalised and that need to find a position from which to speak *to* power, not merely through it. This, as we will see in our own analysis, especially towards the end, might require a widening of the perspective in order to re-inscribe some form of agency from which to formulate less an identity, but a position that allows, quite simply, for hope vis-à-vis the all-encompassing discourse that can only be re-affirmed even through contestation. At the same time, it also has to be acknowledged that Foucault's concept of power as circulating through networks is not an exclusively abstract one. Rather his proposed analysis focuses on the mechanisms and techniques of power on the most basic levels and enables an engagement with power from the perspective of its results and procedures (Foucault, 1980a). This is also what I attempt to do with regard to the open access debates; that is to see the texts emanating from it as effects of relations of power, in the Foucauldian sense, and thus their analysis provides us with some clues as to how the fields of power to which they relate are structured.

This leads on to the notion of expert knowledge, which is particularly relevant in the context of development (cf. Apffel-Marglin, 1996), but also of science, both systems that are shaped and given credence by the expertise of their practitioners. More to the point, legitimacy and reason of their existence and thus their ability to act depend on the expert knowledge that is tied up in their power/knowledge, i.e. their production of truths, as enacted through their institutions. Consequently, expert knowledge can also be understood as a form of knowledge that functions as a disciplinary system of control. It is the result of so produced instruments and apparatuses from specific institutionally privileged positions. In other words, expert knowledge emerges from discourse and at the same time it contributes to its construction. It is socially negotiated and its status and role depend on being accepted by those that are subject to its disciplinary control (cf. Sundin, 2006). This has to be seen in the context of the institutional character of discourse. Thus, once more, as Foucault (1991a, p.61) insists, discourse should not be related "to a thought, mind

or subject which engendered it, but to the field in which it is deployed".

In relation to this reading of resistance and struggle, which is particularly relevant in the context of the outlined conceptualisation of expert knowledge, Foucault discusses the concept of pastoral power (Foucault, 2002a). By this he means a specific power technique, which he positions alongside that of diplomatic-military techniques and the police in relation to his notion of governmentality (1991b). All three are seen as fundamental to the emergence of the modern 'western' state or more precisely, the "governmentalization of the state" (Foucault, 1991b, p.104).

Governmentality (Foucault, 1991b) is a relevant concept or probably better a way to engage with and understand government and its historical emergence as one specific form of control over populations; that is people and their relations. For Foucault governing means simply the "conduct of conduct" and in turn exercising power is "a mode of action upon the actions of others" (Foucault, 2002a, p.341). The point Foucault emphasises above all, is that this requires a free subject, individual or collective, "who are faced with a field of possibilities in which several kinds of conduct [...] are available" (Foucault, 2002a, p.342). As such, governmentality relates closely to the understanding of power as de-centred and permeating all relations and with it Foucault tried to move away from a perception of the state as a monolithic, all powerful, and unchanging entity. Instead, he draws the attention to the more subtle ways and techniques of governing and control over individuals as populations which work on various levels and change precisely because they cannot be separated from other power relations and thus also from self-government. Thus, writes Sara Mills (2003, p.37) "the state should not be seen as possessing power but as constructing a range of relations which tend to position people in ways which make the political system work." This can be extended also to systems beyond the state, such as for instance the international operations of the development apparatus. In this sense governmentality enables and requires the study not only of who governs and why, but who is governed, how this relationship emerges, how it is sustained and all the various levels on which this happens. One specific technique of conducting conduct is contained in a mechanism Foucault (2002a) describes as pastoral power.

Pastoral power is seen to originate in institutionalised Christianity. It has since however become secularised. It is an individualising power technique whose spread is linked to the emergence of the modern state. Since the 18th century it has pervaded all of society, its aims as well as its agents have multiplied, and it has become a central power technique for a variety of institutions. Most importantly pastoral power is salvation oriented, whereas salvation can take on a variety of meanings, such as health, quality of life, wealth, various forms of well-being or whatever is considered to be a desirable state in different settings and at different times. The agents of

pastoral power are a number of different institutions, including for example the state, the police, the family, or the hospital, but also welfare institutions, philanthropists, charities, or benefactors more generally. Arguably, it provides for a relevant conceptualisation of the expression of power through aid, which can be fruitfully drawn on to consider the work of development agencies, but also such institutions as for example the (public) library.

2.3 The Operation of Discourse in Language (Michel Pêcheux)

A somewhat different way of conceptualising discourse, albeit one which keeps true to the idea of discourse as shaping reality, is provided by another French theorist who was writing at around the same time as Foucault, Michel Pêcheux. His understanding is a more linguistically oriented one and I will introduce some of his more important concepts in the following sections. This will allow us to see more clearly, or to put it bluntly to understand on a more 'practical' level, how discourse can be seen to operate in language.

Unlike Foucault, Pêcheux starts from a Marxist position and one of the main concerns in his work is ideology, specifically also the constitution of the subject through ideology. Correspondingly, the English title of what is considered his main work reads "Language, Semantics, and Ideology" (Pêcheux, 1982). However, I will consider neither Pêcheux's position on ideology nor on the subject here, but take the liberty to extend the Foucauldian *tool-box* metaphor also to his work.

Despite the difference, a certain proximity between Foucault and Pêcheux also exists. This is of course the case in terms of terminology as will become apparent below. However, significantly both, Foucault as well as Pêcheux, strongly emphasise the institutional character of discourse. Furthermore, as Williams points out (1999, p.7), both are concerned with the "power of the normative", and "the manner in which it absorbs earlier knowledges". By inversion, both, Foucault as well as Pêcheux, offer ways to challenge and question the normative by way of exposing it. In contrast to Foucault however, Pêcheux has been strongly concerned, not only with the possibility and constitution of linguistics itself as a science, but also with methodology and in the course with language patterns and grammatical structures. Equally, at least in some contrast to Foucault, his work is more strongly concerned with the issues of exclusion and omission. In particular, as Sara Mills maintains (1997, p.14),

> Pêcheux's work is important in that he stresses more than Foucault the conflictual nature of discourse, that it is always in dialogue and in conflict with

other positions.

Thus, what I would like to emphasise here, mainly for methodological reasons, are some of Pêcheux's concepts that are concerned with the concrete workings of discourse. These seem to open up fruitful ways to envision the interlinking and in particular also the conflicts of different discourses or discursive strands, contemporary and historic. This also opens up ways for a textual analysis, which shifts the focus to individual words and the conflicts contained in the creation of meaning as well as to grammatical structures and language patterns. Furthermore, in particular Pêcheux's insistence on the conflicting nature of discourses, the continual contestation of meaning as well as his emphasis on integration, convergence and struggles of discourses provides for a useful addition to the Foucauldian framework.

In particular three concepts of Pêcheux's need to be introduced in more detail, namely interdiscourse, intradiscourse, and transverse discourse. The latter two are concepts that are particularly relevant for the way in which the relationship of statements and the interlinking of discourses, in what I will call discursive procedures, operate. Prior to that, however, I will briefly sketch Pêcheux's notion of the discursive formation and in the course also the discursive process.

2.3.1 Discursive Formation, Discursive Process

Discursive formation resonates strongly of the like-titled Foucauldian concept, which, in my reading, Foucault employs in most cases synonymous with discourse itself. Pêcheux's concept is closely related, insofar as he puts equally strong emphasis on the materiality and institutional contingency of the discursive formation. However, it is more precisely delineated. It relates quite concretely to the formation of meaning, as well as to the concrete historical instance of materialisation of ideology, in what he terms an ideological formation. Whereas, in this understanding ideologies are always practices and not merely ideas (Pêcheux, 1982), in the same way that discourses are never merely words nor images. This emphasis on practice, from which a focus on the social contingencies of ideologies derives, also makes it possible to consider Pêcheux's concepts on the backdrop of Foucault's theories.

For Pêcheux, very close to Foucault, a discursive formation is characterised by the fact that "words, expressions, propositions, etc., change their meaning according to the positions held by those who use them". Thus a discursive formation is "that which in a given ideological formation [...] determines 'what can and should be said'"(Pêcheux, 1982, p.111). Put differently, meaning is created through use and determined by the discursive formation, which contains the conditions for the use and significantly also non-use. Since Pêcheux emphasises the multiplicity of discursive formations, this consequently also means that the meaning of an expression changes depending

on the discursive formation in which it is used. Words or signs change their meaning when they move from one discursive formation to another. Crucially, this means inversely also that words, which are "different literally can, in a given discursive formation, 'have the same meaning'" (Pêcheux, 1982, p.112, italics in original).

This process of meaning creation through use that is legitimised within a discursive formation is what Pêcheux calls the discursive process, namely

> the system of relationships of substitution, paraphrases, synonymies, etc., which operate between linguistic elements – 'signifiers' – in a given discursive formation (Pêcheux, 1982, p.112).

This is similar to the way in which Foucault envisions the dispersion of statements in a discourse and the shifting ways in which statements relate to each other. However, while Foucault's approach – which deliberately does not restrict the notion of statement to linguistic signs – allows us to see more clearly the displacements of these relations within discourse, and the power knowledge link, Pêcheux emphasises the linguistic mechanisms and rhetorical devices that are brought into play and that underlie or precede the creation of meaning. Significantly, he also foregrounds more directly the ways in which discursive formations cannot be seen to exist in isolation, but always only in relation to other discursive formations. Thus, his emphasis is more strongly on the shifting nature of meaning that arises when signs move between discursive formations.

2.3.2 Interlinking Discourses

The various discursive formations are seen to relate to each other in ways that are determined by complex laws that regulate their different statuses. This is what Pêcheux calls the interdiscourse or "the complex whole in dominance of discursive formations" (Pêcheux, 1982, p.113). In a way, interdiscourse is seen to contain the rules which determine how discursive formations interlink, that is how they are dispersed unevenly in society and how their dominances are regulated.

While interdiscourse determines the ways in which discursive formations relate to each other and their asymmetrical dispersion in society, intradiscourse determines the rules within a discursive formation, i.e. "the operation of discourse with respect to itself" (Pêcheux, 1982, p.116). Finally, the term transverse discourse is reserved to describe the ways in which pre-constructed elements from one discursive formation pass to another. The concept captures the ways in which the interlinking of discursive formations manifests itself materially. Furthermore, it quite accurately describes what happens when elements with established meanings – pre-constructed elements – in one discursive formation are drawn on to legitimise another. Martin Montgomery and Stuart

Allen (1992) provide a useful way to think about the relationship between interdiscourse, intradiscourse, and transverse discourse. By imagining them in spatial terms, they describe their connection very concisely and deserve to be quoted in full.

> At particular crucial points in the plane of intradiscourse, elements from interdiscourse may erupt as 'already there': these preconstructed elements are lateral reminders of material established in another discursive formation. In this way one 'line' or 'plane' of discourse may intersect with another, providing tacit support from *elsewhere* in interdiscourse to an intradiscursive enunciation. When the intelligibility of an intradiscourse leans for support on its intersection with pre-established discursive material from interdiscourse, Pêcheux choses to call this phenomenon *transverse discourse*. (Montgomery & Allen, 1992, italics in original)

Pêcheux (1982, p.116) himself describes the way in which transverse discourse operates as metonymy, i.e. pars pro toto or the substitution of the whole by its part. Thus, transverse discourse describes the process in which one discursive formation is literally brought into the domain of another discursive formation by drawing on or introducing (certain) elements from the former. It quite literally ties discursive formations together. In this sense, words or expressions – signs – might change their meaning when they pass between discursive formations. At the same time however, they are also determined – and certain signs more so than others – by their prior and concurrent use in one (or several) other discursive formation(s) and this is carried over when they re-emerge in other fields of use.

2.3.3 Grammar and Implication

Pêcheux emphasises specifically the grammatical processes in which transverse discourse inscribes itself into intradiscourse. In particular, his focus is on explicative and determinative relative clauses, by which pre-constructed elements from one discursive formation are introduced into another through implication. While I find the focus on relative clauses somewhat limiting, they can still serve as examples for the general ways in which meaning can be implicated, either from other discursive formations or from the one in which a statement occurs. I will therefore briefly sketch the ways in which Pêcheux conceptualised them and their working.

In general, relative clauses are grammatical constructions, which modify a noun. Whereas an explicative relative clause is a non-restrictive and non-defining one, while a determinative relative clause is one that is restrictive and defining. In fact, in linguistics they are also called non-restrictive as well as restrictive relative clauses. The difference between them is best understood by way of example.

"This is the article, which I need to read" is a determinative relative clause; in it an indefinite

number of articles is restricted to one particular article. In contrast, "The Journal of Happiness Studies, which is an open access journal, has published its latest issue" is an explicative relative clause, i.e. information about the Journal of Happiness Studies is added and it is further specified as being an open access journal (which it is not).

The examples provided by Pêcheux himself are less straight forward. However, they are better suited to illustrate the process of implication. Borrowing from logician Gottlob Frege, the following sentence is introduced as an example of a determinative relative clause:

> He who discovered the elliptic form of the planetary orbits died in misery (Pêcheux, 1982, p.61).

Pêcheux takes Frege's own analysis as his starting point and shifts the attention away from the logical construction of this sentence to the way in which pre-constructed elements are introduced. Specifically he points out that the connection made between the 'he' who discovered the elliptic form of the planetary orbit, i.e. Johannes Keppler, and the assertion that he died in misery is seemingly totally arbitrary from the point of view of the internal workings of the sentence, "except of course in a religious or moral perspective for which misery is the counterpart of genius, and a punishment for knowledge seen as transgression" (Pêcheux, 1982, p.63). Sure enough, other readings than Pêcheux's are also possible, however they will equally be determined by various outside meanings which acquire their significance from elsewhere. They will draw this meaning into the sentence. Thus, the point is, what happens here is the introduction of meaning from an external source simply through implication and it is a meaning that is not as such contained in the expression of this sentence, or in the words of Pêcheux (1982, p.64) "we are dealing with a discursive effect linked to syntactic embedding".

Again, referring to Frege, the following sentence is provided to illustrate the workings of the explicative relative clause:

> Napoleon, who recognised the danger to his right flank, himself led his guards against the enemy position (Pêcheux, 1982, p.74).

From a purely logical and grammatical perspective this sentence can be broken down into two propositions: (1) "Napolean recognised the danger from his right flank." (2) "Napoleon himself led his guards against the enemy position." However, these two assertions separately do not convey the same meaning as they do in the explicative relative clause, which implies a causality. It is not purely a matter of adding information about the noun, but establishes a "connection of precondition and consequence, of the form: 'If (being a general or being Napoleon) one recognises a danger threatening, one must oneself lead the attack to ward it off'" (Pêcheux, 1982, p.76). As above, of course other readings are possible. However they will equally draw

conclusions or establish a sequence or causality which is derived from outside the internal working of the sentence.

These types of relative clauses are certainly rare in everyday language. Yet, they still illustrate quite concisely how grammatical structure can operate as furthering processes of implications, which introduce elements from one discursive formation into another and which establish causalities. However, one can imagine a number of other processes that would have the same or similar effects for the operation of transverse discourse, although Pêcheux himself focuses almost exclusively on relative clauses. This, while illustrative, is also a limitation and it clearly poses a problem for the actual analysis. Thus, as Montgomery and Allen (1992) point out,

> a more radical step reflecting more fully the consequences of his [Pêcheux's] position, would entail working from discursive processes as such, conceived in a more autonomous fashion, and noting the range of grammatical processes that potentially may be associated with them.

This is an important observation, since it liberates the analysis. It enables one to focus on the actual manifestations of discursive processes without curtailing it to include only certain types of grammatical constructions, while at the same time it does take these constructions seriously and does not rid them of their semantic significance. I would include here also such regularities as for example word order, the use of modifiers such as adjectives and adverbs, or very importantly the use of grammatical conjunctions.

To sum up, for my own analysis, what is important, are two aspects: firstly, that grammatical constructions form part of the discursive strategies; and secondly, that meaning can be introduced from external sources simply by means of implication, grammatical, or otherwise.

2.4 Discourse Hierarchies

In society discourses are not dispersed evenly, but some are more powerful and more influential than others at a given time. Discourses draw their legitimacy from other discourses. Yet, particular types of discourses exist which hold a special position in what Pêcheux calls interdiscourse. These are discourses that do not refer to any hierarchically higher discourse, but claim to draw their legitimacy from within; that is they claim to found themselves, while they found others. These are usually referred to as dominant discourses. One way to think about these

types of discourse and the ways in which they act is offered by Dominique Maingueneau (1999), who proposes to speak about "self-constituting" discourse[5]. The reason why Maingueneau's approach is relevant here is that he also proposes a way to understand the workings of international organisations on a discursive level (Maingueneau, 2002) and these are the types of institutions through which most of development occurs and is legitimised. Furthermore, in particular, I find his approach fruitful because it allows me to develop my own understanding of the ways in which discourses legitimise each other and the ways in which a discursive system, in our case most notably development discourse, can function in legitimising certain constructions, and not others, and thus as authorising speaking. Therefore, in the following, after introducing his concepts, I use Maingueneau's theory predominantly as a bouncing board for my own thoughts in order to clarify a number of issues surrounding the way in which discourses interact and how resistance can come into play. I do this specifically also by means of defeating some of his arguments.

2.4.1 Self-constituting Discourses

Maingueneau's focus is on so-called constrained discourses; that is those that adhere to particularly strict rules and regulations. He furthermore is strongly concerned with how discourses act on each other, something that takes into account that "the identity of a discourse is constituted and maintained through other discourses" (Maingueneau, 1999, p.181).

In this context it is necessary to briefly clarify some terminological issues, which however also point to different aspects of the ways in which these discourses operate. In the English language work of Maingueneau's (1999) he uses the term self-constituting discourse. However, the equivalent French term, which he introduces, is *discours constituant* (Maingueneau, Cossutta, 1995; Mainguenau 2002). This translates into constituting rather than self-constituting discourse. The French and the English term are both equally suited, yet they capture different aspects of this type of hierarchically superordinate discourse. While self-constituting discourse highlights the way in which certain discourses do not gain their authority from other, higher ranking discourses, the French term *discours constituant* points more strongly to the fact that certain discourses have the power to act on others in ways that other discourses do not. Both aspects are fundamental for the understanding of dominant discourses. Maingueneau (1999, p.185) himself points out that "ideally we should write '(self) constituting discourses', with 'self' in parantheses".

5 Maingueneau does not use the term discursive formation, but solely refers to discourse. Therefore, I will employ the term discourse throughout this outline of Maingueneau's ideas and reserve the discursive formation for Pêcheux's understanding.

Fundamentally two dimensions to the way in which self-constituting discourses operate exist. Firstly, they "emerge by instituting themselves as legitimated to utter as they utter". Secondly, they "are sets of texts whose structuration modes must be legitimized by discourse itself" (Maingueneau, 1999, p.186). For example, in our society most prominently, and often on opposite sides, science or religion are discourses that operate in this way. Sure enough, in other societies other discourses can hold the position of self-constituting discourses.

Significantly, from the way they found *themselves*, their authority derives. Their authors do not speak for themselves, but according to sets of rules and rites and legitimised by institutions, they claim to speak *truth* and on behalf of others. Moreover, the texts in which these discourses manifest themselves are also determined by the way they circulate and thus quite concretely by their manifestation in a medium, which also founds their communication and meaning.

> Meaning is not locked up in a text like in a box, it implies a set of communicational conditions. The 'content' of a text cannot be apprehended independently of these conditions: mediological conditions of a discourse are a dimension of its identity (Maingueneau, 1999, p.191).

The relevance assigned to *mediological* conditions for the identity of discourse will become an important feature in my own analysis in subsequent chapters. I will return to it and relate it to the concept of genre to account for the way in which formal characteristics typical for certain groups of texts influence and shape discourse and come to be part of its semiotic structure.

While self-constituting discourses may claim not to be founded by other discourses they still interact with them and also with other self-constituting discourses. Furthermore, within themselves they are not homogeneous, but rather as Maingueneau (1999, p.186) points out by introducing the notion of the discursive field, in them different positions can be held and these positions also compete. These discursive fields also form the basis for discursive communities, i.e. communities structured by discourses. This is of course, one could add, the case for discourses and communities in general and not restricted to self-constituting discourses. However, in the case of self-constituting discourses, it could be argued, that these positions and the communities formed around or through them have more profound consequences for other discourses and discursive communities, insofar as the latter lean on these seemingly prior form of discourse, which claim to be closer to the truth. The community formed around development discourse is in certain ways such a community and it is certainly one whose claims and practices have indeed very profound consequences, at least, for those to be 'developed'.

2.4.2 Demarcating Discourses

Particularly interesting here, however, is not the way in which these discourses operate internally, but rather how other discourses establish themselves by leaning on them and how discourses converge. For example, politics is not a self-constituting discourse rather it is an arbitrator of discourses or in the words of Maingueneau's (1999, p.185) "political discourse is a privileged contact zone between self-constituting discourses and other areas". Likewise, the open access movement, albeit in a different way, can also be understood as a contact zone of discourses. One particularly powerful discourse it leans on is that of science, but also something that could be called the discourse of international organisations, specifically of the likes of the the World Bank or the United Nations. Mainguenau (2002) considers these separately and investigates them with regard to their possible role as self-constituting discourses. These are especially interesting in the present context, since this very discourse of international organisations is drawn on to significant degrees in the open access debates, specifically when the discussions turn to the 'developing world'. However, it also highlights a fundamental problem with the notion of self-constituting discourse in particular and with the way in which discourses are demarcated in general.

According to Maingueneau (2002) international organisations are generative of a type of discourse that conveys the image of being self-constituting, while de facto they do not truly draw their legitimacy from within. They are what he terms the "simulacrum of a self-constituting discourse" (Maingueneau, 2002, p.131, my translation). They equally allege to speak from nowhere and everywhere, their enunciations claim to be universal. They also claim to advance what they consider universal positions beyond questioning, like humanity or human rights. Equally, conflicts and different positions exist within the discourse and their texts are illustrative of that. However, these, so Mainguenau (2002) are legible only to experts and they remain on the surface. Thus, Mainguenau (2002) argues, that while self-constituting discourses *proper* also establish themselves through the struggles and contestations within their own fields, these have to remain subdued in the case of international organisations, since exposing them would challenge the very reasons for their existence.

While at first reading, this seems like a reasonable distinction it also contains a problem. It is not quite clear why, for example, the conflicts and struggles over positions within the discursive field of science should be more legible to non-experts than those surrounding international organisations, neither why their exposure could, at some point, not constitute a challenge for the very reasons of its existence. Somehow it is not entirely obvious how for Mainguenau science,

religion or philosophy become to be self-constituting *proper*, while other discourses that are based on the same premises are considered simulacri. Essentially, the very need to introduce the notion of the simulacrum of a self-constituting discourse brings the problem inherent in clarifying what constitutes a self-constituting discourse to the fore and it also highlights the difficulties in how to demarcate it with respect to other discourses and also other self-constituting discourses. The hierarchies become less obvious when venturing beyond science and religion. Why are contestations within one field understood as rivalries that contribute to its construction, yet not in another? Furthermore, if one strips the term discourse of international organisations of its 'organisation' and calls it instead for example the discourse of universal human rights, which is the element that Mainguenau (2002) emphasises, the difference between it and science or religion becomes less obvious. This insofar as it also introduces an authority which goes commonly unquestioned or which in itself disqualifies opposition. Inversely, admittedly crudely, calling the discourses of science or religion, discourses of universities or of the mosque/church/synagogue/temple etc. equally amplifies this point. Specifically, it highlights the societal and cultural contingeny of self-constituting discourses as well as of discourses in general, and followingly also of their hierarchies. This is of course already considered by Maingueneau (1999) when he states that different societies have different self-constituting discourses. However, and this is in fact the point I want to make, it also highlights the problems inherent in how to delineate discourses, in particular when considering their actual analysis. While it is obviously a central element of discourse that it is legitimised from a particular social place – an institutional position – at the same time, certain discourses in some ways seem to transgress these clear institutional boundaries and can also be seen as grouped around powerful key notions, such as for example universal human rights, more recently information, or in our context most prominently development. These are of course predominantly shaped in specific institutional settings and fields of use, yet they cannot be merely reduced to these institutions, as for instance in this case international organisation. Granted, a concentration on these very narrow manifestations of use can be advantageous for certain types of analysis. Yet at the same time, it also limits the understanding of how discourses operate and overlap. To consider this seems particularly relevant when attempting a discourse analysis of a field as diversified as that which unites around open access, even if my focus is predominantly on its connection with development.

In the same way that statements are seen to relate to each other in shifting but clearly regulated ways, discourses also fluctuate in their relation to each other. In this sense, the most important point and qualification, it seems to me, is that when in comes to considering discourses with a view to analysis, any attempt at clearly circumscribing them has to take into consideration that it

is only a temporary delineation and one that is made for a specific purpose.

Having said that, indeed certain types of discourses, as for instance religion(s) or science, but of course also other 'non-western' forms of knowing, claim to be universal, they attribute to their speakers the authority to speak from a position of everywhere and nowhere and they refuse to be legitimised by other superordinate discourses. This is the reason for their existence. In a sense, they perform what Donna Haraway has prominently called the "god-trick" (Haraway, 1991a, p.189). Fundamentally, their specific legitimacy is commonly accepted, which not only perpetuates their authority, but also their existence and demarcation as well as the way in which they are perceived as standing out from other discourses. These are the discourses that are given priority as legitimising sources to establish or at least authorise speaking. It seems to me, development discourse, however contested, has become such a discourse, whether it is connected to international organisations, NGOs, or individuals speaking *as* 'from the developing world'. In this sense, it is useful to consider their positions as particularly powerful. This becomes most salient and acute when those types of discourses which are in their emergence and internal reasoning intimately linked with a society move to other societies and are drawn on to legitimise another society's 'self-constituting' discourses. Therefore, it is crucial to consider that the ways in which they are demarcated is also always arbitrary, but also to bear their conditionalities in mind.

2.4.3 Counter-Discourse

While Maingueneau's conceptualisation of how some discourses claim to constitute themselves is useful to envision discourse hierarchies, his claim that "only a discourse that constitutes itself can found others" (1999, p.185), seems problematic. Firstly, this puts these discourses in a position that makes it near impossible to challenge them. Secondly, it ignores the ways in which discourses act on others through chains and how this manifests itself in actual language practice. For example, when considering the way in which development discourse has been described, it becomes clear that it is to a large degree founded on the discourse of economics. Yet, economics itself is not self-constituting, but, one could argue, it founds itself on the discourse of social science and thus in turn on science. Likewise, if one considers the discourse of international organisations as being not self-constituting, this would imply it cannot found other discourses. Yet, it can be argued, that a number of discourses are founded on the discourse of international organisations, most notably the discourse of NGOs, and I would suggest , at least to a degree, also that of grassroots movements. This example also highlights another aspect of how discourses are founded on other discourses that needs to be considered.

Until now it was implicit that discourses lean on others as sources of legitimisation and authority

in a positive sense. However, just like Gayatri Spivak (1996) pointed out with regard to the productivity of power, legitimisation can also occur in a negative sense or in resistance to discourse. Thus, I would like to suggest, the idea of how discourses are founded needs to be expanded to consider how discourses gain authority from other discourses through resisting them. Of course those discourses that are considered dominant in interdiscourse are particularly powerful legitimisers, also when discourses emerge that are aimed at resisting them. At the same time, one has to be careful not to disqualify a counter-discourse as solely the product of a dominant discourse, as its opposite, which would effectively rid it of any autonomy. Here it makes sense to return to Foucault's understanding of resistance, which he sees as inscribed in power, yet not in mere opposition to it. This opens up a way to conceptualise manifestations of discourses of resistance, or counter-discourses, while being founded and legitimised by dominant discourses, as presenting points of resistance that are equally the product of power, yet also its obstruction and "the starting point for an opposing strategy" (Foucault, 1998, p.101). At the same time, what are considered counter-discourses at certain times can equally be very powerful legitimisers and they can also serve to legitimise the dominant discourses that they appear to resist. In certain ways, open access might be such a case in point. Development has certainly absorbed counter-discourse or at least elements of those, indigenous knowledge might be such a case or community-based development, as we will see later (chapter 5.1).

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In this context it is interesting to introduce Arjun Appadurai's (1996) depiction of the migration of concepts in what he terms ideoscapes, since it opens up the view to a situation, in which not only markets, but also societies and cultures are more closely integrated than ever before. Appadurai (1996) attempts to account for a dissolution of clear dichotomies and hierarchies. In doing so he emphasises the fluidity of movements, shifts, and cultural flows and develops an elaborate model of multi-layered *scapes*. With this he aims to arbitrate the tensions between homogenisation and cultural differentiation, or 'indigenisation', which take place simultaneously under the umbrella term of globalisation. He visualises globalised society by the construction of five dimensions of exchange, so-called -scapes, namely ethnoscapes, mediascapes, technoscapes, finanscapes, and ideoscapes, each with its own cultural flow. Ethnoscape relates to the movement of people, technoscape to technological flows, and finanscapes to financial transfer (Appadurai, 1996). Finally, mediascapes "provide [...] large and complex repertoires of images, narratives", and they are quite concretely manifest in "the distribution of electronic capabilities to produce and disseminate information" (Appadurai, 1996, p.35). Most significant here is the concept of the ideoscape. Ideoscapes are understood as "concatenations of images" (Appadurai, 1996, p.36).

More specifically,

> ideoscapes are composed of elements of the Enlightenment worldview, which consists of a chain of ideas, terms and images, including freedom, welfare, rights, sovereignty, representation, and the master term democracy (Appadurai, 1996, p.36).

These elements and their connections are based on a specific European view of the world. However, they have been transposed to other parts of the globe and have developed into global master signifiers, which have also impacted on the way they relate to each other. In the words of Appadurai (1996, p.36):

> [T]he diaspora of these terms and images across the world, especially since the 19th century has loosened the internal coherence that held them together in a Euro-American master narrative and provided instead a loosely structured synopticon of politics, in which different nation-states, as part of their evolution, have organised their political cultures around different keywords.

The concept of ideoscape is an interesting one, insofar as the elements seen to populate this (land)scape of images can be related to dominant discursive formations and in particular to the ways in which the certain elements, by way of migration, tie different discursive formations together. In other words, Appadurai's depiction of the movement of highly charged concepts through ideoscape is in a certain way illustrative of the operation of transverse discourse. It also illustrates the way in which dominant discourses operate by way of exporting concepts that are fundamental to their functioning in the specific situation of their emergence, that however are often transformed into catchphrases and keywords or allusions outside these specific situations.

At the same time, Appadurai's conceptualisation of ideoscape, which restricts it to master narratives and in particular to Enlightenment ideas in certain ways also limits its usefulness. This insofar as it excludes resistance and counter-movements from ideoscape and thus to a degree legitimises the perpetuation of these dominant discourses. However, it can be argued, that these are equally subject to diasporic shifts and migrations. While the channels of their diffusion might be different, they undergo similar modifications and are drawn on as catchphrases in comparable ways. Not seldom they are appropriated and fed into dominant discourses. To return to the point made above, if resistance is considered, with Foucault, as inscribed into power and importantly as not merely oppositional, this also means that statements, originating in such counter discourses make their appearance in those formations that are considered dominant and of course vice versa. This can lead to a mere legitimisation of these dominant formations, it can, however, also be an indication of the occurrence of more significant shifts and thus of possible fissures. In most instances, I believe, it is both.

2.5 Discursive Procedures

My own analysis concentrates on a number of what could be considered key notions, more specifically these are science, development and progress, technology and knowledge and information. I attempt to establish what the ways in which they are imagined and used and in which constellations might tell us about the constructions of the 'developing world's' information requirements within the open access debates and in turn of the construction of the 'developing world' itself, of its people and their knowledges, as well as of 'open access' position within the development paradigm.

Each of these notions is related to a number of different, at times overlapping institutional sites, sets of knowledges, practices, and instruments. In transverse discursive operations elements from different discursive formations are introduced into the debates to lend support, to allude to that which is taken for granted, to contest certain perceptions, to authorise and to enable speaking. This leads to specific constructions which advance and make possible certain perceptions, here specifically of the 'developing world', its 'information needs', of science, information, or technology, and so forth, but also of those doing the 'developing'. However, not only do these constructions exert influence over each other, the reliance on pre-constructed images and already established constructions from very dominant discourses contributes significantly to the ways in which they emerge. How this takes place becomes most obvious by focusing on the literal processes that give way to these constructions as they are manifest in the actual textual artefacts. These are strategies that can best be described as discursive procedures.

A discursive procedure can be imagined as the way in which a statement's position becomes inscribed into discourse and how this leads to a temporary stabilisation. This takes place through iterant alliances and connections between statements, which give way to particular recurrent and most importantly to repeatable strategies. Discursive procedures can be the result of overlaps between different discourses as fields of use, but also they can derive from recurring alliances between statements within a discursive formation. Crucially, they lend a statement significance and precede as well as enable its construction. Moreover, in these procedures the formation of statements surfaces and manifests itself in a way that facilitates their investigation; that is, they can be identified and described. Typically, this takes place in the form of tropes, i.e. figures of speech, and through processes of implication, such as those that occur through various grammatical operations, but also implications on the level of terminology.

In this sense, by insisting on the shifting nature of relations between statements, while at the same time considering the concrete instances of a statement's stabilisations that derive from the

iterant connections it enters, this understanding of the discursive procedure also brings together the way in which Foucault describes the dispersion of statements with Pêcheux's understanding of the discursive process.

The next chapter is concerned with presenting one particular discourse and the theoretical perspective that underlies its investigation. That is, I will present development discourse and the power relations inscribed into its workings, from the perspective provided by post-development studies; not least by drawing the attention to a few of its historical ties.

3 DEVELOPMENT DISCOURSE: A POST-DEVELOPMENT PERSPECTIVE

Since the late 1980s and increasingly during the 1990s and early 2000s studies have emerged that position development as a discourse and focus on deconstructing the power structures and truth claims that emerge from the discursive relations at play. Taking their cue from Edward Said's (2003 [1978]) "Orientalism", most operate within a Foucauldian framework. These have been subsumed under the name post-development, thus positioning them alongside a clutch of closely related post-modernist and deconstructionist 'schools', most important here probably post-colonialism.[6]

One of the earliest and certainly still one of the most influential and perceptive studies that paved the way for a Foucauldian engagement with development was James Ferguson's (1990) work on development interventions in Lesotho, in which he famously described the development apparatus as:

> [A]n 'anti-politics machine', depoliticising everything it touches, everywhere whisking political realities out of sight, all the while performing almost unnoticed, its own pre-eminently political operation of expanding bureaucratic state powers. (Ferguson, 1990, p.xv)

While Ferguson focused on one specific case, that is Lesotho between the years 1975 and 1984, and carved out the workings of the development apparatus in this one particular setting, Arturo Escobar (1995a), a number of years later, embarked on an analysis of the "making and un-making of the third world" in a global context., albeit with a strong slant towards South and Latin America. Equally operating within a Foucauldian framework, he presents us with a picture of the

6 The position of Foucault particular within the post-colonialism and colonial discourse studies is not entirely unproblematic and Foucauldian theory has itself been criticised for presenting a Eurocentric world-view (cf.. Loomba,, 2005, pp.49 et seq.). Within post-development approaches however, a Foucauldian perspective is questioned less and also considered less problematic. Foucault himself might not have paid attention to colonial expansion and the very specific power relations and relations of dominance within colonialism, yet as Said's, Ferguson's, or Escobar's highly relevant studies go to show, this does not mean that approaches starting from a Foucauldian perspective on discourse and the power knowledge link need to fall short of considering precisely these.

construction of development and the 'third world' that traces it back to the end of World War II and follows it up to the early 1990s. Both authors' analyses have proved uniquely influential and have triggered a great number of works of varying scale and ambition following on from them.

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Looking back now, what is, I think, the most striking observation that can be made on the basis of their analyses and the ones that followed, is how little has changed. Sure enough, the various techniques and instruments have been updated over the decades. Typically in accordance with the economic paradigm dominant at any one time, new schools have been added, new angles have been found, new 'problems' have been identified, and terminology has been dusted off. Certainly, state-controlled development as it was thought of in the 1950s is different from ideas of a free market and privatisation that predominate today and they are based on different terminologies. However, these terminologies operate according to similar discursive rules when they relate to development and employ similar metaphors to describe their aims with regard to those to be 'developed'. For example, more recently knowledge, frequently of the *indigenous* kind or information often related to ICTs, or a lack of it, have been inserted as 'novel' problems, certainly changing the field, yet also moving according to the rules laid out by and in its discourse and thus basically re-enforcing the binary opposition between already 'developed' and still 'developing' (cf. Mehta, 2001; Wilson, 2003).

That is to say, all the while schools have changed and new economic paradigms have taken over from another, the fundamental workings of development discourse have shifted little. It has established itself as a common sense way of regarding the world and of making sense of its inequalities. Moreover, development's ways of operating and its instrumental terms and concepts have migrated and emerged as traces in other settings, not least in Library and Information Science where they serve for example as basis for the construction of concepts like 'information poverty' and similar (cf. Haider & Bawden, 2006) and they also operate in the context of the open access movement.

Development discourse has become its own relic, which however still – or perhaps it is because of this – provides for one of the most powerful systems on the basis of which to authorise speaking and which continues to shape the relations between the various knowledges, people, institutions, techniques and so forth that constitute development. This will become acutely obvious in my analyses in the subsequent two chapters and we will return to this point, as well as in particular to Escobar's (1995a) analysis, a number of times throughout.

Before we continue with outlining in some more detail the operating of development discourse

and take a brief look at some of its history and central concepts, I would like to draw the attention to what has become known as post-development studies and focus on some key scholarship and specifically also on problems and critiques.

3.1 Post-Development theory: Confronting Criticism

At their core post-development approaches criticise the foundations upon which the development project is build, thus by way of stripping the concept to its (Eurocentric) bones, questioning the very idea of the possibility of development. However how this is done and starting from which premises varies greatly between authors.

For instance, Wolfgang Sachs's claim (1992, p.3), "it is not the failure of development which has to be feared but its success", which he advanced in the foreword to the "Development Dictionary" – intended to be the age of development's "obituary", already over a decade ago (Sachs, 1992, p.1) – can be taken as a hyperbolic expression of this idea and one, which certainly not all authors writing under the label would share. Still, it is one that highlights a perceived and in many ways also real problem with development and how it is thought about and that is the idea that all countries and people should 'develop' along a prescribed trajectory towards states which the 'West' held before them and furthermore that this should be an obvious path to follow.

Gilbert Rist (2006), when writing the "History of Development", starts from rather different premises. He sets out to

> scrutinize the aura of self-evidence surrounding a concept which is supposed to command universal acceptance but which – as many have doubtless forgotten – was constructed within a particular history and culture (Rist, 2006, p.2).

A similar point is also made by Frédérique Apffel-Marglin, (1996, p.145) who writes:

> Development knowledge will remain a colonizing type of knowledge as long as it continues to take such categories as 'technology', 'ritual', 'science', 'religion' as givens rather than constructed on the basis of a certain Western epistemology and ontology. The people to whom development is brought will continue to be perceived as engaging in irrational or wasteful behaviours. Decolonizing development requires the questioning of a world constructed by the categories of the dominant system of knowledge (Apffel-Marglin, 1996, p.145).

In a similar vein, Arturo Escobar (1995a) speaks about the need *to unmake development*. By this he means a discursive unmaking, the changing of the "order of discourse" and a challenge to the power/knowledge link that sustains it, in order for development to

> strategic[ally] move away from conventional Western modes of knowing in general in order to make room for other types of knowledge and experience (Escobar, 1995a, p.216).

For some, these references to *unmaking* or even *obituaries* might sound somewhat abdicating, an accusation which in fact post-development is occasionally faced with (e.g. Nederveen Pieterse, 2000a). However, the dismissal of development as pronounced in the most interesting and relevant analyses provided by post-development theory is not necessarily equal with complete relativism and with it loss of hope for alternatives or some form of change. On the contrary, by freeing the view from the imperative and unquestioned necessity that development has become and by challenging its underlying premises and claim to universal applicability, these analyses also contribute to opening up the view to forms of change that might lie outside those prescribed by the dominant development paradigm(s).

Furthermore, by focusing the analysis on development discourse, these authors and others have drawn the attention to a number of historical ties and epistemological premises that vastly improved our understanding of how development came to be what it is and what it was and how it still operates today. Moreover and especially relevant for our context, these analyses also help us to understand how development discourse has, by constructing its aim as an ostensibly benign and unavoidable regime, become so powerful and pervasive that it can still be drawn on to authorise or at least legitimise other discourses. Clearly, given the central position the notion of development still holds for defining international relations and also of course for addressing inequalities these are relevant considerations.

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I will begin, by presenting some of the criticism parts of post-development theory have been subjected to up front, before moving on to briefly introducing those approaches that contributed to substantially challenging what had become, however critical in its individual expression, 'conventional wisdom' and managed to introduce new perspectives. This bottom-up approach will help to clear the terrain before moving on, but it shall also serve to point to some dangers that might emerge when a merely polemic perspective is taken up, to clarify what post-development theory is not, as well as, in the course, to establish a few central premises.

To start with, while I have done so up to this point, it is not actually tenable to speak of post-development as one coherent school of thought or even a cohesive group of scholars. While most tend to base their analyses on a Foucauldian instrumentarium, their use and understanding of Foucault's concepts varies significantly (cf. Ziai, 2003, 2004; Brigg, 2002). In some cases it can rightly be said to be reduced to mere allusions, without considering the wider context and

implications of a such a framework and in particular of the Foucauldian notions of discourse and power. In particular Wolfgang Sachs' (1992) well-known "Development Dictionary", aptly subtitled "A guide to knowledge as power", which unites substantially different articles by eighteen more or less prominent authors, has been faced with accusations of Foucauldian *sloppiness* (e.g. Brigg, 2002). An accusation that cannot be entirely dismissed in the case of some authors represented in this anthology, which however cannot be extended to the entire compilation. At the same time, while Foucauldian is usually taken as one unifying characteristic of post-development which in most cases is also correct, as Aram Ziai (2004) reminds us, by no means all authors usually subsumed under the label actually base their analyses on Foucauldian concepts, nor do they claim to do so, and neither do all the authors united in the said anthology, despite its title.

Almost ironically post-development has also been accused of being a "conservative ideology". (cf. Simon, 2002, p.125). In an attempt to distinguish between different strands of post-development theory and to pin down their ambivalence, Aram Ziai (2004, p.1055) describes purely anti-modern and, one could add, often cynical approaches as "a programme of reactionary populism". These, he argues, often unwittingly and maybe naively, legitimise oppressive, typically patriarchal structures. Thus they ally themselves with neo-populist and authoritarian projects as well as ironically also with ('western') neo-liberal capitalism, whose proponents would most likely fully agree with the strong critique of state intervention these texts advance, often rightly, but in very undifferentiated ways and for very different reasons. In particular, Ziai's (2004) criticism is targeted at the work of Majid Rahnema and Claude Alvares. The former is accused of "celebrating the model of enlightened authoritarianism", the latter of playing into the hands of nationalism and even racism (Ziai, 2004, p.1055). Both, in my view, are at least in some instances guilty of romanticising 'traditional' society in ways that forecloses serious (political) engagement with their positions in, what is commonly called, a global society and in particular with the power structures inherent to them. At the same time, Claude Alvares' (1992a, 1992b) analysis of the role of science in development and colonialism is, admittedly polemic, yet nonetheless very perceptive. He highlights a number of problems in the way science as an institution operates that made it complicit in anti-democratic modernisation projects which systematically devalued and discredited local knowledges. Likewise, Majid Rahnema's (1992) close examination of the cultural conditionality of poverty, again undeniably polemic, is very valuable considering the foundational position poverty holds in development discourse. I will return to both points later. However, I agree with Ziai, when he points to the danger that lies in the close proximity between the simplistic arguments occasionally advanced by these and similar authors with those of neo-liberal, free-market economists as well as specifically with authoritarian projects for which 'the tradition'

serves as a powerful legitimation for erecting or perpetuating oppressive structures. This danger is very real, and it is of course necessary to be acutely aware of its possible consequences. It is a dilemma post-development as well post-colonialism are often faced with (cf, Loomba, 2005, p.21). Furthermore, the polemic nature and tendency to resort to sweeping rhetorical moves, characteristic of some post-development texts, makes them easy prey for criticism and, not always entirely unjustified, leaves them open to accusations of being naive (e.g. Schuurman, 2000).

This streak together with its strong privileging of discourse analysis has made post-development theory susceptible to accusations of being impractical and of not suggesting any viable solutions. This goes hand in hand with charging post-development for stopping at deconstruction and for not considering present and possible future possibilities (e.g. Nederveen Pietersee, 2000a, Schuurman, 2000). First of all, not being instrumental is hardly a valid reason for objecting to the analysis. More importantly however, this argument is self-defeating, since by dismissing the very idea of development, it is outside post-development's terms of engagement to suggest practical solution for development problems; problems which by default are formulated within the very discourse post-development set out to deconstruct (cf. Escobar, 1995a, p.222; Tamas, 2004). Furthermore, while it is absurd to demand post-development theory propose solutions for development problems, it is at the same time untrue that all post-development authors evade political responsibility and avoid the question of what comes next. In particular, Arturo Escobar (e.g. 1995a, pp.212 et seq; 1995b; 2004) addressed the difficult issues of alternatives as well the future on several occasions, specifically by discussing the roles of grassroots and social movements as well as, more recently, also by considering the potential of politics of place in the face of neo-liberal globalisation. Likewise, Gilbert Rist engages very well with the question "what is to be done" (Rist, 2006, p.241). In doing so, he is in no way dismissive of the benefits to modernisation or of 'western' technological innovations which of course also exist and cannot be argued away. He writes:

> There are numerous ways of living a 'good live', and it is up to each society to invent its own. But this in no way justifies the injustices of the present day, when some continue to 'develop' while others have to make do with a 'happy poverty' – on the false grounds that this corresponds to their particular culture (Rist, 2006, p.241).

He develops a number of positive answers to the question 'what is to be done'. All point to approaches that move away from development as such and as it is often conceived, yet still improve people's lives; for example, changes in international loan and trade structures to favour a real improvement in living conditions rather than merely economic growth; or changes achieved through the work and activities of social movements in the 'South' to move away from perceiving

economic development as the only possible route to follow. The main point he makes however is that "post-development [...] should not be confused with anti-development" (Rist, 2006, p.248).

Related to the accusation of not being sufficiently instrumental and constructive, Jan Nederveen Pietersee (2000a, 2000b) argues that in post-development theory discourse analysis has been turned into an ideology. A powerful charge, yet one that can only be formulated as an accusation were discourse analysis considered a neutral methodological tool, which can be applied from the outside in order to uncover some form of essential truth. This is exactly what Nederveen Pieterse (2000b, p.206) does when he states,

> discourse analysis turns into anti- or post-development thinking [...] and in the process methodology turns into ideology – an instrument of analysis becomes an ideological platform, a political position.

However, discourse analysis, at least in a Foucauldian understanding, derives from the very unease with the ways in which society has been turned into a scientifically manageable and understandable entity, based on the idea that it is possible to remove the presumably neutral instruments from the object of their study. By rejecting this premise, discourse analysis is always a form of political engagement; it is what Nederveen Pieterse would, rather problematically, call *ideological*. Estranging the familiar means also always to take side, at least insofar as, before moving on to bracketing it, one first has to make assumptions about what the familiar might be and choices why it should be rendered unfamiliar and in whose interest. These choices are never innocent and do not take place in a power free space, but they are equally part of a discursive regime of knowledge and truth and constituent of discourse. However, it is not by acknowledging this that discourse analysis becomes partial, or political, which it necessarily is, but it is the non-acknowledgement that would make it impossible.

A further charge post-development has been faced with, is the way in which it supposedly wrongly represents development discourse as monolithic and one-directional (e.g. Gardner, 2000). It is of course undeniably the case that development *economics* has experienced a number of significant shifts, some more significant than others, as has economics in general; a factor which for example James Ferguson (1990), Arturo Escobar (1995a) or Gilbert Rist (2006) have not only never denied, but which they have actively considered in their respective analyses. However, this also points to a misunderstanding of what discourse is and what discourse analysis is capable of doing. Discourse analysis aims at making visible regularities at a higher level than the one of individual opinions, positions, or even schools. The point is that while there are clearly different ways of engaging with development and this extends to voicing criticism of how it is executed, not least within the development industry, development *itself* is constructed in a way that

positions it as unquestionable and the 'developing world' is a *result* of this construction not something that existed prior to discourse. In the words of Arturo Escobar (1995b, p.213):

> Development can best be described as an apparatus that links forms of knowledge about the Third World with the deployment of forms of power and intervention, resulting in the mapping and production of Third World societies. Development constructs the Third World, silently, without noticing it. By means of this discourse, individuals, governments and communities are seen as 'underdeveloped' and treated as such (Escobar, 199b, p.213).

Thus, in the following section I will try to present a brief problematisation of the notion of development itself as the most fundamental statement under girding the discourse and will draw the attention to a number of historical and conceptual ties that enable its working.

3.2 Problematising Development

There are essentially two different ways in which development is normally conceived (cf. Ferguson 1990, p.15). First, in one reading development means a progression through the stages of history as prescribed by the trajectory of European societal and economic development.[7] Typically this means modernisation and economic growth; that is a move from agricultural to industrial society, and more recently to a so-called knowledge economy or an 'information society'. This is no less the case for a proposed, idealised development towards a capitalist system than it is (or was) for one towards a communist or socialist one. Second, there is the conception of development as betterment and of an improvement in the quality of live. Most often this is taken to mean poverty reduction. It is not always easy to keep these two apart however, and in particular the first is often seen to result in the second. Both understandings, although the idea of development as poverty reduction at first glance seems to be less prescriptive, essentially favour a largely Euro- or Western-centric perspective on how societies are supposed to change over time and both are anchored in and give way to essentially the same regime of representation that constructs the 'developing world' and its people along the lines of that which they are not.

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Development, today, is the sum of its institutions and practices; institutions like the World Bank,

7 The version of European history that is proposed as 'ideal' is also a very limited one and for instance colonial expansion is curiously left out of the picture. That is, policies do not normally recommend 'developing countries' acquire colonies of their own as one of the 'necessary' stages in order to enable and support their economic growth.

certain divisions within the United Nations Organisation, the International Monetary Fund, national government-run development departments, and increasingly myriads of non-government organisations and philanthropic institutions, large and small; and a set of practices which in a variety of ways produce, collect, distribute, re-produce and apply knowledge *about* the 'developing world'. In the words of Andrew Rew (1997, p.81):

> Development is [...] at the same time rhetoric, official practice and political theory, while also serving as a framework for descriptions, on a global scale, of human misery and hope (Rew, 1997, p.81).

Of course, and this is often forgotten, it is also those that are to be 'developed' and who tend to appear as 'clients' and client categories, suffering from one or the other deficiency which is drawn on to define their identity.

Clearly, development and with it the division of the world in 'developing' and 'developed' parts, is one of the most dominant concepts to have shaped our world, and in particular international relations since the early years after World War II. Since then development on a global scale has established itself as an imperative in itself, an idea that is almost beyond questioning and in particular an assumed need for it has become something which, despite severe criticism, still manages to present itself as an almost undeniable truth. In order for this to happen, it was necessary for the idea of the *necessity* of societies to 'develop' and economies to grow to establish itself first as positive and then as self-evident and as the 'normal' state of things. Therefore, if societies are to adhere to this norm, they have to be turned into societies that do precisely that – 'develop'. Cornelius Castoriadis (1991) links this to the post-war years during which the notion of economic growth as "the key to all human problems" (Castodiadis, 1991, p.176) began to appear increasingly attractive – after all it seemed to work for the reconstruction of Europe – and it established itself more forcefully. It became the preferred solution for the world's problems, which existed at the time, and which as a matter of fact still persist today, most notably hunger and war. In tandem with this process it also became clear that a mere focus on quantifiable economic inputs and outputs would not be enough, since not all societies appeared to have this very 'need' to 'develop'. There were hurdles, cultural, societal and so forth, which would require changes in societal structures to make development possible and the 'natural' option. Thus, in the words of Cornelius Castoriadis (1991, p.180):

> [T]he term 'development' came into use when it became evident that 'progress', 'expansion' and 'growth' were not intrinsic virtualities, inherent to all human societies, the realization (actualization) of which could be considered inevitable, but were specific properties of Western societies possessing a 'positive value.' Thus one could consider these societies as 'developed', meaning by this that they were capable of producing 'self-sustaining growth'; and the problem then seemed to consist simply in bringing the other societies to that famous 'take-

> off.' So the West thought of itself, and proposed itself, as the model for the entire world. The normal state of a society; what one could consider as the state of 'maturity' and designate with this apparently self-evident term, was the capacity for indefinite growth. Other countries or societies were considered to be naturally less mature or less developed, and their main problem was defined as existence of 'obstacles to development'.

Sure enough, this has not happened suddenly, but was the result of lengthy political, economical, and general societal processes, rooted in epistemological premises that long pre-date WWII[8]. However, it is not my aim here to give a detailed account of the history of development thought nor to present the history of development practice, but to focus on the key coordinates of development discourse and its workings today. These are of course rooted in historic processes and events. However, I can only consider some of these here. Suffice to say, the idea of development, since it is in essence the idea of the possibility of infinite progress and improvement and of the continuous growth of knowledge, cannot be thought of without Enlightenment and it is thus closely linked with notions of rationality and of science as universal and as a progressive force. It was necessary for a belief to emerge and to take hold that *man* is a *man* of reason and in control of *his* own destiny and that science is progressive and the epitome of reason. Moreover, it was during Enlightenment that capitalism took hold and "spread to just about every part of life – commerce agriculture, banking, etc. – and affected the ideas in political as well as intellectual spheres" (Budd, 2001, p.55). It was furthermore necessary for the idea of indefinite growth as the "central objective of human existence" (Castoriadis, 1991, p.184) to emerge and this was only possible, as Castoriadis (1991) points out, after infinity in *this* world, in the 17th century, had become a (mathematical) 'reality'.

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The construction of development and of a need for it as self-evident and inherently positive from the post-war years onwards did of course not happen, as for example Gilbert Rist (2006) has pointed out, in an entirely homogeneous and unidirectional process, but it underwent significant changes and also contentions (cf. also Moore, 1995). The point is however, once more, that although changes occurred and certainly criticism was voiced and also taken into account, meanwhile a very curious object was constructed, namely that of a relation defined almost exclusively by lacks and in particular by a chronological deficiency. After all, and this is probably a truism, the possibility to define societies, countries and peoples as 'underdeveloped' or even as

8 See e.g. Castoriadis (1991), Watts (1995), Rist (2006). For an overview of development paradigms and theory see e.g. Hoogvelt (2001), Desai & Potter (2002).

'developing' hinges first and foremost on assuming the possibility of applying one culture's time or chronology to describe another. This procedure has earlier been described very pertinently by Johannes Fabian (2002 [1983]). In his highly influential study on the role of time in the ways in which anthropology makes its object, Fabian introduces the notion of *allochronism*. By this he means, what he calls, the denial of coevalness[9], more precisely,

> a persistent and systematic tendency to place the referent(s) of anthropology in a Time other than the present of the producers of anthropological discourses. (Fabian 2002 [1983], p.31)

What Fabian convincingly shows to underlie much of anthropology – to a large degree founded on the assumption of a binary, diachronic opposition between the traditional and the modern, where the former is invariably an earlier stage of the latter, rooted in theories of (cultural) evolutionism – is quite clearly also the case for development. The founding premise of development is based on a systematic and recurrent insistence to place its object and target of interventions in a time prior to that of the 'developer'. In the course, the object of development is stripped of its history (cf.. also Crush, 1995). This denial of coevalness contributes fundamentally to shaping the economic theories and practices of the various institutions bound up with it and the ways in which the 'developing world' is constructed through their discourse and other practices. In the words of Arturo Escobar (1995a, p.78):

> In spite of the fact that the ethnographer or researcher/economist is mandated to share the time of the other – the 'native', the 'underdeveloped' – in the fieldwork experiences or in the economists' missions, this other is nevertheless represented as belonging to another time period [...]. By constructing the other as living in another time period, these scientists avoid having to take into account the other seriously; a monologue from the height of power results.

To this day, the relation of power, Escobar alludes to, is continued in representations of the 'developing world' and its people and it emerges time and time again not least, as we will see, in the way in which open access is tied to 'development discourse' or in ideas about the so-called 'digital divide'. Curiously, it is also present in many cases where a term like the 'third world' or now the 'South' is used to stand in for the 'developing countries'. In its simplicity, it is of course a very seductive idea, yet one has to be aware of its historical ties, which lie, not exclusively, but to a considerable degree with colonialism.

However, as Gayatri Spivak (1999) points out, there lies a danger in both, in trying to construct a

9 Fabian's use of the English term coevalness is actually a compromise to replace what is more accurately expressed by the German *gleichzeitig* and *Gleichzeitigkeit*. These, in addition to coeval incorporate also the meanings of the English terms synchronous and simultaneous as well as in certain circumstances contemporary (cf. Fabian, 2002, p.31)

linear continuity from the past to the present (i.e. from colonialism to development) as well as in trying to establish the new order as something totally different and new, which constitutes a clean break with everything that went before. Neither path does justice to any phenomenon, but certainly not to one which is historically as complex and consequential as development. While development discourse does indeed carry with it elements of colonial discourse, it would be too simple and polemic to pertain it was a mere continuation. It also needs to be understood as being founded on a clear break with it. I will in the following briefly sketch both, the relation with colonial discourse and the way in which de-colonisation is inscribed into it. Both are fundamental to its workings.

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Describing countries as 'developing', much like the earlier euphemism 'underdeveloped' which it replaced, is not fundamentally different from depicting societies as 'backward' that shaped much of colonial discourse and it implies a hierarchical relation of control. One could argue that in a succession of euphemisms 'underdeveloped' replaced 'backward' to be then itself replaced by 'less-developed' which subsequently made way for 'developing' (cf. also Castoriadis, 1991).

As suggested, the connection between colonial and development discourse exists on different levels and the depiction of colonies and the colonial subjects strongly relies on the idea of *them* being 'backwards'. But it also relies on the depiction of these societies as static and unchanging in order for Europe to see itself as progressive and changing, as moving ahead (cf. Loomba, 2005, p.9). The continuity is very obvious also on a terminological level and the term 'economic development' itself has its roots with colonial economics. Pakdaman (1994) traces the first mention of 'economic development' back to the British Empire's concern with governing her Australian colony in the 1860s. The then introduced terminological entanglement of development and colonialism was subsequently taken further. This is perhaps most obviously expressed in the naming of legislation in the 1920s and 1930s, which included for instance the 'Colonial Development Act' or the 'Colonial Development and Welfare Act' (Pakdaman, 1994). Ania Loomba (2005) also points out how in the case of India in the 1850s the advancement of European knowledge through a British education for the 'natives' was connected to the "economic development of the subcontinent" (Loomba, 2005, p.24).

It seems almost futile to point to the fact that those countries that were defined as 'underdeveloped' from the 1950s onwards have at one point or another almost exclusively been colonies of European powers and their populations were to a large degree of non-European descent. Although development as a field of political intervention and also development

economics as an academic discipline are predominantly children of the post-war years, part of their roots lie with colonialism in general (cf. Andreasson, 2005) and with colonial economics in particular (cf. Pakdaman, 1994), on a terminological level and also on the level of territory and of people and of political control over them.

Stefan Andreasson (2005) offers an interesting way to bring the connection between colonial and development discourse into focus. He applies the concept of the reductive repetition motif – originally introduced by Edward Said in the context of his investigation of 'Orientalism' (Said, 2003, p.297) – to highlight the continuous representation of Africa, certainly the one region which is considered the epitome of 'underdeveloped', in terms of deficiencies and failures. While on the surface changes have taken place and representations have become more complex, in essence, the dominance of homogenising depictions "in terms of system failure and inherent inadequacy" demanding external solutions has remained more or less stable from the colonial period to this day. He argues that,

> reductive arguments regarding development and progress are transformed only at the rhetoric level, but remain essentially the same at the conceptual level across the colonial and development era. [...] What changes, however, is that the link between externally contrived solutions and the need for African societies to adapt to them is now made by reference to unfortunate societal structures created in Africa by well intentioned, if perhaps misguided, colonial administrations, interacting with perpetually refractory African traditions and people. (Andreasson. 2005, p. 973)

We will see in our own analyses how reductive repetition continues to be influential even today and we will return to Andreasson's observation in due course. However, while continuity from colonial to development discourse can certainly be made out, at the same time, obvious changes and discontinuities which are equally relevant also exists.

Most importantly, there is another reading to development in which it appears as the opposite of colonialism. This contributes fundamentally to its self-understanding and not least to its public perception and explains to some degree why it is, for many, still so strongly connected with liberation and hope. To explain, the construction of the 'developing world' strongly relies on it being constructed as a post-colonial world, thus ostensibly presenting a clean slate devoid of any tainted historical or political responsibilities (cf. Rist, 2006). This de-politicised, largely ahistorical character of development that distinguishes it fundamentally from an earlier form of imperialism positioned it firmly in the era of post-colonialism. The idea of development as the opposite of colonialism or even as a way to correct it was particularly fundamental to the way which the United States inscribed themselves into this discourse, namely precisely in *opposition* to colonialism

and the old colonial powers, at a time of decolonisation.

Thus, when Gayatri Spivak (1999, p.360) points to the "the American self-representation as the custodian of decolonization" as fundamental for post-colonialism, this can be taken to apply also to development. Furthermore, different from the clear and very obviously political opposition between coloniser and colonised, development and the pair developed/developing does not contain such an obvious conflict. Rather, as Gilbert Rist (2006, p.74) points out, "'[u]nderdevelopment' was not the opposite of development, only its incomplete or [...] its 'embryonic' form". It does contain a space for hope for improvement, which is distinctly different from what was provided during colonialism and which, one could argue, is also what has made it such a powerful and seductive concept.

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The text commonly referred to as having heralded the 'age of development' is the by now famous 'Point Four' of US President Harry Truman's inauguration speech, delivered in January 1949. Curiously, anecdotal evidence suggests that what was to become the most influential part of this speech had in fact been a last minute addition, suggested by a civil servant to spice up an otherwise relatively conventional speech (cf. Rist, 2006, p.70). Despite the fact that underdevelopment, in a similar sense as introduced here, had been used before, it had never before been aired as widely into the political mainstream. Esteva (1992, p.7) traces the first use of 'underdevelopment' back to a certain Wilfred Benson, member of the Secretariat of the International Labour Organization, who had written a paper entitled "The economic advancement of the underdeveloped areas" in 1942. However, it never caught on then in the way it did after Truman's speech (Esteva, 1992).

As Porter (1995, p.64) very incisively maintains, development discourse, "despite significant changes in the fashion-conscious language of development since World War II", distinguishes itself in a curious way through the historical continuity of its underlying master metaphors. What Porter claimed over a decade ago, has not changed significantly in the years since then. On the contrary, as new compounds, such as the much cited 'digital divide', 'information poverty' or 'knowledge gap', demonstrate, the accessorising of old metaphors – to keep with Porter's (1995) allusion to the world of fashion – has continued and proliferated. Thus, it seems in order to take a closer look at the speech so frequently understood to be development's founding document, not least to get a better understanding of these master metaphors and key concepts and how the ways in which they operate still contribute to the shaping of development and those that are seen as 'not (yet) fully developed'. 'Point Four' has been analysed a number of times as constituent of

post-war developmentalism and been considered from different angles (e.g. Esteva, 1992; Porter, 1995; Rist, 2006). I will add my own interpretation, on occasions drawing on Doug J. Porter's (1995) reading.

'Point four' of Harry Truman's inauguration speech:

> Fourth, we must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas. More than half the people of the world are living in conditions approaching misery. Their economic life is primitive and stagnant. Their food is inadequate. They are victims of disease. Their poverty is a handicap and a threat both to them and to more prosperous areas. For the first time in history, humanity possesses the knowledge and skill to relieve the suffering of these people. The United States is pre-eminent among nations in the development of industrial and scientific techniques. The material resources which we can afford to use for assistance of other people are limited. But our growing imponderable resources in technical knowledge are constantly growing and are inexhaustible. I believe that we should make available to peace-loving peoples the benefits of our sum of technical knowledge in order to help them realize their aspirations for a better life. And in cooperation with other nations, we should foster capital investments in areas needing development. Our main aim should be to help the free peoples of the world, through their own efforts, to produce more food, more clothing, more material for housing, more mechanical power to lighten their burdens. [...] With the cooperation of business, private capital, agriculture, and labor in this country, this program can greatly increase the industrial activity in other nations and can raise substantially their standards of living. [...] The old imperialism – exploitation for foreign profit – has no place in our plans. What we envisage is a program of development based on the concepts of democratic fair dealing. [...] Greater production is the key to prosperity and peace. And the key to greater production is a wider and more vigorous application of modern scientific and technical knowledge. (Truman, 1949, quoted in Rist, 2006, p.259)

As Doug J. Porter (1995) points out, what was unique and novel about this speech was not the fact that certain metaphors are used, since most had been fairly common currency before, but the way in which they were meshed. Specifically these are images that originate in colonial economics and a clutch of evolutionary and biological metaphors. The speech was obviously intended for a US-American audience, yet not only did it resonate the world over, it made official the foundation of a new ordering of the world, in which within the space of one short sentence over half the world's population was relegated to their new status of *underdeveloped*, i.e. less fully developed than, first and foremost, the USA. This was evidenced by their supposed inadequacy in the areas of nutrition and health as well as their general *misery*, and specifically by the *stagnant* character of their *primitive economies*. By describing *them* as economically (and thus culturally) stagnant, change and progress is firmly located with the 'West'. Anything that could help *them* originates outside their domain, their poverty not only being regrettable, but an actual *threat* to the *more prosperous areas*. But luckily, *for the first time in history*, the solution was already at hand. The way

in which a problem is constructed by immediately referring to its imminent solution, which is usually said to have never before been possible, is very common in development discourse. Yet, it is more than merely a rhetorical figure, it is fundamental to the historically disconnected manner in which development discourse functions and the way in which it constantly re-invents itself in a depoliticised space devoid of earlier failures. Equally, the ways in which the primitive and stagnant character of the newly created 'underdeveloped' are put in opposition to advance and progress as characteristics of the USA and other *more prosperous areas* is a further basis of development discourse. It relies on this dichotomy and recognises change only as a certain type of progress, which is defined as accumulation, increased production, and consumption; in short, economic development understood as growth. Obviously the USA are put into a pre-eminent position – at the top of the pack. Sure enough, this is not entirely surprising, after all this speech was intended to appeal to a US American audience. This fact is also contained in the way in which Truman appeals to the *peace-loving* and *free people* of the world, thus taking a stance against the Soviet Union and her empire building. Having said that, it is equally clear that the ideas underpinning the Communist model of development and progress are in many ways the same as the ones that are capitalised on in this speech and that have continuously been used since. Be that as it may, in Truman's speech this reference quite clearly serves to delineate the US and her allies from the Soviet Union and the Eastern block and to position the possibility of development firmly in the realm of 'western' capitalism (cf. Porter, 1995). In this sense development is also inextricably linked with cold war politics. A further foundational element contained in the speech is the way in which science and technology are seen to be the neutral tools that will bring about this *greater prosperity and peace*. Both technical knowledge as well as science are seen as originating outside and as having to be delivered. In conclusion, in the short space of this text the key coordinates of development are established. To be 'underdeveloped' means to be poor, malnourished and ill. It furthermore means a lack of knowledge and of technology. To 'develop' then means industrialisation, capital accumulation, increased production and consumption which are facilitated by technology transfer and application of scientific knowledge. It is a rather simple recipe.

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Thus, as I have tried to show, it is necessary to understand development and development discourse as being anchored within the discourse of colonialism, yet at the same time as constituting a break with it, which was facilitated by the changed geo-political situation after WWII. It is thus just as much formed by de-colonisation and cold war politics as it by its roots with colonial discourse. Neither one is the 'true' origin of development.

Today, since the end of the cold war, it is shaped strongly by ideas of globalisation, especially economic globalisation and the integration and liberalisation of markets (cf. Hoogvelt, 2001). Some go as far as arguing that globalisation has taken over from development (Mestrum, 2002; Rist, 2006) and development, by now so strongly inscribed into the public consciousness and vested with hope, functions merely as providing the pretence for it (Rist, 2006, pp.226 et seq.). We will return to the notion of globalisation in development discourse as it is manifest in the connection between open access and the 'developing world' a number of times (esp. chapter 4.4.4 and 4.4.5).

For now, what is certainly obvious today is that one of the founding concepts of development discourse has gained a position that is much stronger than it was in previous decades and that is poverty. While poverty was always foundational to development discourse, as we can see not least from Truman's speech, more recently the 'fight against poverty' has been prioritised. It has also been foregrounded in ways that led some to see it as providing the main justification for the need for development interventions and institutions (e.g. Mestrum, 2002).

We will concern ourselves briefly with the role of poverty in development discourse in the next section and I will also draw the attention to the way in which, in this context, ignorance is often co-constructed with it.

3.3 Poverty and Ignorance

One of the most influential concepts around which development, or perhaps better the need for it, is constructed, is poverty. Development conceived as poverty reduction is indeed the most basic way to visualise it and also the one against which it is hardest, or near impossible, to argue. I am not trying to argue poverty away, by showing it is merely a construct. Neither does any of the post-development authors. Clearly, destitution exists and real people are threatened in their real lives and livelihoods. I acknowledge this of course and I also acknowledge here that my own position is privileged in many ways, not least in a material sense.

At the same time, since the post-war years poverty also fulfils a function in constructing the *Other*, the less developed, that is fundamental to the workings of development discourse and it is in some instances also a move away from the ideas of poverty and also of the 'native' that went before and one that assigns science a lead role. Arturo Escobar (1995a) outlines how notions of development and poverty co-emerged and how the concept of 'poverty' and also 'global poverty' was drawn on to provide an organising principle for the construction of the 'underdeveloped'.

According to Escobar (1995a, p.22), while earlier poverty, in many cases a characteristic of the 'native', was to be accepted since the pre-requisites for economic development, science and technology, were considered outside their capabilities, with the onset of development and prevalence of less racist ideas the application of science became a possibility. However, this image of the 'native', I would like to add, cannot be applied to the whole colonial spectrum. For instance, in the case of India, as Ania Loomba (2005, p.24) points out, British education and European technology for the 'natives' was already established earlier in the 19th century as a possibility to facilitate their development away from superstition. At the same time, while the connection between the 'native' and poverty might not be as simple and direct, the connection between poverty and ignorance typically is. It is a long-standing one and it runs deep and it is also the one that is established in Truman's speech, as we have seen above. Importantly, this knowledge remains something that is delivered and applied from the outside. The poor are seen not only to lack material wealth, fundamentally they also lack the knowledge necessary to change their own condition and they lack the understanding to gain that knowledge. Since material wealth and increased consumption, in this view, indicate a higher state of development, the poor countries are 'less developed' than the rich.

The same year as Truman established poverty and disease as the essential characteristics of most of the world's people and countries, the 'International Bank for Reconstruction and Development' sent out the very first professional development mission and Colombia became the first country to be targeted by strategies aimed at changing its 'underdeveloped' state. In their programme poverty featured in a central position as a characteristic of 'underdevelopment' and it was accompanied by the notion of ignorance (cf. Escobar, 1995a, pp.24 et seq.). The combination of poverty and ignorance developed into a powerful pair for the description of 'non-western', per definition 'underdeveloped' societies and over a decade later, in 1961, John F. Kennedy, addressed the US Congress by declaring:

> Throughout Latin America millions of people are struggling to free themselves from the bonds of poverty and hunger and ignorance. To the North and the East they see the abundance which modern science can bring. They know the tools of progress are within their reach. (Kennedy, 1961, cited in Ullrich, 1992, p.275)

While Truman characterised over half the world's population as primitive and poor and consequently as posing a threat to economic progress, Kennedy classified, in a sweeping rhetorical move, large parts of the Americas not only as poor, but also as ignorant, characterised chiefly by their lack of science. The way ignorance, lack of science and technology, and their relation to poverty are operationalised to contribute to an image of the 'underdeveloped' as well as the rhetorical positions they occupy in these early documents are in many ways similar to those

of today's notions of 'information poverty' and similar concepts expressing information inequality.

For instance, the 1999 World Development Report (World Bank, 1999) contains the following statement:

> Poor countries—and poor people—differ from rich ones not only because they have less capital but because they have less knowledge. (World Bank, 1999, p.1)

We will return to this claim at a later point and consider it in more detail (chapter 4.4.3). Since in contemporary discourse there is such a profound confusion between information and information technology, generally and in particular in the realm of international development organisations, the connection between poverty and ignorance often also supports concepts like the 'digital divide' and similar, or it is drawn on to justify development activities in the realm of information technology.

For instance, Mark Thompson (2004) analysed a speech given by then World Bank president Wolfensohn in 2000, and he highlights how – based on a North-American world-view riddled with *orientalisms* – 'poverty in the world' is mobilised to construct a need for the organisation's expert intervention in the area of information technology and to make it indisputable. Merridy Wilson (2003), in the context of a study of international public ICT debates, highlights how 'information poverty' holds a specific position within development discourse which contributes to perpetuating the dominant opposition between the 'developing' and the 'developed', based on technological determinism and simple teleological ideas of development.

As I have already pointed out, there is some indication that more recently broader concerns of development have merged with globalisation, understood as the continued integration of cultures and markets, and a new form of the 'fight against poverty' has become the main raison d'être for mainstream development institutions and apparatuses (e.g. Mestrum, 2002; Rist, 2006). The fact that the first of the United Nations' eight 'Millennium Development Goals'[10] is aimed at tackling extreme poverty seems to substantiate this view. That this is taken to mean reducing the proportion of people living on less than a dollar a day by half, confirms the perpetuation of the dominant economy-centric perspective. The proliferation and high visibility of events like 'Making Poverty History' or the fact that in the year 2000 the World Bank entitled its annual world development report 'Attacking Poverty' (World Bank, 2000) equally seem to point in this

10 UN Millenium Development Goals: http://www.un.org/millenniumgoals [April 8, 2008]

direction. In early 2008, a search for the term 'poverty' in the World Bank documents and reports database[11] on their website yielded over 16.000 results, the oldest dating from 1950. Yet, over 10.000 of those were issued between 2000 and early 2008 alone.

Read differently of course, it is indeed curious that poverty reduction has been associated with development and has been one of its stated goals ever since the project began, yet very recently the international community felt the need to declare the so-called Millennium Development Goals. The first of which is precisely poverty reduction and poverty is still understood as a simple measure that can be expressed in Dollars – after half a century of development. Considering this, it does not seem unreasonable to suggest, as Francine Mestrum (2002, p.69, my translation) does, "it is the persistence of poverty that constitutes the irrefutable proof for the failure of developmentalist politics".

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Establishing poverty as an essential category of development, meant also establishing a new kind, namely that of 'global poverty', the kind of poverty measured and expressed in differences in GNP. While today it seems such a self-evident notion, it is only since the 1940s and 50s that the idea of 'global poverty' even exists (Rahnema, 1992) and that programmes should be initiated to tackle it. It is closely tied to the emergence of professional instruments and tools to alleviate it, but also to notions of science and of ignorance. Mahid Rahnema (1992) shows how, from a variety of meanings in different cultures and at different times, 'poor' has been curtailed to signify solely the opposite of rich, predominantly in a material sense. 'Global poverty' is, for Rahnema (1992, p.161), "an entirely new and modern construct" based on "the economization of life and the forceful integration of vernacular societies into the world economy".

For the first time in the late 1940s this new and indiscriminate form of poverty was employed to describe entire countries. It was and, despite modifications, to a large degree it still is an economic concept, almost exclusively based on the simple measurement of national per capita income. Rahnema (1992) furthermore shows how, alongside the assumed universality of 'global poverty', universal solutions and neutral tools to achieve them evolved. These are rooted in a firm belief in the necessity and most importantly in the universal character of economic progress and material accumulation. This was advanced and accompanied by the professionalisation and institutionalisation of the development project, exemplified in a proliferation of programmes

11 Available: http://go.worldbank.org/Y3BHKIBKI0 [April 8, 2008]

aimed at alleviating 'global poverty'. Thus, according to Rahnema (1992), poverty turned into a catchphrase, while the compound 'global poverty' has led to perpetuate and intensify existing relations of governance and domination, rather than to challenge them. Most consequentially however, establishing such a group as 'the poor' and applying this category indiscriminately to entire countries and populations also has had a strongly homogenising effect, which discards all the differences that exist on every possible level between those people, countries, and continents labelled as poor (cf. Escobar, 1995a, p.53).

In addition to establishing the category of poverty and of the poor, development and development discourse work on a further level. What is essential, as Escobar (1995a) reminds us, is that the poor had to be transformed into "the assisted" (Escobar, 1995a, p.22). Thus they became a problem of government and of political economy, a group that could and should be changed. A whole set of social mechanisms and techniques for their reform and treatment emerged. "The poor", Escobar writes (1995a, p.22), "increasingly appeared as a social problem requiring new ways of intervention in society". This is, I think, quite clearly contained in the way in which Truman introduces the poor as posing a *threat* to themselves and to the rich.

The idea of the poor as the assisted, so fundamental to development discourse, has its roots already in changes in political and economic theory, and in government, which took place in 19th century Europe and emerged in tandem with industrialisation. Giovanna Procacci (1991) investigates how during that period a "politics of poverty" (Procacci, 1991, p.164) emerged that was fundamentally different from what went before. It required the amalgamation of economic and moral discourse, in order to establish the poor as treatable in the sense that they could be transformed into *citizens* and integrated into the labour market. Pauperism became a social danger since it was – perhaps wrongly, but still – associated with independence, mobility, insubordination, and also ignorance. Ignorance and knowledge grew to be, as Procacci (1991, p.162) maintains, strongly connected to mechanisms of social control, since the ignorance of the poor included "technical backwardness which hinder[ed] the organization of labour". However, more importantly, she argues, the true challenge to political power, which makes the government of poverty so essential lies in an ignorance of duties.

Thus, it could be said, development discourse, established in an era of decolonisation, drew the newly independent states into this *politics of poverty*, in a way that was not so easily possible before within the overtly racist structures of colonial relations. In development discourse "the transformation of the poor into the assisted" (Escobar, 1995a, p.22) happened at an unprecedented scale, at the level of entire countries and regions, yet it originates in the period of 19th century industrialisation and modernisation and the fundamental changes in political

economics and in government that occurred during this time. This is probably also were the Foucauldian notion of pastoral power as a form of governmentality, which is a very useful concept for understanding the development project, can best be situated. In this sense, the 19th century "politics of poverty" and with it philanthropy can be seen as further constitutional elements of development discourse, which in addition to colonialism and decolonisation, as well as of course Enlightenment thinking, are fundamental to its workings.

3.4 Science and Technology

The difference between what is considered a 'developed' society and an 'underdeveloped' or 'developing' one, a 'civilised' and an 'indigenous' one, while at the surface being an issue of finances and economics, is constructed strongly along the lines of presence and absence of an activity called science. Of course, science lives on the idea of incremental increase of knowledge and continuous progress. In this sense it enables not only the means of development, as is typically claimed, it provides its very blueprint. Since the 19th century, Escobar (1995a, p.36) maintains, "[s]cience and technology had been the markers of civilization par excellence". Accordingly, in order for societies to 'develop' toward *civilised* societies, science has to be present, appreciated, supported, and advanced. This close entanglement of science, technology, and notions of development and also of civilisation, which are partially rooted in colonial times, and the persistence of these ideas also provides for some of the context in which a movement like the open access one is situated and it relies on certain connections that were established much earlier. It is thus interesting to see how and if these connections are replicated or refuted.

The close ties between science, poverty, and development can be clearly made out in 'Point Four' of Truman's inauguration speech. After all, if we remember, it starts out with the following sentence:

> Fourth, we must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas.

And it concludes:

> Greater production is the key to prosperity and peace. And the key to greater production is the more vigorous application of modern scientific and technical knowledge. (Truman 1949, quoted in Rist, 2006, pp.259-260).

This connection between science and technology and development has developed into a common-sense assertion and it continued to be made throughout the decades that followed

Truman's speech. For instance, the following is an excerpt from a UNESCO document dating from 1982:

> Science and technology are for their part fundamental dimensions of the problems of development, of peace and disarmament, the environment and natural resources, communication and information. The means exist to combat hunger and disease and to improve living and working conditions; by systematically applying modern technology, it would be possible to satisfy men's material needs and to solve many of the problems facing their societies. (UNESCO, 1982, p.19)

Very similar – although peace is no longer part of the programme – in 2004, almost a quarter of a century later, a document by the UN Committee on Science and Technology for Development (CSTD) contains this claim:

> There is [...] an urgent need for developing countries to transform the policy environment and make institutional adjustments to make science and technology work for the poor and realize its potential as the prime lever for development. Simply keeping the status quo would leave many developing countries further and further behind.(CSTD, 2004, p.4)

In all three instances the argument is very similar; the application of science and technology is assumed to reduce poverty and thus to lead to development. However, an important change has also occurred from Truman to the UN document issued in 2004. While Truman saw science and technology exclusively as having to be applied from the outside as fairly unproblematic, in the UN's more recent understanding the 'developing countries' are seen to have to change their political and societal structures to adjust to science and technology and to finally recognise its benefits. Both however agree that science and technology is indeed the *prime lever for development* and that development means economic growth (cf. CSTD, 2004, p.3).

The UN document is also interesting in another way. In addition to perpetuating the simple dichotomy of 'developing' and 'developed', it also, fifty-five years after 'Point Four', manages to construct the idea of science and technology as 'delivering' development as a rather recent recognition, not least by describing it as something that is "*increasingly*" being recognised (cf. CSTD, 2004, p.4, my emphasis). They build a case for why and how science and technology can improve nearly every aspect of life, including enabling sustained economic growth, pharmaceutical innovations, extending education, tackling climate change, improving the lives of women, and facilitating good governance. Still, they also concede, the "majority of the world's poor, however, have yet to benefit from the promises of science and technology" (CSTD, 2004, p.3). This statement, it cannot be emphasised often enough, comes after more than half a century of development efforts have supposedly been targeted at just that, reducing poverty with the aid of science and technology.

The obvious question here seems to be how is it possible that they have failed. Yet the more interesting question, it seems to me, is to ask how is it possible for this statement to be made in the first place and without any apparent consideration of its historic precedence. In fact, what we see here is a very good example for the way in which development discourse works and how it firstly, is fundamentally constructed around the same parameters that were established or at least meshed in the post-war years, secondly, appears to be blind to its own failures, and finally, how it perpetually introduces the essentially same connections as new and recent realisations. We will see variations of this during our own analyses when we focus on how open access is being connected to development.

The tie between science or science and technology and development runs deeper and is more complex than just outlined. It exists on a number of further levels which are inscribed into this connection and which also need to be considered, at least briefly. Firstly, science in its practices is a political activity (cf. Harding, 2006; Procter, 1991) and it was implicated in and instrumental to colonial expansion (cf. Deepak, 1990, McClellan, 1992; Stafford, 1990). It did not only exclude people from its institutions based on racist and sexist prejudices, it provided the 'objective' justification for racist forms of domination, and sexist ones for that matter (cf. Harding, 2006; Loomba, 2005). Secondly and related, science is not culture-less. It is a European form of knowing and is deeply embedded in European history and traditions (cf. Harding, 1998, 2006). It is furthermore a system of knowledge, which not least because it is founded on the claim to universal applicability has difficulty in accepting and co-existing with other systems of knowledge (Marglin, 1996), which however it tends to assimilate without giving due credit (cf. Marglin, 1996; Harding, 2006). Finally, development practice itself is in many ways cast in the mould of scientific rationality and neutrality, and of course also universal validity (cf. Escobar, 1995a; Williams, 1995), not infrequently stereotyping the behaviour of those to be 'developed' as irrational (cf. Apffel-Marglin, 1996).

This last relation between science and development has to do with the way in which development practice is cast as scientific in the sense that it presents its tools and categories as objective, scientifically founded, and typically as universally applicable.

> The professionialisation of development also made it possible to remove all problems from the political and cultural realms and to recast them in terms of the apparently more neutral realm of science. [...] The empirical social sciences were instrumental in this regard. So were area studies programmes. (Escobar, 1995a, p.45)

Development needs the language of science and a scientific way to represent itself as (largely) abstractable and neutral (cf. Apffel-Marglin, 1996; Williams, 1995). Hence, the typical

development report is full of statistics, rankings, figures, models, measurements and so forth, giving the impression of a world that is objectively representable. It is almost ironic then, as I will argue with Sandra Harding below, that it is precisely cultural neutrality that marks science out as stemming from a specific culture.

All these points, closely interwoven as they are, are relevant when we consider how science in relation to development and the distribution of scientific information to the 'developing world' are discussed. Not least since they point to a certain history of science and this history is not always entirely spotless. A history of science is not just a history of scientific discoveries and the great men, sometimes women, who made them. It necessarily is also a history of the society in which these men acted, that made it possible for them to be scientists, but not for others, of their interests and agendas, of the politics of the time and so forth. A history of science is also a history of people and institutions and of a society and its politics (cf. Kuhn, 1996 [1962], p.1). In the words of Helga Nowotny et al. (2002, p.121):

> All knowledge, scientific or otherwise, is produced within a particular culture and set of social arrangements. It is not produced at some remote site and then transferred to 'society' […]. In that sense all knowledge is contextualized. It is produced by groups of individuals who, however independent their ideas, form a loose collective which operates in a specific historical context.

While such a position might not be the preferred one for many, there is clearly something to gain from understanding science as not being out of or above society. Not least as Nowotny et al. (2002) develop further, it could contribute to shaping a *strongly contextualised knowledge* more responsive to society's needs and more responsible for its consequences, without giving in to bureaucratic coercion.

Thus, as Helen Longino points out:

> Scientific knowledge – although not the product of some uniquely truth-producing method – is [...] a specific form of knowledge. It is pursued for particular reasons, to achieve particular ends (Longino, 1988, p.574).

However, she also reminds us that "the aims of individuals engaged in scientific enquiry are not, or not necessarily, identical with those of the society that supports such enquiry" (Longino, 1988, p.574).

Science as an institution is and always was political in many ways, not least in regard to which problems are considered worthy of research and who pays, but also in regard to who are the scientists and who are not. Both questions and their connections, have been considered extensively from a feminist (e.g. Haraway, 1991a, 1991b; Harding, 1991, 2006; Longino, 1988; cf.

also Suchman, 2008) as well as from a post-colonial perspective (e.g. MacKenzie, 1990; Petitjean et al., 1992, cf. also Anderson & Adams, 2008). Sandra Harding (e.g. 1998, 2006) unites both viewpoints and in most of what follows in this section I draw on her work.

Sandra Harding reminds us of the need to understand modern science's features as distinctly European in a number of ways. That is to say, science is in society, but society is also in science (cf. Harding, 2006, p.116). None of this is to imply that other culture's systems of knowing are or were not successful, accurate or systematic or that they were inherently inferior to the European one which is now described as the *real* science, while others have become proto-sciences in the best cases, and superstitions in the worst. In fact this is a complicated discussion. How to refer to other cultures' knowledge systems and whether to call them science or reserve the term for the European modern sciences is not a question that can easily solved. Pitfalls exist in every direction. In fact, it seems to me, it can only be decided on a case to case basis and depending on context. We will return to this discussion later (chapter 4.4.4), since it also influences the open access debates. For now, in the following presentation, the terms science or modern science are used to refer to the European system of knowledge known by these terms and which has undoubtedly become one of the most influential outside its societies of origin[12]. Not least since this is what is referred to in development parlance when science is invoked, almost always together with technology, and which holds such a central position in development discourse.

To return to the discussion of what makes these modern sciences so distinctly European; it is in fact not least science's value neutrality itself that marks it out as such. Value neutrality as well as abstractedness are not culturally neutral, they are distinct cultural features. It is not a given that value neutrality is and has been seen as desirable characteristics in all societies at all times[13]. "The point is", Harding (2006, p.47) writes, "that trying to maximize cultural neutrality, as well as claiming it, expresses a culturally specific value". Furthermore, the language used in scientific accounts to represent nature draws on discursive resources, which are precisely not culturally neutral, but the metaphors, models, and narratives mobilised to provide and structure these accounts stem from a specific culture. In the case of the modern sciences the cultures that have provided for most of these discursive resources have been European ones (Harding, 1998, pp.68 et seq.), although since science has migrated to other cultures and societies certainly not

12 This is in opposition to Harding (1998, p.9), who proposes the use of the term science "to refer to beliefs and practices of non-European cultures" as well. However, in our context this seems unduly confusing. When I draw on her work I am of course aware of that and I take caution not to misread or misrepresent her arguments.

13 This is of course not to claim that modern Europe was the only place ever to come to come up with value neutrality as a positive characteristic (cf. Harding 2006, pp.1164-165, n.37).

exclusively. However, since knowledge is always mediated, this is not just something one can look beyond to come to the *true* core of knowledge contained in these accounts (cf. e.g. Latour, 1987). The point is "cultural features of sciences' cognitive cores shape how people see and consequently intervene in nature". Thus, "[s]cientific language necessarily both enables and limits what a culture can know about nature's regularities and their underlying causal tendencies" (Harding, 2006, p.69). [14]

Two further distinctly European features of science are especially relevant in our context; firstly, the connection between scientific progress and European expansionism and secondly, science's accounting practice.

The relations between European expansion and scientific progress are manifold. First of all, it is a truism that the voyages of discovery were also voyages of scientific discovery. Scientific expeditions were part of the colonial project. Scientists were doing the measuring, indexing, cataloguing, describing and so forth of the lands and people, thus making control over them possible. They were crucial in this regard and not merely there accidentally (cf. Harding, 1998, pp.39 et seq.; McClellan, 1992). The lands, flora and fauna but specifically also the people of the 'discovered' lands were turned into objects of research. Not infrequently they provided the backdrop upon which to construct Europe's past and in turn to construct them as 'backwards'. This keeps in line with what we have discussed earlier as allochronism and which still influences development discourse.

Robert Stafford (1990) develops that point in the case of geology. Geology emerged as a discipline from 1800 onwards, always with a view to practical application in the interest of the land-owning elites, who usually also were the geologists and surveyors. In it scientific and commercial usefulness fused into an "ideology which envisioned science as an instrument of economic policy". According to Stafford (1990, p.71),

> British geology proved extraordinarily successful in imposing scientific order upon the overseas wilderness. By the early 1840s [...] it was confidently asserted that science and empire would advance hand in hand.

Furthermore, geologists studying colonial environments were also in search of Europe's past. The colonial landscapes, for instance in the case of Australia, were often imagined as providing a

14 This is largely in accordance with the position Thomas Kuhn (1996 [1962]) advanced already in the "Structure of Scientific Revolutions". Furthermore, in fact Harding (2006, p.68-69) points out that while this is commonly perceived as limiting to science, it could and probably should be seen as a positive feature that can enable to pose different questions and frame observations in different ways.

glimpse into Europe's pre-history. However, this was also extended to the people, who became living fossils frozen in a state of stasis and frozen development, in a word 'backwards'. Hence,

> [t]he study of ancient environment fostered such an impression of the colonies as primitive places inferior to Europe. Such research contributed to theories of race and environmental determinism which shaped the ideology and practice of imperialism. (Stafford, 1990, p.84)

Geology was not the only discipline intimately connected to colonial economic policy and development. Botanics, biology, medicine, and so forth all had a role to play and were considered significant (Worboys, 1990), not least for the development and adaptation of crops and plants for plantations or to deal with diseases Europeans were plagued with in the new environments. In short, science was needed to make the establishment of "little Europes" (Harding, 1998, p.41) in the colonies possible as much as to enable the extraction of natural resources. For instance, the British Colonial Office recognised research as one of its fundamental activities to 'open up' the colonies and at times colonial and scientific development were seen as virtually synonymous (Worboys, 1990).

Geology was also not the only discipline to help establish notions of 'backwardness'. An especially helpful concept here proved to be evolutionism (Broks, 1990). It was not only drawn on as justification for conquering weaker states and peoples, it also provided scientific 'proofs' for their less developed nature and hence inferiority based on racial discrimination.

> Evolutionism brought a new dimension and a new scientific authority to racial distinctions and hence to racial stereotyping. It provided a new language to express old stereotypes. A time-scale was added to racial descriptions where the black man was now seen not simply as 'savage', but as 'primitive', as 'less evolved' than the civilised white man. (Broks, 1990, p.149)

However, it was not only those scientists active in the colonies, who were part of the colonial project. Massive data collections from all over the colonies in the home-countries meant an immense advantage for European scientists and science in general (cf. Harding, 1998; Latour, 1987, 1996; Stafford, 1990). Consequently, Europeans' ability "to organize disproportionally large share of of the world's supply of human and natural 'energy'" (Harding, 1998, p.44) increased exponentially. Bruno Latour (1987, 1996) derives his concept of information from the relation between a centre and the periphery as they emerged from the early scientific expeditions, which turned objects into *inscriptions* and brought them to the *centres of calculation* in the European capitals, i.e. museums, laboratories, libraries, thus enabling the construction of the centre as a place which is capable of exerting control at a distance. Information is here understood as the "compromise between presence and absence" (Latour 1987, p.243). Put differently, information is interpreted as the material connection between two places, whereas "one acts on the other at a

distance" (Latour 1996, p.25, my translation). According to Latour, the uniting of different knowledges, objects and descriptions from all over the world in its geographical centres of power is what made European science so much more successful than other knowledge systems, rather than some inherent superiority in its epistemological features. Seen from this perspective, the relation between European political history and science and everything that follows on from it runs very deep indeed.

The 'natives' were not just researched on, they also functioned as informers and their knowledges were often integrated into the European sciences. Although in many cases of course they were ignored or their knowledge was only recognised as such later, after it had also been established by scientists (cf. MacKenzie, 1990).

Modern European science, hand in hand with colonialism, is also said to have contributed to the destruction of other culture's knowledge systems. That is,

> European expansion contributed to the increasing gap between the achievements of European sciences and technologies and those they encountered in two ways. There were the active scientific projects Europeans organized to aid European expansion, and also there was the destruction of other knowledge systems either directly, or through the destruction of their human, cultural, and environmental resources. (Harding, 1998, p.50)

Sandra Harding (1998, pp. 49 et seq.) points to six ways in which this has occurred. Firstly, the extraction of raw materials from the colonies meant that these contributed now to the growth of European societies rather than to supporting those native to the areas. Secondly, the extraction of labour meant that "indigenous labour was no longer available to support projects, including scientific and technological ones that could be organised to benefit non-European societies" (Harding, 1998, p.49). Thirdly, the incorporation into the European knowledge system of other local knowledges led to "the fruits of their own scientific and technological traditions [being] turned against them" (Harding, 1998, p.49), since these in turn profited the further expansion of European control. Fourth, the destruction of local trade and industry, deliberate in some cases, unintentional in others, meant that old trade relations were destroyed and replaced by centre/periphery relations in which Europe held the pre-eminent position. The disappearance of local industries and trades also meant that technologies and knowledge about them were lost. Fifth, local populations were decimated as a result of European expansion, either through diseases, warfare, slavery, or simply the general "immiseration and destruction of life-sustaining conditions" (Harding, 1998, p.50). Lastly, there was also the active and systematic devaluing of non-European cultural traditions and thus knowledge systems.

In this reading, the link between science and colonialism can neither be considered superficial nor

accidental, and, I suggest, a lot of this connection does get carried over into development and its discourse, at the very least at the level in which development discourse operates – not only, but also – in the tradition of colonial discourse.

Finally, the last European feature I briefly want to draw the attention to is science's accounting practice, more precisely the way in which science's failure and successes are accounted for. This, as Harding (2006, p.46-47) points out, often masks the way in which benefits tend to be distributed to those already privileged, while most of the costs have to be carried by everyone else, and mainly the 'South'. The reason why this, for a long time, remained largely invisible, specifically to those at the benefiting end, lies with the way in which science's and technology's externalities are portrayed as non-science, as failures that lie outside their domain. It seems to me that a statement like the one by the UN's Committee on Science and Technology for Development (CSTD, 2004), quoted above, which demands structural changes within developing country's societies to "make science and technology work for the poor" can be read in this context. Science has not delivered *yet*, because the 'developing countries' were not yet ready for it. Externalisation of costs and internalisation of profits, Harding (1998) maintains, is – intentionally or not – guided by European/Northern interests and has profound political origins and consequences. She takes the argument a step further still. This accounting practice and the related externalisation of costs can also be considered, she suggests, a consequence of looking at nature as consisting of isolated parts and thus "the very ontology of modern sciences creates these inequitable effects" (Harding, 2006, p.47).

A slightly different, yet very similar point on science's accounting practice is also made by Ashis Nandy (1988, 1992). He calls our attention to the pairing of science and technology. In it, he argues, science is always kept neutral and beyond criticism, while all failures are blamed on technology or its wrong implementation and use. Thus, despite the marriage of science and technology being a very close one and one which often presupposes the idea that science precedes technology and enables its advancement in some way (if it works)[15], there is also a need to keep them apart "because it is only by distinguishing between science and technology that all social criticism of science can continue to be deflected away from science towards technology" (Nandy, 1988, p.3). Even though Ashis Nandy made that point already a number of years ago, it seems, in many ways we can still observe it today. Although, of course, as Helga Nowotny et al. (2001, pp.220 et seq.) develop in detail, a general shift in the public perception of science and

15 Although of course scientific knowledge is also a result of the application of technology.

technology and also its failures has occurred more recently, which, in tandem with a re-casting of the *narrative of expertise*, moved away from its uncontested glorification that is one of the distinguishing characteristics of modernity. At the same time, this shift seems to have largely by-passed mainstream development discourse and the conveniently direct connection between science and technology and positive societal advance that is imagined there.

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It can be argued that the open access movement tries to redress some of this imbalance and unequal distribution of costs and benefits and also to address the centralisation of knowledge resources which, as I have outlined, has its roots with European expansion that took place during colonial times. It could furthermore be argued, and this is in fact one of the central claims of the open access movement, that it is an attempt at re-establishing or extending one of the central features of science itself, namely that the results of scientific research be publicly available so they can be replicated (by other scientists). This, as Harding (2006, pp.130 et seq.) also concedes, is an important, potentially *pro-democratic* feature of science which has become increasingly undermined. At the same time, science, which started out as a *resistance* movement, "a guerilla warrior challenging powerful religious and state interests", is today "deeply enmeshed with powerful global economic and state interests" (Harding, 2006, p.131), and has been so, as we have seen, at least since the 19th century. Furthermore, in many cases the promotion of the idea of public access to science can also be said to be grounded in missionary ideals about the need to spread 'western' rationality.

At the same time, given the enormous significance of science, it seems to me, public access to the records of science should in principle be a desirable feature, precisely because it *is* so deeply enmeshed with economical and political interests. And in the same vein, it is also commendable to open up the sciences to perspectives from its 'periphery' by extending the archive to accommodate these. However, as we have seen, the interests at play are conflicting and the histories are sometimes violent. As John Willinsky (2005, pp.109-110) points out:

> Innovations in open access publishing are taking place against the chilling historical backdrop of earlier efforts at instilling universal education and global knowledge systems, when the West placed educating the native at the heart of imperialism's moral economy.

Considering this and the points made above, it will be particularly interesting to see how science and its connection to the 'developing countries' is imagined in the texts on open access and development, and based on which premises it is argued for. To establish this, is the focus of the following chapter.

PART II

So far we have seen how discourse is understood to shape reality and how different discursive systems have different positions and roles in society and how some discourses function as powerful tools with which to authorise speaking. Furthermore, we have established the interdependency of power and knowledge as well as of power and resistance. We have also seen how development itself is bound to a certain way of imagining the world and in particular change and how this is anchored within a specific European view of history and of progress. I have furthermore discussed how development is closely allied with colonialism on the one hand as well as cold war politics on the other. In this context, I have also outlined some of the major lines of criticism that have been advanced by as well as against post-development studies. Scholars, commonly united under this label, have not only laid bare the often, it seems almost consciously, forgotten historic and epistemological ties the very idea of development brings with it, but also, and perhaps more interestingly, contributed to uncovering many of the power structures that are still inherent in its various practices and assumptions and its ways of working by continuously re-inventing itself. In this context, I have highlighted in particular the close connections between the development project and science as well as between science and colonialism that exist on various levels and also drawn the attention to the fundamental set of problems inherent in these connections.

Open access, in its dealings with science in general and in its connection with development in particular, clearly links into this problem space and it does this in a number of particularly interesting ways. I will try to work these out by concentrating on two instances of representation or 'cases' and more specifically on some of the discursive procedures and constellations at work. Firstly, we will look at the *representation* of open access in relation to development in articles in the widest sense of the word. This includes scholarly and professional journal articles, editorials, opinion pieces, study reports, and such like. In contrast, the subsequent chapter will be dedicated to investigating how this pairing of open access and development is *debated,* in one particular instance. For this purpose I will draw on material retrieved from an email debate that took place over a couple of weeks early in 2006.

4 'REPRESENTING' DEVELOPMENT WITH OPEN ACCESS: A CLOSE READING

As I have showed and argued already up to this point, open access is being connected to the 'developing world' on a number of different grounds. The present chapter is concerned with making visible certain ways in which this connection is constructed and maintained; that is in it I look at the representation of open access in its relation to the 'developing world' and hence to the concept of development. Before proceeding, a number of points need to be clarified. First of all, it is important to underline once again, that strictly speaking, what we are dealing with here is neither development nor is it open access. Rather, the attention is on representations, that is ways of understanding and concepts of development in relation to open access.

Furthermore, the term *representation* is here used as an operational term. It has been chosen to distinguish this chapter's focus from the focus of the next chapter which will be concerned with debating open access with development in mind. The opposition between representation and debate that I introduce here is entirely rhetoric, in the sense that I am of course aware that debating means representing as much as representation is part of the debate.[16] The distinction between the two is here predominantly based on the material which underlies the respective chapter. However, I will also try to exploit the difference in material to work out divergences in the ways in which open access is related to development in different settings and to contrast the issues that surface and which become significant for discursive procedures. In this sense the present chapter serves to mark out the most significant and also more stable coordinates around which the connection between open access and development is constructed.

While the following chapter will be based on the analysis of an email debate that took place on the topic of open access and development in 2006, the present chapter draws on an entirely

16 Term and concept of *representation* has specifically been discussed and developed by Stuart Hall (e.g. 1997), who uses it for understanding cultural and political practices of meaning creation and circulation. However, I do not go down this avenue.

different set of material and also on one that in many ways is less coherent, but more expansive. Roughly, it consists of two sets of documents. Firstly, a selection of five petitions, declarations and official statements that have been issued by various bodies to express some form of support for open access. Secondly, a set of thirty-eight articles, which either directly discuss open access in relation to development or vice versa, or which cover aspects that are commonly considered as acutely relevant in this context.

4.1 Material and Corpus

The material consists of two different sets of documents; declarations or statements on the one hand, and articles, in the widest sense of the word, on the other. This section is concerned with presenting this material, discussing how it was selected and considering some aspects specific to their form, their genesis, or their context.

4.1.1 Journal Articles, Announcements, and Reports

The first set of material in the corpus consists of thirty-eight publications, including journal articles, professional and scholarly, editorials, opinion pieces, press releases or programme announcements, and a survey report, all published between 2001 and 2006. They were selected from three sources.

(1) Charles W. Bailey's (2005) "Open Access Bibliography", more specifically the sub-category "general works" of the section titled "Open Access for Developing Countries" (Bailey, 2005, pp.102-103). This is still the most comprehensive existing bibliography on the issue of open access.

(2) The UNESCO "Open access resource directory"[17], whereas the collection was restricted to documents of the type "publications". Of those, only publications dealing with issues or concepts of development in one form or another were included. This was determined by reading the documents individually. Search and final collection took place in May 2007.

(3) The "Open access and the developing world" resource page provided and maintained by open access publisher BioMed Central[18]. This section constitutes a part of BMC's "Open access

17 Available: http://www.unesco.org/cgi-bin/webworld/portal_observatory/cgi/page.cgi?g=Access_to_Information_and_Knowledge%2F Scientific_Information%2FOpen_Access_Resource_Directory%2Findex.shtml;d=1 [May 26, 2007]

18 Available: http://www.biomedcentral.com/developingcountries/resources [May 26, 2007]

and the developing world" portal.[19] Included were only publications referenced in the section entitled "Highlighted articles". Search and final collection took place in May 2007.

After excluding duplicate publications, this led to a final set of thirty-eight publications, all dealing primarily with open access and considering development as a factor facilitated, dependent, inhibited, or otherwise related to it or trying to give a particular 'developing world' slant to the issue. Having just said that all articles are concerned with open access, this statement has to be qualified to a degree. A small number of publications are actually concerned with other free access initiatives which have been initiated specifically for 'developing countries', such as for example HINARI or AGORA. These are not commonly considered open access in the narrow sense of the term, since they merely open up access to otherwise paid-for resources to those who cannot afford the price. However, since these are topics which are routinely mentioned when it comes to the 'developing world' and open access and these publications are also indiscriminatingly listed in the open access bibliography as well as other resource listings, it seems only appropriate to include them; for example, John Willinsky (2006), in his book *The Access Principle. The case for open access to research and scholarship* attempting to describe different *flavours* of open access, introduces the category of "per capita open access" (Willinsky, 2006, p. 212). These programmes and the publications talking about them also shape the discourses we are dealing with and in a sense confounding open access with other free access initiatives, specifically and only when it comes to 'developing countries', can be considered a relevant part of this.

All publications are written in English, a fact that, in and of itself, is interesting. My own limited language skills play of course a role in this. However, leaving this aside there also other reasons for this limitation and interesting factors playing into it. On the one hand, given our and their concern with the 'developing world' and non-English speaking countries, limiting the material to English language texts clearly constitutes a limitation. On the other side, considering the spread and significance of the English language in scholarly publishing and correspondingly also in the discussions surrounding it, and its importance for an issue as international as the present one, this seems to be a justifiable limitation. It is furthermore, at least to a degree, outweight by the fact that the publications do have authors from a whole range of different countries and continents, including those commonly considered 'developing'. Most interestingly though, none of the above sources which were consulted contained references to publications written in languages other than English. This seems justifiable in the case of the "Open Access Bibliography" and it is stated

19 BMC portal: "Open access and the developing world" : http://www.biomedcentral.com/developingcountries [May 26, 2007]

in the preface that only English-language sources are included (Bailey, 2005, p.xi). It is also understandable in the case of "Open access and the developing world" portal, provided by BioMed Central, which is after all a British company. However, the online resource listing provided and maintained by UNESCO did equally not include non-English publications. This is significant, given the fact that UNESCO is an agency of the United Nations which has somewhere around 190 member states, most of which it can be assumed are probably not English-speaking countries.

While as such this provides no sufficient justification for excluding non-English language publications on my part, the fact that they are not even contained in a reference list maintained by an institution like UNESCO is in itself a remarkable occurrence. The more so, since for example Brasil and other Latin American countries have very active and also substantial open access programmes and thus a great number of articles have been published in Portuguese and Spanish on the topic (cf. SciELO, no date). Yet, these have not been included in the listings and bibliographies. It certainly highlights an important aspect about the way in which the discussion is led and on which premises it is based. Namely, to put it bluntly, that it is led in the language of *power* and thus, one could argue, on its terms. Especially the fact that the discussion is represented by an institution like UNESCO as being one that is led solely in English is an important one. This representation clearly forms part of the discursive space in which we navigate and as such it contributes to the shaping of the discourse.

Excluding is as much an active strategy as including, and thus my choice to only analyse English language materials follows not only from my own linguistic limitations – which of course play into it, especially considering how language intensive a work discourse analysis is – but also from my decision to focus on the most readily available material. And that is arguably material in the English language.

The publications vary with regard to a number of aspects. This includes obvious elements, like their length and place of appearance, i.e. which type of journal, website, magazine they have been published in or on. This also has bearing on their format and in particular on their style. They include editorials and opinion pieces of various sorts, research articles, as well as reports, press releases and simple announcements. This being said, strong commonalities can also be made out.

Most are journalistic in style and outlook and most have been published online only, a fact that sometimes also leads to certain difficulties when trying to pin down their text genre. Most are articles in the wider sense of the word; that is a self-contained piece of writing which forms part of an edited publication, online or off-line, and which has one or more identified authors. One

text is a transcript of a round table discussion and is author-less, while two texts have institutional authors. One of these is a report on a survey and available only from the institution's website. One text is a blog-posting and one is a discussion paper prepared for an email debate. Some texts have appeared on websites which do collect and publish articles yet they do not have periodically appearing issues, but their organisation is based on topics and/or chronology. The largest group of articles (11) has been published on the website of SciDev.Net (Science and Development Network), a science and technology news aggregator aimed at the 'developing world', and which works in cooperation with *Science* and *Nature* (see Appendix A for bibliographic information).

It is of course necessary to be aware of these differences, since they are mirrored in the writing style of the respective publication, and as we will see with regard to the declarations and statements these genre aspects can also form part of their semiotic structure; yet at the same time, they need not be over-emphasised, in all cases, specifically not when as in our case the material is sufficiently similar. This being said, the combination of different types of materials is, as Sanna Talja (2001, p.24) points out,

> a solution that is also closely connected to the principles of discourse analysis. When data are analyzed from a discourse analytic viewpoint, they are analyzed not as descriptions of external reality, but as evidence of interpretative practices. It follows from this viewpoint that all research materials are equally authentic and trustworthy.

Furthermore, the fact that they are all united under the same category in authoritative bibliographies or resource listings does bind them together and by association they themselves become authoritative publications on the issue. This is also reflected in the way in which they are connected to each other through references. Without having carried out a bibliometric study, it is evident that a lot of the articles are closely interlinked by way of references and also through authors. This way somewhat of a canon has formed which is reinforced and also facilitated by their inclusion in authoritative and readily available bibliographic lists. Going through the lists of participants at relevant conferences, meetings and such like confirms this perception. This and going through other texts on the issue furthermore confirms that the selected texts constitute a good cross section of the available literature on open access and development.

4.2.2 Petitions, Statements and Declarations: An overview

The second set of material in the corpus consists of five statements and declarations. Before presenting these, I give a very brief overview of the various types of declarations that exist in support of open access. My focus is on types of texts and forms of expression of support, rather than on presenting a concise time-line of open access statements.

As a movement, open access is constructed around a number of meetings and the resulting declarations, petitions, or statements, all issued by various organisations or groups. One of these, the 2002 *Budapest Open Access Initiative*, was also the document which provided a name for the then still fledgling movement. With it came not only a title that stuck, but also organisation, promotion, and perhaps most importantly funding, namely by the Soros Foundation's Open Society Institute, which until this day can be regarded as one of the major funding and promotional bodies behind the open access movement. Since then the number of petitions, statements, and declaration has reached several dozens[20].

Organisations that have issued statements expressing some form of support for open access include various library associations, academies of science, universities and research councils, as well as groups as diverse as German and Italian university rectors, or organisations like the OECD, the European Union, or IFLA.

As texts, while all adhere to the conventions of the respective text genre, they are also very varied, stylistically and with regard to their focus. On the one hand, there are those drafted specifically with open access in mind, either as a result of a meeting or as a response to one or more of the various initiatives, by governments or otherwise. On the other hand there are those documents that are dedicated to other, wider concerns or concerns in the thematic vicinity, and in which open access is presented as one among several options to reach a certain aim or where open access forms part of a set of strategies or concerns. Those dedicated solely to open access either address it in a more general way, or at times they have a specific slant, target audience, or focus, depending on who issued them.

For example, the *Bethesda Statement* (BS, 2003) addresses the biomedical community. There are the quite specific *Petition for Open Data in Crystallography* (PODC, 2005), *the Salvador Declaration* drafted with the 'developing world' in mind, or the *Declaration of Mexico* (DM, 2006) which is aimed at Latin American institutions and governments and recommends they adopt open access policies. Then there are those documents that merely demand the signing of another declaration, typically either of the *Budapest Open Access Initiative*, the *Berlin Declaration*, or the *Bethesda Statement*. This has for instance been done by a group of Italian university rectors in form of the *Messina Declaration* (MD, 2004).

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20 For a comprehensive list see: Peter Suber's "Timeline of the Open Access Movement", *Open Access News,*: http://www.earlham.edu/~peters/fos/timeline.htm [April 8, 2008]
or *Co-Action* website: http://www.co-action.net/links/links.php?%20sessid=02661871&user=346351&env=Opera [April 8, 2008]

Some documents support specific kinds of open access or open access to particular kinds of material. Most frequently this is open access to material that relates to publicly funded research. The so-called tax payer argument has since a long time been high on the agenda of the open access movement, very prominently in the USA, but also in Europe. Put simply, research publications that are the result of research which was carried out with the support of public funding should be freely available to the public who funded the research, i.e. the respective country's tax payers. Since the internet does not know any physical borders, this would de facto equate with free access for a global audience, provided of course there is (unrestricted) internet access. The Medical Library Association of the USA, for example, issued a statement in support of "open access to information generated from federally funded scientific and medical research" (MLA, 2003). This specific statement was made in support of the "Public Access to Science Act". It was put forward by a member of the US House of Representatives, who demanded copyright exemption for works resulting from publicly funded research. In Europe, the *Eblida Statement*, further entitled "towards an effective scientific publishing system for European Research" (EBLIDA, 2005) equally embraces the tax payer argument, as does the Council of the European Union (CEU, 2007). The NIH, that is the US National Institute of Health, introduced a much-debated open access policy for the researchers it funds first in 2004 and has since modified and adapted it a number of times. However, the precise demands and genesis of the NIH's public access policy is not of particular relevance to my argument here, rather it is the very prominent support it found which is noteworthy. It deserves a mention, since it also found its expression in a public statement of sorts. Twenty-five Nobel prize laureates issued an open letter addressed to the US congress supporting the NIH's move towards demanding open access, reasoning that "science is the measure of the human race's progress" (Agre et al., 2004). This re-enforces strongly one of the ways in which the link between science and development, which I have discussed in the previous chapter, is commonly established and maintained.

In 2004 the OECD (2004, Annex 1) adopted a *Declaration on Access to Research Data from Public Funding* in which they carefully, but still, recommended open access. Incidentally, a further declaration was adopted on the occasion of the same meeting in January 2004, *the Declaration on International Science and Technology Co-operation for Sustainable Development* (OECD, 2004, Annex 2), further underlining the connection between open access and issues of development.

There are also documents dedicated to other, wider concerns or issues in the thematic vicinity, and in which open access is presented as one among several options to reach a certain aim or where open access forms part of a set of strategies or concerns. This includes equally different documents, issued once again, by a varied set of groups and organisations. For example, the

WHO and twenty-five editors publishing mental health research journals issued a joint statement on *Galvanising Mental Health Research in Low- and Middle-Income Countries: Role of Scientific Journals* (Joint Statement by Editors and WHO, 2004). Open access is one amongst a number of measures envisioned to reduce "the barriers to publication of mental health research by investigators working in LAMI countries" in order to "address the enormous unmet mental health needs of low and middle income (LAMI) countries" (Joint Statement by Editors and WHO, 2004). An entirely different set of issues is addressed in the *Adelphi Charter on Creativity, Innovation and Intellectual Property* (Adelphi, no date). Here open access is inserted into the wider fight against increasingly restrictive intellectual property laws and mentioned together with open source software licensing. The *Adelphi charter's* drafters come from a number of different countries, yet its main base is at the Royal Society of the Arts in London and its key, yet by no means exclusive, concern lies with the arts in the widest sense of the term.

In the WSIS *Geneva Declaration of Principles* open access initiatives are mentioned as one of the many so-called key principles of an "Information Society for All" (WSIS, 2003a), a uniquely unspecific concept developed in a uniquely jargon ridden document, whose drafters see their challenge in,

> [h]arnessing the potential of information and communication technology to promote the development goals of the Millennium Declaration, namely the eradication of extreme poverty and hunger; achievement of universal primary education; promotion of gender equality and empowerment of women; reduction of child mortality; improvement of maternal health; to combat HIV/AIDS, malaria and other diseases; ensuring environmental sustainability; and development of global partnerships for development for the attainment of a more peaceful, just and prosperous world. (WSIS, 2003a)

All of these activities and statements show at least one thing, and that is that open access has found resonance across wide spectrum and that it is being connected to very different concerns, ranging from crystallography or mental health to the arts and from the rights of tax payers to development.

This provides the context in which the five documents, petitions, official statements, and declarations, chosen for my analysis, are situated. These were all issued in the short time span between 2002 and 2005. They are either significant because of the way in which they introduce a connection with one or another aspect of the concept of development, or because they are particularly fundamental to the open access movement, as is the case with the name-giving *Budapest Open Access Initiative* as well as the *Berlin Declaration*.

For a number of reasons, it seems sufficient to concentrate on these five documents. First of all, a great many other declarations explicitly refer to them, which makes them more visible and thus,

quite simply, also more relevant for shaping representation and perception of open access. In particular this is the case with the *Budapest Initiative* and the *Berlin Declaration*. Secondly, they have all been issued and signed in the context of significant events or by well-known bodies allied to specific, typically powerful, interest groups, and they have thus greatly influenced the shaping of open access as well as its perception. This is closely connected to a further reason. The selection is seen to represent the official attitude of a number of different interest groups or even just their viewpoint and which all bring with them a particular agenda. Their wordings are the result of negotiations and represent a consensus of sorts between stakeholders and interest groups within an institution or between participants in a meeting. Clearly, what is at stake for those represented by an organisation like IFLA is different than what concerns those united under the umbrella of the Inter Academy Panel. Yet, as the existence of these documents shows, all these groups and institutions have a vested interest in open access as a form of communicating science, or more precisely scholarly documents and data, and all tie their understanding of it and their interest in it to some concept of development, the often related idea of 'global knowledge', or a unitary ideal of science.

The following documents were included in the analysis:

- Budapest Open Access Initiative
- Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities
- Inter Academy Panel Statement on Access to Scientific Information
- IFLA Statement on Open Access to Scholarly Literature and Research Documentation
- The Salvador Declaration on Open Access: The Developing World Perspective

All documents are available in a number of different languages of which solely the English versions were chosen for analysis. I will in the following briefly present the declarations individually, by focusing on the organisations or events behind them. A more detailed overview of their key elements, including their respective definitions of open access and the languages in which they have been issued, as well where they can be accessed, is available in Appendix B.

The *Budapest Open Access Initiative*, issued in February 2002 was the result of a meeting that took place in December 2001 in Budapest, Hungary. The meeting was organised by the Soros Foundation's Open Society Institute (OSI), which also supported the initiative with three million US dollars during the first three years. OSI continues to support and fund the open access initiative. It is now part of its so-called information programme where it constitutes one of four initiatives, "which enable access to knowledge in poorer countries" (OSI-IP, no date). OSI is a privately operated foundation, active in twenty-nine countries and it consists of individual

country offices that operate independently yet in consultation with the OSI founder and chairman, George Soros. OSI was founded in 1993 with an original focus on the countries of the former Eastern Block in Eastern and Central Europe. It has since expanded its activities to other areas in the world. Its main office is based in New York. The OSI's main aim is, according to its website, "to shape public policy to promote democratic governance, human rights, and economic, legal, and social reform" (OSI-about, no date). The *Budapest Open Access Initiative* was originally signed by sixteen individuals. Since then the number of signatories has reached several thousand.[21]

The *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities* was presented in October 2003 in the context of a conference which took place over two days at the Max Planck Society in Berlin. Since 2003 annual follow-up conferences have been organised in different countries. One took place at CERN in Geneva (Berlin 2), one at the University of Southampton in the UK (Berlin 3), one at the Max Plack Institute in Potsdam (Berlin 4), Germany, and one at the University of Padua in Italy (Berlin 5). All conferences were at least co-organised by the Max-Planck Society. Berlin 4, called "From Promise to Practice", stated as part of its programme the intention to pay special attention to 'developing countries' and one session of the conference was dedicated to the issue. Equally, Berlin 5 "From Practice to Impact" had as one of its general subjects open access in the 'developing countries'. In 2003, the year it was issued, the *Berlin Declaration* received signatures by twenty-eight institutions and with the exception of the Open Society Institute, all were from Europe. In early 2008 the number of signatories had reached nearly 250. The Max-Planck Society for the Advancement of Science, founded in 1948, is an independent, non-university research institutions with 81 institutes and research facilities, 78 of them in different parts of Germany. It employs over 20.000 people and it receives its main funding from the German state. Its main areas of research include Biology, Medical Sciences, Physics, Chemistry, and Technology, but it also has a Humanities section. Importantly, the Max-Planck Society carries out research on research policy itself.[22]

The *Inter Academy Panel Statement on Access to Scientific Information* is one of a series of five science related statements issued by the Interacademy Panel on international issues (IAP) in December 2003 on the occasion of the General Assembly and Conference on Science for Society held in Mexico City. The other four statements relate to the following topics: science and the media,

21 All information presented is available at the Open Society Institute website: http://www.soros.org [April 8, 2008]

22 All information presented is available at the Max Planck Society website: http://www.maxplanck.de [April 8, 2008]

science education of children, the health of mothers and children in developing countries, and capacity building of young academies. None of these is open to signatories. The IAP is an international association of science academies. Founded in 1993, it has its headquarters in Trieste, Italy and it operates under the administration of the Academy of Sciences for the Developing World (TWAS). Its stated primary aim is, "to help member academies work together to advise citizens and public officials on the scientific aspects of critical global issues" (IAP-about, no date). The TWAS, founded in 1983 in Italy, in turn, has as its primary goal the promotion of "scientific capacity and excellence for sustainable development in the South" (TWAS-about, no date). The IAP has relations with a number of other international organisations, including, but not limited to, the International Council for Science (ICSU), the Federation of Asian Scientific Academies (FASAS), All European Academies (ALLEA), Network of African Science Academies (NASAC), European Academies' Science Advisory Council (EASAC), Association of Academies of Sciences in Asia (AASA), and the Caribbean Scientific Union (CSU). It operates a programme dedicated to access to scientific information in 'developing countries', which is led by the US National Academy of Sciences.[23]

The IFLA Statement on Open Access to Scholarly Literature and Research Documentation was adopted by the Governing Board of IFLA at its meeting in The Hague on 5th December 2003. IFLA, the International Federation of Library Associations and Institutions, founded in Scotland in 1927 and with its headquarters in the Netherlands, sees itself as being "the global voice of the library and information profession" (IFLA-about, no date). Its members are constituted of over 1700 library associations, or associations of information professionals and research institutes or similar as well as individual libraries and information services. IFLA has a number of corporate partners, mostly publishing houses and suppliers of library equipment. IFLA also has various kinds of relations with a number of other international bodies, including, but not limited to, UNESCO and the International Council of Scientific Unions (ICSU), or the International Publishers Association (IPA), and they also have observer status with the United Nations, the World International Property Organisation (WIPO), and the World Trade Organisation (WTO). It is furthermore itself a member of the International Committee of the Blue Shield (ICBS) which is dedicated to protecting world cultural heritage from the destruction in armed conflicts and natural disasters.[24]

23 All information presented is available at the IAP website: http://www.interacademies.net [April 8, 2008] or the TWAS website: http://www.twas.org [April 8, 2008]

24 All information presented is available at the IFLA website: http://www.ifla.org [April 8, 2008]

The *Salvador Declaration on Open Access: the Developing World Perspective* was issued in September 2005 in the context of the 9th World Congress on Health Information and Libraries "Commitment to Equity" which took place in Salvador de Bahia in Brasil. It was the result of a parallel session, entitled "International Seminar. Open Access for Developing Countries", which ran over two days. The seminar was sponsored by the Latin American and Caribbean Center on Health Sciences Information (BIREME), the Pan American Health Organization (PAHO), and the World Health Organization (WHO), all three large international organisations dedicated to coordinating various aspects of medical research and health related information. It united speakers from these three organisations, but also from other institutions, including SciELO, the Open Society Institute, the Indian National Informatics Centre, the Public Library of Science (USA), Thompson ISI, the US National Library of Medicine, and the US National Academies. The *Salvador Declaration* is issued in the name of the participants of the parallel session and it is not open to other signatories.[25]

4.3 Text Genre: Mission Statement and Manifesto

Before moving on to considering the discursive procedures at play in more detail, it is necessary to step back for a moment and look at some of the formal elements present in the five statements and petitions selected here. When reading them, and also the ones surrounding them, it becomes clear that they are formulated in a particular manner. They adhere to specific regularities which, as we know, derive from certain conventions and which can be understood as a style. This might be an obvious observation. Yet, it is, I believe, still a significant one. Clearly, formal aspects are important and integral parts of a text. They are not accidental, but derive from choices made and these choices are arrived at in certain contexts – historical, cultural, social in the wider sense of the word – and with other representations in mind. Thus, they contribute to the way in which texts are written and naturally also perceived. They are, one could say, part of a text's semiotic structure, on some occasions of course more obviously so than on others. This situation shapes one's own reading, but moreover it can be expected that most readers of these texts will be – more or less consciously – aware of the textual conventions to which they adhere.

25 All information presented is available at the conference website: http://www.icml9.org [April 8, 2008]
I was present at that particular meeting and it was clearly an interesting event. I was not involved in the drafting of the declaration however, and in fact it never became very clear to the 'regular' participants who was. Leaflets with the text were handed out at the concluding plenary session and on the occasion it was 'issued'.

One way to come to terms with this is to think about it in terms of text genre[26]. This of course refers to morphological characteristics that certain texts share or also stylistic elements and rhetorical devices that allow us to group and classify texts. It furthermore implies a perspective that considers that texts emerge in social situations, typically for specific communities and purposes. Carolyn R. Miller (1984), in her influential essay on "Genre as Social Action", emphasises that genres are cultural artefacts which "represent typified rhetorical action" (Miller, 1984, p.151). In particular, however, she argues for the need to understand genre in terms of "the action it is used to accomplish" (Miller, 1984, p.151).

An important implication deriving from this is the observation that a particular text genre also carries with it a perceived intention; or perhaps better that it has a specific apprehended communicative purpose (cf. Swales, 1990, p.58), precisely because it is seen to belong to certain group of texts. To clarify, these are group characteristics, that is not the perceived communicative purpose of an individual text in terms of its content, but the way in which it is perceived because it shares a number of characteristics with a specific group of texts; for example, it is considered to be an editorial, a scholarly article, a mission statement, or a manifesto.

As such this has bearing on the shaping of discursive procedures. This at least insofar as, at the surface of the text, in their linguistic expression, these have to be considered in relation to the formal elements specific to the respective text genre, simply because this is where they happen. More precisely, at the level of textual analysis, awareness of formal aspects as well as, at a deeper level, social and historic contingencies specific to text genres adds to the analysis of discursive procedures.

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The open access statements are written in a declarative style and intended for public display. Clearly, this is a choice that was made. This choice situates these documents in certain traditions – political, cultural, social, but also formal – and these influence their reception, perception, and circulation. It does not matter for us here, how this choice was made or why. At this point, it is merely its discursive effects that are relevant. To return to our theoretical discussion of discourse and of discourse hierarchies above, this is precisely what I was referring to when claiming that texts and thus discourses are defined also by their manifestation in a medium and consequently also by their form. It is also what Maingueneau refers to when he maintains that the

26 Of course, texts need not be limited to written texts; they can also be oral or even visual ones. However, since we are here dealing exclusively with written texts, the focus is predominantly on those.

"mediological conditions of a discourse are a dimension of its identity" (Maingueneau, 1999, p.191). Text form and genre not only contribute significantly to a document's discursive strategies and procedures, they form an integral part of its discursive structure.

Regarding the open access statements, it can be argued that these are what comes closest to being the official documents of the open access movement. Obviously, I am using the word 'official' rather loosely and of course, differences exist between the individual documents' statuses. Yet, since the open access movement is a dispersed movement, and one which cannot be pinned down to one institution and official representation as such, but is constantly in the making, these texts, constitute a big part of what literally makes the movement. At the same time, having said that the open access movement cannot be pinned down to one institution, it is still strongly associated with certain institutions, through individuals, financial support, personal ties, or otherwise. These have vested interests in open access and the issues it is connected to, not least the Open Society Institute, IFLA, or various science organisations.

This also leads us to a major difference between the types of documents investigated here. It might seem superficial, yet it is still an important one. On the one hand there are those issued by an institution in support of open access. On the other side, there are those which have been drafted on the occasion of an event of some sort and subsequently been signed by individuals or representatives of institutions. To a degree, this is already reflected in their titles. These tell a lot about their purpose as well as their genesis. They are called *Initiative*, *Declaration*, *Statement*, and are further specified with either a place name or with the name of an institution, thus alluding to past meetings and with it to negotiations which gave birth to the respective document. Their names alone reflect political engagement, in the widest sense of the word. *Initiative* and *Policy* both suggest future action and are directed towards initiating change. *Declaration* and *Statement* on the other hand, are less future oriented, yet also less vague. They more strongly connote conviction and engagement, political or otherwise. In this sense and this is particularly important here, neither wording nor formulations are coincidental in any way. They are carefully crafted and significantly, they depend on a certain level of agreement between different stakeholders. This means that their wording is also result of the enacted power relations that exist between these different stakeholders.

Specifically two text genres are relevant in the present context: first, the mission statement and second, the manifesto. While both are so-called non-routine genres and as such have to be distinguished from so-called everyday communications, significant differences between them exist. Mission statements exist predominantly as corporate texts, or as texts explicitly bound to institutional expression. In contrast, the manifesto's history is one of political as well as artistic

engagement, and perhaps even more specifically, of subversion and opposition in these contexts. Neither the text form of the mission statement nor that of the manifesto fully apply to the documents we are dealing with here. However, both still feature a number of characteristics that are also present here and I argue that in the present context, specifically with regard to some of the selected documents, it is justifiable to consider them together. Moreover, introducing some of their most important traits also adds an extra layer of context, which aids in our understanding of the texts we are dealing with here.

John Swales and Priscilla Rogers (1995) investigate the mission statement as a text genre, and they specifically focus on the corporate mission statement. They define it as the "guiding principles within the framework of the corporations' announced belief system and ideology" (Swales & Rogers, 1995, p.227). Typically, mission statements are institutional – as opposed to individual – texts, which in the words of Swales and Rogers (1995, p.225), "primarily act as carrier of ideologies and institutional cultures".

Swales and Rogers (1995) establish a parallel between the mission statement and religious synopses:

> These types of genre act as carriers of culture, ethos and ideology. As a result they stand a little apart from the normal recursive processes that produce and reproduce everyday social and institutional costums. (Swales & Rogers, 1995 p.226)

What is important here is the observation that they are *carriers of culture*. This means of course that they are shaped by a culture, but it also means that in their content they carry forward an ethos that proclaims a certain culture, that they are announcing it. In this sense the corporate mission statement is quite akin to the statements and declarations of a movement like the open access one.

In short, according to Swales and Rogers (1995), mission statements are institutional texts advancing and developing institutional cultural norms and belief systems and offering guiding principles that make it possible to act within the thus presented social/cultural framework. This is certainly a useful observation, but it seems to me that a further component needs to be added. Specifically, it is the mission statement's communicative purpose not only to announce these norms and principles to those participating within the system, but significantly also to those outside, that is the wider public. By making the principles that guide an institution's actions and the actions of its members public, an institution also gives itself a public identity and thus a purpose. These, identity and purpose, stand in relation to other organisations and of course to the public more generally.

This latter aspect is particularly significant for the texts we are dealing with here, which, as I have suggested, also represent the movement's public face. Furthermore, like the mission statement does for the corporation, the open access statements transport an "announced belief system and ideology". In this sense they also provide the movement's "guiding principles". If the *Salvador Declaration* (SD, 2005) announces, "[s]cientific and technological research is essential for social and economic development", then this, more than anything else, is the announcement of a belief system. Equally, when IFLA declares that "the discovery, contention, elaboration and application of research in all fields will enhance progress, sustainability and human well being" (IFLA, 2003), then this is a declaration of its guiding principles and its beliefs which underlie and give purpose to its actions.

These two examples point us in the direction of another direct connection between the mission statement and the open access declarations. However, they also show us that the latter contain a forward looking element which the former typically lack. This makes it necessary to look beyond the genre of the mission statement for similarities.

The connection, but also the divergence, can be found in terms of style and grammar. For the mission statement, Swales and Rogers (1995, p.227) observe:

> [T]he content of these texts largely consists of general statements, claims and conclusions. It is not surprising then that the verb forms are predominantly the present, the imperative [...], and the purposive infinitive [...].

Clearly, general statements, in particular claims and pre-supposed conclusions, abound in the open access declarations. The two brief examples, quoted fully above, demonstrate this; "research *is* essential for [...] development" (SD, 2005, my emphasis), "discovery [...] *will* enhance progress, sustainability and human well being" (IFLA, 2003, my emphasis). These claims are presented in a matter of fact way and without any prior or further justifications. Clearly, these are not the appropriate documents to allow for academic or other kinds of reasoning taking place. To fulfil their function as proclaimers of a belief system, they must *Declare*, with a capital D. They cannot allow for any uncertainties, inconsistencies or questions to shine through. The present tense and the imperative predominate.

Yet, at the same time, there is also a tendency to formulate in the future tense; that is with an outlook to change, something that is also connected to demands, as in our second example, which concludes with the "advocacy" of seven principles, formulated very much like demands.

> IFLA [...] advocates the adoption of the following open access principles in order to ensure the widest possible availability of scholarly literature and research documentation:

> Acknowledgment and defense of the moral rights of authors [...].
>
> Adoption of effective peer review processes to assure the quality of scholarly literature irrespective of mode of publication.
>
> Resolute opposition to governmental, commercial or institutional censorship of the publications deriving from research and scholarship.
>
> Succession to the public domain of all scholarly literature and research documentation at the expiration of the limited period of copyright protection provided by law [...].
>
> Implementation of measures to overcome information inequality by enabling both publication of quality assured scholarly literature and research documentation by researchers and scholars who may be disadvantaged, and also ensuring effective and affordable access for the peoples of developing nations and all who experience disadvantage including the disabled.
>
> Support for collaborative initiatives to develop sustainable open access publishing models and facilities [...].
>
> Implementation of legal, contractual and technical mechanisms to ensure the preservation and perpetual availability, usability and authenticity of all scholarly literature and research documentation. (IFLA, 2003)

Leaving aside the way in which the developing nations are *juxtaposed* with the *disabled*, this is typical of the statements and declarations in the open access movement. The InterAcademy Panel's statement on *Access to Scientific Information* concludes with a list of five recommendations, the *Berlin Declaration* with a list of five intentions.

In terms of recommendations the main difference between these documents lies in whether a demand or recommendation is made of someone else or whether the obligation to act is seen to lie with those issuing the respective declaration. To recapitulate, we have declarations of commitment on the one hand, and statements of demand on the other hand. The first group encompasses solely the *Berlin Declaration*, while the second group consists of the *Budapest Initiative*, the *IAP statement*, and, most strongly, the *Salvador Declaration*. The *IFLA Statement* contains elements of both.

In particular the latter group of documents is very similar to another type of text genre, a more openly political one, which typically contains demands as one of its defining characteristics, namely the manifesto. In opposition to the mission statement, the manifesto can look back at a history of resistance or at least of a desire for change. Illustrious examples include not least Marx' and Engel's *Communist Manifesto* or Marinetti's *Futurist Manifesto*[27]. As such, that is to say, in its

27 It is interesting to consider here also Donna Haraway's (1991) explicit toying with the status of the manifesto in her

desire to promote change, it is arguably quite distinct from the mission statement, whose main aim it is after all, to set guiding principles and thus maintain a status quo.

"The manifesto", writes Mary Ann Caws (2001, p.xix),

> was from the beginning, and has remained, a deliberate manipulation of the public view. Setting out the terms of faith toward which the listening public is to be swayed, it is a document of an ideology, crafted to convince and convert.

For their effectiveness manifestos depend, she maintains further, on their "power of declamation and persuasion" (Caws, 2001, p.xix). This is reached and fulfilled by resorting to certain rhetorical devices which are shared by different kinds of manifestos – political, religious, or artistic. Janet Lyon (1991) discusses a number of these in more detail. For Lyon (1991, p.102) the essential elements of the manifesto form are "pronominal configurations", a "gridlike rhetorical framework", the "practice of enumerating demands", and a "tendency to historicize a founding moment of crisis".

Janet Lyon furthermore provides us with a broad overview over some the manifesto's major morphological characteristics:

> Generally the manifesto stitches together the discourses of (among other things) religion, history, war (or siege), and persuasive rhetoric. It is a public/published enunciation of aggression and righteous rage; conventionally the term 'manifesto' itself signifies both the form and the passional [sic] state (usually, frustration or disappointment or aggression) that precedes or engenders the manifesto text. The term 'manifesto' has signified a whole range of political speech acts: in the seventeenth century its discourse was predominantly martial, and the form was used for military ends, while a century earlier it had been a form for the refutation of anonymous character assaults in the university community in Italy. Its use to assert vigorously a religious 'proof' – which is one of the OED meanings – coincided with its emergence, during the French Revolution, as the preeminent organ of anti-statist dissent. (Lyon, 1991, pp.103-104)

This is achieved through a number of strategies, three of which Lyon considers particularly important:

> First, a foreshortened, impassioned, and highly selective history chronicles the oppression leading to the present moment of rupture; second, a forceful enumeration of grievances or proposals politicizes this oppression; and third, an epigrammatic , declarative style directly challenges the oppressor [...]. (Lyon, 1991, p.104)

"Manifesto for Cyborgs".

These are interesting observations and we can see how this applies to some of our open access statements. For instance, the *Salvador Declaration* contains the following statement towards the beginning of its text:

> Historically the circulation of scientific information in developing countries has been impeded by a number of barriers including economic models, infrastructure, policies, language and culture. (SD, 2005)

This contains elements of both. It is a declaration of grievance which contains a strongly political moment, but also a shortened and selective construction of history that leads to the present crisis.

In relation to their respective, predominant communicative purposes, mission statement and manifesto are two distinctly different text genres, one oriented towards declaring and maintaining a status quo, the other one towards initiating change. However, the open access statements unite features from both of them. They are certainly – in the words of Lyon (1991, p.104) "governed by the need to position [themselves] against and make [themselves] intelligible to the dominant culture". Yet, this need in relation to hegemony is only fulfilled to a certain degree and they are also, and it seems to me more strongly so, governed by the need to stay within the boundaries of hegemony, as well as to maintain the status quo.

We could simply claim that the conflict we perceive in the movement and its declarations corresponds to what Lyon says about the political manifesto. Namely, it is not actually a conflict, but it is simply a friction that arises from wanting to be positioned against dominant culture, while still being understood by it. Somehow though this is not quite what is happening here. Rather, some of the stylistic elements of the manifesto seem to be mobilised, precisely because it is so strongly associated with counter-culture, its anger, and change. However, the change that is being aimed at never concerns dominant culture as such, but merely one of its mechanisms. Two main constituents of dominant culture, i.e. the discourses of science and of development, are called upon to back-up and sanction the demand for change. Its substance is never called into question. The mechanism – very simply the way scientific papers, data and so forth are communicated – is singled out for change in order to strengthen one element of the dominant culture. As such, change is sought from within the system not from the outside. It is, in other words, a change of *the* system and not a change of system, and only a minor challenge to it.

It could be argued, that the change aspired to lies largely in an extension of the dominant culture's system of knowledge. At the same time of course, precisely *because* 'western' science is such a dominating system of knowledge, public access to its documentary archive should be in the interest of those previously excluded and can be considered a *pro-democratic* demand, potentially leading to more participatory and inclusive sciences. It is thus significant, that the way

in which these texts are crafted draws so heavily on a genre that is traditionally associated with attacking hegemony, while part of their thrust goes towards maintaining it. This is where the mission statement comes into the picture. It is a text genre aimed at communicating a system of believes and setting out guiding principles in order to define, strengthen and maintain it. Thus the most fundamental characteristics of both text genres in terms of their perceived communicative purposes, initiating change on the one hand and consolidating norms on the other, can be seen to amalgamate in the open access statements. Formulated the other way around, considering these texts from a genre perspective, shows, I think, how change and stasis work together in the open access movement.

4.4 Discursive Procedures

A multitude of thematic strands conceptually ties development to open access, in turn contributing to the shaping of both notions. The identification of certain recurrent and pervasive topoi[28] and also of iterant rhetorical strategies led me to the characterisation of five particularly dominant procedures. These I identified through repeated reading of the texts and subsequent close reading of selected paragraphs. Close reading, which typically guides and underlies discourse analyses, has its origins in literary criticism. It describes a technique of repetitive, careful, and sustained reading and subsequent close reading of usually short paragraphs of text.

Sure enough, overlap exists between the discursive procedures identified and not all of them are equally strongly re-presented in the literature. Yet, all five procedures are clearly discernible as constituting unifying tendencies in the texts. At times, they contain conflicting aspects which, as we will see, occasionally include almost contradicting positions. This is natural and only to be expected. It shows, for one, that an issue is actually being debated, and also, that different stakeholders hold different positions. However, having said that, in our case these conflicting positions are rare and concern almost only rhetorical devices. Thus, while a certain degree of discursive heterogeneity exists, it is in fact more intriguing how homogeneous the issue is being presented and how seldom real conflicts and problematisations appear. This will become obvious when we look at the procedures more closely. These are:

28 Topos (pl. topoi): A traditional motif or theme (in a literary composition); a rhetorical commonplace, a literary convention or formula (OED, 2nd edition, 1989).

(1) Leaving a blank or defining the undefinable: The elusiveness of the 'developing world'

(2) Technologism and technological determinism

(3) Economism

(4) Scientific Centralism and Scientism

(5) Temporal distancing

These procedures are closely interlinked, as we will see, not least by the use of a common set of tropes; that is figure of speech. The most important ones are divides and gaps, as well as closely related, flows. In particular, technologism, economism, and scientism, but also temporal distancing make strong use of these images. Since they are very dominant and feature in a number excerpts that I discuss, I will repeatedly return to their significance throughout, depending on context. However, I will only consider them, their role, and effect in the present context in some more detail in the chapter's concluding remarks subsequent to the discussion of these procedures.

In the following, example quotations taken from the corpus are distinguished from other references by using a numbering system and square brackets. For reasons of consistency this applies in this section also to the declarations and statements included in the analysis. This serves the purpose of setting the analysed material apart from the literature used to support the analysis. Furthermore, not including the authors' names in the text is also intended as a deliberate form of depersonalisation. This seems necessary in order to present all material on an equal level and to avoid letting the focus shift away from the text and its effects to the author. Moreover, to avoid emphasising individual texts or authors and to keep the attention on general tendencies, no references to the material are provided throughout the presentation of the analysis, other than to those articles that are quoted directly. This is not an attempt at anonymising the material, which is not required since we are dealing with published texts. However, it is a way to emphasise in the presentation that it is not an individual speaker's words which matter so much as it is the discourse, i.e. the system of rules that renders them possible to be said in the first place, which is our focus. Therefore, while author names for example quotations are not contained in the main body of text, full bibliographic information for them as well as for the entire corpus, on which the analysis is based, are listed in the appendix, separately from the references (see Appendix A).

4.4.1 Leaving a Blank or Defining the Indefinable: The Elusiveness of the 'Developing World'

Definitions are interesting. They are seemingly obvious places to look first when trying to find out which are the premises and factors that contribute to the presentation of a certain concept in

a specific context. After all, definitions are where concepts are temporarily fixed, where they are assigned with supposedly stable meanings, where society defines itself by setting up the guiding posts for its discourse. They can be used to signal one's position in a shifting system of signs, like a flag marking a position and stating an allegiance. In a certain way, one might think, they are perhaps an all too obvious place to look to really get behind things. It is not always all that simple however and there are cases when definitions, or attempts at definitions, are interesting precisely not because of the apparent clarity they are able to establish, but because of the way in which they obfuscate connections, and set up signals that concurrently blend allegiances and positions, and also, most notably, because of their absence.

What is being expressedly defined and what is not, tells us as much about a concept's status as does the way in which it is defined and of course as what something is defined. In the case of 'the developing world', as it makes its appearance in the literature on open access, the issue of definition is an interesting one. At first glance, it seems it is notoriously missing. There are very few definitions, in the strict sense of the word. Naturally, there are some and we will of course look at them. Yet, most salient are absences, assumptions, substitutions, and something that I would like to call, perhaps polemically, a definitional 'stammer'. A more or less detailed definition of open access is very often included, yet almost without fail development, the 'developing world', or whichever else is the preferred term, is left standing somewhat elusively as 'too complex', to paraphrase the words of some authors.

It might seem curious, but it appears that one of the most dominant discursive procedures in the texts is characterised by a blank, more precisely, an avoidance to define development, the 'developing world', or any of the other related concepts used. To a considerable degree, this is rooted in the hegemonic status development discourse has achieved, and which positions development as a concept that in its essence is unquestionable. We are supposed to know what we speak about when 'developing countries' are mentioned. It is quite simply assumed, and probably rightly so, it seems, that the system of reference is clear.

Of the statements and declarations mentioning 'developing countries' none contains a definition. Implicit mentions are made of course, yet not one includes what could be considered a definition, a qualification for the use of the concept or even an explanation for the omission of such a definition. Open access is usually defined, however briefly, yet development, which it is after all meant to facilitate, remains unexplained.

For example, the first mention of 'developing world' in the text of *Salvador Declaration*, subtitled "The Developing World Perspective", reads as follows:

> Open access means unrestricted access to and use of scientific information. It has growing support worldwide and it is received with enthusiasm in the developing world. [34]

In the same way, development is introduced, but never explained. Below is its first, and only, appearance in the *Salvador Declaration*:

> Science and technological research is essential for social and economic development [34].

This is a very strong statement, one that it is only possible to make because both concepts, science and development, have achieved the powerful status of unquestionability that allows for such a claim and specifically such a connection to be made without any further need for justification. What we learn here is merely that science and technological research are essential for development, specified further as social and economic development. Yet we do not learn what development is meant to be nor why nor how it is going to be facilitated by science and technological research.

This causal and yet unexplained connection between science and technology and development can, as we have seen above, be traced back to the inception of development discourse. It has remained fundamental to it ever since and it is now an almost common-sense assertion to make which can be capitalised on here and in numerous other instances in the open access debates, and beyond. The above sentence is a very typical example for the way in which the connection between open access and development is introduced and how with it the need for a definition of development or 'developing countries' is circumvented. It is a strategy that can be found throughout. The simple statement of the 'fact' that science means development – and in this constellation science is always positioned as an instrument of progress while development is invariably seen as positive – suffices to introduce the argument and the need for open access becomes an issue of compassion, while development becomes unquestionable, since everybody knows what a 'developing country' is and it is clearly not a desirable state.

As has been suggested before, the power contained in this simple connection is perhaps the one element that is most central to the open access debates when it comes to the 'developing world'. We will return to it in due course, when considering the other procedures, most importantly when trying to decipher which understandings of science are at play here.

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The majority of texts avoids definitions altogether or get lost in systems of substitution. A clutch of well-known concepts is usually present when the 'developing world' is discussed, among them

the 'South', the 'third world', 'low-income countries or economies', 'least developed', or 'poor countries'. All these have a history of their own and are tied to certain ideologies and some to more or less directly political forms of engagement. A term like the 'South', often 'Global South', derives from a distinctly different context to the terms 'low-income economy' or 'developing country', not to mention 'underdeveloped'. In fact, this is the term appropriated precisely to elude the evolutionary assumptions contained in the notion of development, or the implicit ranking inherent in the opposition of first and third world.

Sandra Harding (2006, pp.11-12) struggles to find a way to address "what used to be called the First World and the Third World." She writes:

> That terminology is a product of the cold war. It is problematic to import the cold war politics into our discussion here [of science and inequality]. Yet progressive science movements in the developing world, such as the Third World Network have named themselves with such a term. All of the proposed substitutes for this terminology have their own problems. 'Developed' versus 'underdeveloped' or 'developing countries' fails to question the imperial rationale of modernization embedded in the language of development. 'West' versus what? The East? The Orient? The Rest? Such binaries seem clearly linked to histories of European-U.S. orientalism. The language of 'North' versus 'South' emerged in 1992 at the United Nations' Rio de Janeiro environmental conference. In the United States, one must say 'Global North' and 'Global South' to draw attention away from the histories and differences of distinctive regions within the United States. Yet even so, one cannot use the equator to divide the world since there are industrialized countries [...] in what a mapmaker would regard as the Southern Hemisphere and, many not fully industrialized ones [...] north of the equator. [...].

Juxtaposing all these terms within the same textual space, and doing so unreflectingly, has the curious effect of amalgamating statements that are at times even founded on an opposition to each other. Doing this, without awareness of their origins, I would like to suggest, empties them of their political significance. Consider the following sentence:

> First, the South is very varied and includes, for example, emerging, intermediate, and least developed countries. [31, p.154]

This can be read as an attempt to provide a definition. Sure enough, in fact it is merely a substitution of terms, or perhaps an attempt at a differentiation. The *South* is here introduced as hierarchically superordinate to various kinds of 'developing countries'. These are presented in a way that suggests some form of progression from *least developed* via *intermediate* to *emerging*. At the same time, they are just examples and the *South*, it seems to be suggested, contains further sub-categories of this kind, not specified here. Quite randomly, one term – the *South* – is chosen to be positioned above the others – *emerging*, *intermediate*, *least developed* countries –, and it is interesting how this re-introduces the very value judgement to the term the 'South' which it originally tried

to escape. Furthermore, the matter of fact way in which these very different terms are bundled together by grammatically and logically connecting them with each other, contributes to positioning them as essentialist categories, apparently logically and hierarchically structured like in a taxonomy.

The following is an attempt at "providing an overview of the developing world".

> There are 75 countries in the world that have a GNP of less than USD 1000 per capita and per year. A further 47 countries have a GNP of between USD 1000 and USD 3000. There are only 20 countries in the world that have a GNP of over USD 25 000. It has been shown also that, the lower the GNP in a country, the higher the burden of disease. [14, p.155]

The overview of the 'developing world' is reduced to a quick recapitulation of a few figures. These figures come from the World Bank, however the reader never finds out about this. The data is presented by someone speaking on behalf of the WHO in order to introduce their HINARI scheme which discriminates between countries based on the classification provided by the World Bank. It is important to know this and granted, it does help us understand why the 'developing world' is being presented this way. Still, the author attempts to define the term 'developing world' and to provide it with context. The context that is chosen for this is a purely financial one and it is clear that 'developing countries' are those 122 countries with the low GDP and the high burden of disease, without any need to explicitly state this.

A strategy recurring time and time again lies in insisting on the varied and heterogeneous nature of the 'developing world' and on the complexity of the issue. This is particularly intriguing, since this is also where the 'naming game' really starts to rupture. For example, the following is an introduction to a text summarising a round table discussion on open access for 'developing countries':

> I will begin by stating a fact of which you will be aware: developing countries are many and varied in terms of their economic and infrastructure resources. Discussing these issues from the point of view of developing countries is thus a complex task. In general developing countries face either a scarcity of resources (infrastructure, economics, and access to published journals) or a scarcity of human skills.[31, p.149]

This is an interesting way of trying to circumvent the thorny issue of having to describe what one is actually talking about when one is talking about 'developing countries'. It starts of course with the assumption that they exist. However, not only are they *many*, they are also *varied*, varied *in terms of their economic and infrastructure resources*. Speaking about them is thus seen not quite as impossible, but as a *complex task*. It is an attempt at escaping homogenisation. Still, they have one thing in common, *scarcity*. They do not have enough, not enough resources or their people are not

sufficiently skilled. Either way, they are defined by a lack, something they need to acquire before they can become 'fully' developed, for example access to published journals. The question of more or less journals becomes part of the characteristics distinguishing the more from the less 'developed'. It is very interesting how the complexity is first introduced as a fact which it is then very easy to overcome by finding a single common factor binding these many and varied countries together again. Clearly, and this can be seen throughout, the category 'developing country', and this is perhaps not surprising, is perceived as a flawed category. More to the point, it is seen and described as unusable, or at least problematic to use, in the sense that it does not work as a geographic category, as a category denoting a physical place, or places, which of course it never did very well. Yet, it continues to be used in its function as a conceptual category denoting 'different' and 'lacking'. This is never clearly pronounced. Yet, there seems to be a tacit understanding of the problems this creates and the difficulty of defining. This can be seen in some instances where the authors try to circumscribe more clearly what they are referring to, but more often than not they merely end up in pointing to the complexity of the situation and the impossibility of doing so. Consider, for example, the following paragraph from a research article:

> Defining developing countries: [...] The term developing country has always been difficult to define because of its inherent connotation that the industrialized state enjoyed by rich countries is what other countries are striving towards. The World Bank's definition of developing countries based on a country's gross national product (GNP) is also overly simplistic as it overlooks the highly heterogeneous socio-political, cultural and economic diversity within and between developing countries. Because of inherent problems with defining developing countries, the terms low-income countries and The South are also used in this paper as a short hand to refer to the poorer less technologically advanced nations of the world, as opposed to the north which includes richer, industrialized states. [10, p.143]

Here, the various terms are juxtaposed in a particularly curious way. First of all, it seems the authors criticise the term 'developing country' in a way that seems to make it unusable for the purpose of their article, the reason being its evolutionary connotations and purely economic basis. However, already one paragraph later they use it again, and it continues to be used throughout the rest of their article. In fact, their suggested use of *low-income countries* alongside the *South* only serves to re-emphasise the economic roots of the term. To be specific, the claim made here is not that the term 'developing country' has always been difficult to use because of these limitations, but it is difficult to *define* because of them. As such, it is a very peculiar statement and one which in fact, while it advances problems with the term and its roots, still re-enforces its use and its evolutionary connotations as well as its financial basis. This is perpetuated in the next sentence by yet again introducing *less advanced* and *poorer* as the common denominators to unify and describe the 'developing countries'.

It might seem like redundant nit-picking. Yet it is important to pay close attention to these omissions, substitutions, and what, at first glance, seems like grammatical glitches. On the whole, it is of course of no particular relevance which terms are combined and substituted for each other. What matters are the apparent randomness with which this occurs and its effect. This effect, I would like to suggest, lies in re-enforcing a de-politicised perception of development which takes away its edges, its failures, and collapses all opposition, and also different versions, into a mere question of style. Moreover, the impossibility of circumscribing more clearly what one is talking about and the redress to the complexity of the issue, which can be found throughout in these texts points to a strange conflict. Term and concept of development have become fundamentally unusable, yet they have succeeded in remaining, what could be called, ontological necessities. Put simply, it is impossible not to think development and thus one always looks for other ways to conceptualise it, to re-shape it, or for an alternative.

Clearly, there is an awareness of the problems inherent in the notion of development, and related terms. However, it continues to be used and also it remains the term of choice for powerful international organisations, like the United Nations, the World Bank, or the WHO. These institutions produce myriads of reports and working papers every year which contain substantial numbers of list and indexes and tables and statistics and terminology proposals. These serve as very strong authorisation tools for all kinds of institutional settings and authors. They produce concepts which, while migrating between arenas, are continuously being referenced and reproduced and which continue to shape reality.

4.4.2 Technologism

One of the strongest underlying currents in the literature analysed is rooted in a technologically deterministic view of society, often an 'information society', and to a considerable degree also of information itself. The existence of the former is primarily seen as dependent on digital technologies and in particular on the internet. In the case of information itself, it is an (assumed) increase which is usually traced back to the internet. Consequently, lack of access to these technologies is perceived as a state of deprivation which manifests itself in exclusion from 'global' science or also from information more generally. Very often this is ultimately based on equating science with information or also knowledge in general. Science is then perceived as a system of absolute knowledge and crucially as an abstract system which exists besides its practice and which is loss-lessly captured in the journal literature (cf. Frohmann, 2004, pp.5-6).

The discourse of technologism emerges from varying associations and takes different shapes. It is most frequently, yet by no means exclusively, utopian. In particular in its utopian form it is

closely related to what, for example, Daniel Lee Kleinman (2005, pp.4-5) describes as technological progressivism.

> This is an idea with roots in the Enlightenment when progress became a synonym for the good and technology came to be viewed as a tool in all progressive projects. [...] Thus we have come to take the virtues of technological development for granted and to see technology as self-propelling, moving forward along a singular path without human intervention.[...] There are no social choices as technology has only one path which is intrinsically determined, and there is no point in blocking the road down which technology proceeds as it is always good.

In our texts, this form of technological progressivism is very prominent and it appears in various guises, typically emphasised through grandiose rhetoric and hyperboles. Technological progressivism however, also appears in a dystopian version. Here, as we will see, technology's coerciveness is no weaker, as is ultimately the belief in its power to deliver positive progress. At the same time, it is also different in the way that the question of 'blocking the road' is being asked. And it gets ambivalent, almost schizophrenic answers. Typically, it is put in a way that concerns how to lift existing 'road blocks', in order for technology to spread farther and to deliver more progress to more people. However, another answer also exists, and this is particularly interesting. Here, technology is ultimately 'evil', yet it is still impossible to challenge its coerciveness and its power to deliver positive progress. In this version, technology is the source of injustice and its cure.

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The way in which technologism is played out here relates science to development in two ways. Firstly, science produces technology which in turn means or delivers progress, i.e. development. Secondly, technology delivers information or knowledge, i.e. science, which in itself means progress and thus development. Somewhat curiously, the latter way of reasoning clearly dominates. This shapes open access very strongly as an issue that is connected to IT infrastructure, which is clearly a feature in the literature on open access that is specific to those texts that are concerned with the 'developing world'. Consequently, in this section I will concentrate on the second line of representation that perceives of technology as deliverer of information or as its originator even. The first line of reasoning, which builds on the nexus between science and technology, as it presents itself in the literature analysed, is better discussed in the light of the underlying assumptions about science. I will do this in the following section, which is concerned with the discourse of scientism.

Either way, commonly a clutch of well-known images is referred to, among them the already mentioned 'information society', or various expressions signifying 'information inequality' or

'access inequality'. These are usually related to various gaps and divides, digital or otherwise, as well as 'information flows' and 'IT revolutions'. These associations draw a number of systems of reference and discourses into the debates. For example, since its formation in the 1990s the, by now very prominent, digital divide concept has been shaped in various different contexts and institutional settings, ranging from international development organisations and governments, to local libraries, all of which have vested interest in it (Luyt, 2004) and issued different kinds of policy recommendations (Yu, 2006). Similarly, 'information poverty', or the 'information society' itself, not to mention the so-called 'information revolution' often also 'information technology revolution', have been shaped in different institutional settings which however conflate elements of their resultant meanings as they migrate between settings.

The IT or information revolution concept is a particularly curious metaphor also in another sense. In it information and IT, which in this case are invariably forces for the good, manage to cancel out any negative connotations of violence often inherent in *revolution*. More importantly, this particular characteristic of the concept points us to two strategies that recur consistently and which are particularly relevant to the specific type of technological determinism at work here; that is, on the one hand the construction of novelty and on the other hand an essentially untroubled view of technology as the neutral facilitator of development. Both are premises which are fundamental to development discourse, specifically so in their combination. We have seen examples of it in chapter three (cf. also Rist, 2006, pp.143 et seq.). It certainly has a role to play in the World Bank's re-invention as the Knowledge Bank in the 1990s (Wolfensohn, 1996), which is today one of its most prominent public profiles. Thus, when for example the *Budapest Open Access Initiative* talks about an "unprecedented public good" made possible through a "new technology" [7] it moves in well-worn paths. A similar note is struck in the *Berlin Declaration*:

> For the first time ever, the Internet now offers the chance to constitute a global and interactive presentation of human knowledge, including cultural heritage and the guarantee of worldwide access. [4]

This affirmation of novelty paired with an untarnished view of the possibilities of technology positions both the *Budapest Initiative* as well as the *Berlin Declaration* also in the long-standing tradition of development discourse. Given these documents' relevance within and for the open access movement, this has obvious consequences for the entire relationship between open access and development.

Consider also the following excerpt:

> How is Africa to build up the medical research it needs? Doctors in African research communities are starved of access to the journals and texts their colleagues in more developed countries regard as fundamental to good practice

> and research. Isolation, burden of practice, and resource limitations make education and research difficult, but the rapid spread of access to the internet reduces these obstacles and provides an increasingly attractive means to disseminate information and build partnerships in education and research. [5, p.327]

This is the introductory paragraph of an article published in 2003 in the British Medical Journal. First of all, it is suggested that Africa has little medical research and importantly that this is caused primarily by lack of access to journals and texts and isolation more generally. The scene is then set by evoking starvation, probably the one image most strongly associated with Africa and her crises, and some say, the single most violent and oppressive one (Escobar, 1995a, pp.102 et seq.). Specifically using starvation as a metaphor in the context of discussing medicine in Africa works to a particular and very powerful effect. It draws in an entire set of well-known images of the malnourished African, typically a child or a woman, powerless and immobilised. These are very strong images of despair and destitution appealing of course to our moral sense of wanting to assist, while at the same time also evoking a "whole economy of discourse and unequal power relations" (Escobar, 1995a, p.103). Furthermore, here – and this is interesting with regard to the question of definition discussed in the preceding section – by simply contrasting it with the 'more developed countries' Africa is used as a shorthand for 'less-developed'. This builds once more on the phantasma of homogeneity, assumed on both sides, the 'more developed countries', and of course their counterpart, the *Other*, the African continent.

This is largely how dichotomies work. They are categories, and as such they are simplifications. Entities are grouped according to sets of however chosen characteristics and then put in opposition to each other. It can certainly be a useful approach and at times it can be enabling in the sense that while it limits us, it also allows us to take up positions vis-à-vis certain issues. It gives us the possibility to formulate a standpoint to fight from or to fight against. The assumption of homogeneity which underlies such a process, however also gives way to the construction and subsequent solidification of particular images. And these images do not always work in the interest of those that were on the surface seen to benefit from them in the first place. What is interesting in our case is how the traits that are advanced to characterise Africa in order to set it apart from its opposite, and, one can add, that which it is to aspire to, are unequivocally negative. They are of course well-known and the authors do not tell us anything new. They draw on a set of pre-fabricated and strategic elements commonly used to sketch Africa, largely derived from mainstream development discourse. It is interesting here to return to Stefan Andreasson (2005), who mobilises the concept of the 'reductive repetition motif' to highlight the way in which the representation of Africa continuously, since colonial times, has to a large degree exhausted itself in focusing on inadequacies and failures. Reductive repetition, in the words of

Andreasson (2005, p.972, emphasis in original) has become

> an effective tool with which to conflate the many heterogeneous characteristics of African societies into a core set of deficiencies. Given that these deficiencies are internal, indeed *intrinsic,* solutions must at some point originate externally: development as *deus ex machina.*

Technology has long been the preferred and very literal machina which Andreasson refers to. And technology transfer has been amongst the prime candidates for delivering solutions either by being the solution in and of itself or by connecting to it.

In our extract, aside from starvation, Africa is specified further by introducing as its distinguishing characteristics, isolation and poverty, i.e. resource limitations. All is set to look quite dire. But luckily, a solution, a new tool to do away with these problems is at hand, namely the internet. It connects to the 'solution'. The statement is kept in the present tense, it is happening at this very moment. The internet initiates change, it increases, it reduces, it is a means to overcome isolation. As Leo Marx and Merritt Roe Smith (1994, p.ix) write:

> A sense of technology's power as a crucial agent of change has a prominent place in the culture of modernity. It belongs to the body of widely shared tacit knowledge that is more likely to be acquired by direct experience than by the transmittal of certain ideas.

Thus, they continue:

> The structure of such popular narratives conveys a vivid sense of the efficacy of technology as a driving force of history: a technical innovation suddenly appears and causes important things to happen. (Marx & Smith, 1994, p.x)

Considering that development and its discourse are a deeply modernist project, it is not surprising to find that it builds on a technological determinism that is equally rooted in modernity. In this "popular discourse of technological determinism" (Marx, Smith, 1994, p.x) technology is not infrequently constructed as the autonomous agent of change. This is most tangible in cases where it is put in a grammatical position to work to this effect. In this, Marx and Smith (1994, p.xi), see a particularly pervasive feature of the discourse of technological determinism, which they see as "typified by sentences in which 'technology', or a surrogate like 'the machine', is made the subject of an active predicate." The following extract, published in 2003, reflects precisely this:

> It is the nature of any new technology to exacerbate the existing divide between the rich and the poor. The newer and more potent the technology, the greater its ability to increase the inequalities. [2, p.17]

Here, in contrast to the extract above, technology is portrayed not as the saviour, but on the contrary as the agent actively causing inequalities. It is particularly interesting how technology,

which is usually – and etymologically – the antithesis of nature, gets to have a nature in this extract. I am not to suggest that the opposition between nature and technology, i.e. culture, is sustainable in and of itself and that it can and should not be challenged; on the contrary. I am of course also aware that in contemporary English *nature* has a number of different meanings. Yet, in the present extract, the construct *the nature of technology*, in its combination with the grammatical position *technology* holds in the sentence, works to a certain effect and that is, I suggest, to humanise technology or at least to position it as an independent force, a conscious agent. Here, it is not people using, not using, or producing the new technology, who are the active subjects, yet it is technology in and of itself. This is re-enforced and even amplified a few paragraphs later, when the text continues as follows:

> Thus the new ICTs, left to their own devices, will surely widen the knowledge divide or the disparities in people's capacities to do research and their ability to use them to their advantage. Thanks to men like Gandhi, Martin Luther King, Nelson Mandela and Desmond Tutu, we have abolished apartheid based on skin color, but we are letting the new ICTs create a new kind of apartheid based on information access. [2, p.17]

Here technology – i.e. the new ICTs – is the grammatical subject. It is a very powerful statement and one that fundamentally puts technology in the position of a political actor, consciously and actively shaping people's lives. As a consequence people are relegated to the position of sub-ordinates to technology, or better perhaps they are oppressed by it. Technology cannot *be left to its own devices*; it must be kept from following its will which is ultimately undemocratic, dictatorial even. Introducing *apartheid* in this context and referring to various freedom fighters and civil rights activists further emphasises the hierarchical relationship between technology and people, and technology's authoritarian role. People must restrict the new ICTs. They are not in control, they are controlled by technology. And like Nelson Mandela and Martin Luther King fought against racism and apartheid and Mahatma Gandhi against British rule in India, we must fight against technology, against its 'will' to create inequalities, to create a new form of apartheid, as well as to limit and control people. Martin Luther King, Desmond Tutu, Mandela, and Gandhi are of course also a lot more and something entirely different than simply names denoting historical figures. Here it makes sense to return to Michel Pêcheux and the operations of transverse discourse. More precisely, the manner in which the highly charged signifiers apartheid and also Mandela are introduced here can be understood as "syntactic embedding" (Pêcheux, 1982, p.64); that is the introduction of meaning from an external source through mere implication. By saying 'Mandela', one refers to a lot more than to the person Nelson Mandela – born in 1918, imprisoned for 27 years, former president of South Africa, and Nobel Prize winner. One implies an entire system of unjustness and resistance to it, of inhumane oppression and heroism, captured in series of well-known images. ICTs get to play the role of the apartheid

government, guardian of a racist and unjust regime.

Furthermore, without wanting to be cynical, introducing apartheid, as does starvation, has the effect of moving the discussion to a level on which it becomes almost impossible to argue. This is a procedure which – as I have tried to show elsewhere in the case of the construction of 'information poverty' in Library and Information Science (Haider & Bawden, 2007, in particular pp.549 et seq.) – often underlies the discursive construction of systems of professional expertise and responsibility, frequently connected to education, training and raising of awareness. This is also captured in the following extract, taken from the concluding section of the same text as the previous two.

> There is great need for building awareness among Third World researchers and research managers about such tools as electronic journals and open archives and the benefits of networking. [...] A reader on the advantages of going electronic and current developments must be produced and circulated widely. Librarians in the Third World should be given special training to play their role of information intermediaries in the changed circumstances. [2, p.21]

The author subsequently lists a host of organisations which should play a financial or infrastructural role in providing awareness raising and training programmes. Not only lies the solution with increased availability of the technology that actively created the system of unjust relations in the first place, it is here in particular librarians, more precisely those of the Third World, who are put in the position of having to be trained in order to overcome it. Furthermore, an expert role is carved out for providers of training to them. Most importantly however, what happens here is that by first introducing strongly emotionally charged images it is being constructed as a moral obligation. Awareness raising and the role of information intermediaries are crucial to the way in which open access is presented in relation to the 'developing world' and the way it is being portrayed as 'not yet ready', as not quite independently capable yet. We will return to its development into a discursive strand in the next chapter since, while present in the material analysed for this chapter, it is considerably more tangible and also influential in the more immediate debates of development workers.

4.4.3 Economism

In a curious twist, information is also seen as privilege and property of those in possession of greater financial resources. In effect it is positioned as the result of money or at times even equated with it. Put bluntly, more money is seen to equal more knowledge, which in turn leads to more money and to more knowledge still. This derives from an economy centred view of development and, I would argue, from a belief in a simplistic paradigm of growth, which

understands progress and desirable change predominately in terms of continuous (economical) growth and ultimately positions this growth as something which is always positive.

It derives furthermore from the close relation, sometimes conflation, of information with science and with the availability of technology, and of course it is closely interlinked with technological progressivism. Thus, it is, as we will see, not limited to talk about expensive techno-science which indeed requires great financial resources. In the sense that it fundamentally pre-supposes an identity between knowledge and science, or scientific knowledge, or at least valuable knowledge and science, it goes deeper than that. [29]

This procedure is furthermore interesting since in addition to being economically deterministic, it is strongly infused with Eurocentric concepts of what qualifies as valuable information, knowledge, or science in the first place. It is strongly visible in concepts like information have and have-nots, and specifically information poverty. It is however also played out in more complex ways. It underlies a lot of the accounts, curiously at times even when a de-commoditisation of information is being demanded.

The following two extracts taken from an article published online in 2003 do precisely this. The article opens as follows:

> As we enter the new millennium, the global knowledge base continues to expand. But so too does the information divide between the richer and the poorer nations. Yet in order to overcome their social and economic problems, it is vital that developing countries have access to information, which in turn enables research, the generation of new knowledge, and ultimately the application of new technology. [19]

A number of paragraphs later, it continues:

> The rapidly growing divide in access to information between 'haves' and 'have-

29 At this point I want to make some necessary qualifications. One could argue that, since science is typically positioned as a universal form of knowledge and should thus be applicable and/or repeatable no matter where one is physically located, this will naturally inform the conceptions of information and information transfer that emerge in the open access debates. By default, it will lead to de-contextualised notions of information. Furthermore, since open access is concerned with free access, as opposed to toll access, a recourse to a simple opposition based on financial means is equally to be expected. Clearly, to a degree, this is certainly the case and it has to be born in mind. Yet, it becomes also obvious that notions of information and/or knowledge are used here in ways that go beyond scientific information on the one hand or that put science in a position to cover all and every form of information and/or knowledge on the other hand, i.e. it becomes a shorthand for science or at least for academic research. Furthermore, the issue of science's cultural context is being raised throughout and this also needs to be taken seriously. The problematisation occurs in different guises, albeit typically in a way that homogenises 'developing countries' as well as 'the West' by assigning each one specific culture and a set of problems - usually diseases - that are opposed to each other and which need to be addressed and dealt with differently. The latter point is also relevant with regard to the economy-centric perspective. In some of the texts analysed it is problematised further, typically by introducing notions of indigenous knowledge. We will return to these issues and their significance in the next section when we consider in more detail whose *science* is being talked about, and which role the discourse of scientism plays. Constructions of indigenous knowledge, as an almost essentialist property of the 'developing world', in opposition to science will be considered in the following chapter.

> nots' outlined above is no longer tenable. A new approach to information sharing is essential to 'de-commodify' information and make it more accessible to those who are currently missing out. [19]

Development is here once more understood as technological progress and the image of the information divide is introduced. This divide emerges almost 'naturally' along the line dividing the rich from the poor. What is being demanded is the de-commoditisation of information. However, underlying this demand is an understanding of information as the result of wealth, as property and privilege of the 'richer nations'. Interestingly, this assumption which implicitly also hands over 'global knowledge' to these 'richer nations', remains standing and is not being problematised.

Below is a somewhat longer extract dating from 2004 which works along similar yet slightly more complex lines:

> Advances in science, medicine, and technology play an important role in both economic development and the improvement of people's lives. [...] But a range of cultural, economic and political barriers means that new knowledge does not flow freely between developed and developing regions of the world, resulting in an enduring knowledge gap between the two.
>
> Changes in both attitudes and technology, however, mean that knowledge need no longer be confined primarily to economically robust institutions or regions. The cost of sharing the results of scientific and medical research, in particular, is falling as electronic dissemination replaces paper and print.
>
> As a result, open-access publishing [...] is on the rise. Although it is mostly scientists in industrialised nations who are originating and accessing the material, this form of electronic publishing is also a potentially powerful way of minimising the knowledge gap between the developed and the developing world. [14]

A knowledge gap is introduced and the 'developing regions' are by default assigned the position of those being on the side with less knowledge, and on the side of the potential recipients rather than originators. While the words employed speak of a *flow between,* the image we get is actually more akin to one of a *flow to.* This is continued by the way in which knowledge is conflated with science, medicine, and technology.

This brings us back to the *reductive repetition motif* introduced by Said (2003 [1978]) and applied to Africanism and Developmentalism by Andreasson (2005). The 'developing world' is once more homogenised and reduced to its problems, it becomes an entity on the other side of a 'gap', economical, cultural, political, technological gaps, and importantly also 'gaps' in attitude that have to be closed in order for information to flow freely. The solution is one that has to come from the outside, after the barriers are removed. Furthermore, it is interesting to note how economic development is distinguished from an 'improvement in people's lives', both of course facilitated

by advances in science, technology, and medicine. Technology is once more content and result as well as deliverer of knowledge and thus progress. At the same time, and this is interesting, economical advantages also mean quantitatively more knowledge. It is here an entity which is a result of wealth; it is created by the rich, who in this way also get to hold the definitional power over what constitutes knowledge in the first place. It is clearly a commoditised view of what constitutes knowledge and one that at the same time perceives of knowledge as strangely context independent; i.e. it can flow like water once the barriers are removed. This conception of information and information transfer adheres strongly to the *communications model for information*, in which, as Ronald Day (2001, p.38) describes it,

> information is the flow and exchange of a message, originating from one speaker, mind, or source and received by another. Analogous to theories of production and exchange in liberal capitalism, information, here is understood as created by the 'free' will of one person and is then transferred through the 'medium' or market of public language into the ear and mind of another person, at which point the the second person acknowledges the correct value of the original intention by his or her performative action.

The 'developing regions' are reduced to being the recipients, the 'ears', or more precisely the potential recipients, since of course it is also 'mostly scientists in industrialised nations' who access the material. 'Industrialised nations' is used a short hand for rich, and 'developed', even though of course it is not actually self-evident that industrialised should signify that.

The following extract taken from a research article published a year later in 2005 works to a very similar effect:

> Developing nations today face many major problems, including widespread poverty, inadequate drinking water, high illiteracy rates, intense foreign debt, overpopulation, and a heavy disease burden. A common link underlying these problems is that science and technology could play a major role in their alleviation. At the same time, access to knowledge, primarily in agriculture, medicine, and technology, can help to create stronger social, economic, and technical infrastructure that are essential in the development process. [...] However, the research infrastructure and the capacity to absorb scientific and technical knowledge are also weak in developing countries, leading to low levels of scientific output and further under-development. New knowledge is largely created in richer countries where spending on research and development are highest. [10, pp.141-142]

As above, the 'developing nations' become a sum of their problems, here more pronounced yet in a very similar manner. Science and technology are these problems' solutions and they have to come from the outside. Once more, science means knowledge, and knowledge is a result of money, a property of the rich. Development is thus a process that requires input of external information. This is almost precisely the same image we encountered in Truman's or Kennedy's speeches quite a number of decades ago.

What is interesting here is the way in which the idea of absorption is introduced. As before, knowledge seems to be akin to water and able to flow between locations and get absorbed. Furthermore, the 'developing countries' are not only inadequate when it comes to producing this very knowledge they are also, taking the image further, bad sponges, or perhaps a bad type of soil. This is strongly reminiscent of simple diffusionist accounts of how science spread from Europe throughout the world which dominated until the 1970s (e.g. Shils, 1972; Basalla, 1967) and which were, however subtly, infused with ideas of the colonial subject in need of reform.

All three extracts, in particular when read together, strongly echo the 1999 World Bank report on "Knowledge and Development", in which incidentally an entire chapter is dedicated to 'absorbing knowledge' (World Bank, 1999, pp.40-55).

In 1999 the World Bank opened its World Development report with the following words

> Knowledge is like light. Weightless and intangible, it can easily travel the world, enlightening the lives of people everywhere. Yet billions of people still live in the darkness of poverty—unnecessarily. (World Bank, 1999, p.1)

A few paragraphs later the same report continues:

> Poor countries—and poor people—differ from rich ones not only because they have less capital but because they have less knowledge. Knowledge is often costly to create, and that is why much of it is created in industrial countries. But developing countries can acquire knowledge overseas as well as create their own at home. (World Bank, 1999, p.1)

Colin McFarlane (2006, p.288) analysed mainstream development policy in terms of their traditionally rational understanding of knowledge and he argues that here "knowledge transfer is often conceived as a linear process whereby untransformed knowledge acts as a technical solution to a given development problem."

This is very similar to the way in which knowledge transfer is imagined in the three extracts presented above, and it relates to a restrictive understanding of knowledge which is in essence economically deterministic, in the sense that origin, reason and result of knowledge is ultimately reduced to financial resources. It exists because of and for 'the market'.

In convincing and very interesting analyses of the "Knowledge and Development Report" – anticipating the future seductiveness of "knowledge for development" as slogan and catch-all concept – Lyla Mehta (1999; 2001) criticises in particular the monolithic conception of knowledge in the Bank's agenda as well as its virtual ignorance of the complexity of power issues.

She reminds us also of the striking similarity that exists between the introductory paragraph which likens knowledge to light and ignorance to poverty and darkness (quoted above) and St. John's Gospel (Mehta, 2001, p. 191), a closeness that puts the Bank in the quite authoritarian position of the evangelist. Further dangers are connected to this imagery:

> Apart from privileging a certain kind of knowledge, it risks subjugating alternative voices and, indeed, typecasting and re-creating images of the poor as ignorant or depraved, in urgent need of knowledge and enlightenment. (Mehta, 1999, p. 154)

Moreover, and in particular, she criticises the way in which the World Bank, while casting itself as the "Knowledge Bank" - in itself a remarkable compound - in its reports draws on "the narrow parameters of information theoretic economics, excluding insights of knowledge from the other social sciences" (Mehta, 1999, p. 160).

Thus, while claiming a position that perceives of knowledge as a public good, it in fact treats it as a commodity. The ties between the World Bank's conceptualisation of knowledge and the notions of science and knowledge assumed in parts of the open access movement are strikingly close. Given the sheer size and importance of the World Bank, reflected also in a continuous stream of research reports and publications[30], it is certainly not surprising that its conceptualisations resurface in the context of open access.

Furthermore, the first two extracts [14, 19] were originally published on SciDev.Net (Science and Development Network). SciDev.Net, as already mentioned earlier, is a type of science and technology news aggregator aimed at the 'developing world'. It cooperates with *Science* and *Nature*, as well as TWAS, the Academy of Sciences for the Developing World, and it is funded by four big development institutions, namely the UK Department for International Development (DFID), the Swedish International Development Cooperation Agency (SIDA), the International Development Research Centre (IDRC) in Canada, and finally the Rockefeller Foundation in the USA. Clearly, these are financially strong, major 'western' players. Without giving in to too much speculation, and clearly these organisations differ in a number of respects, it seems still reasonable to assume at least certain conceptual closeness between them and the World Bank. Nonetheless, it is surprising that the procedures we encounter here are virtually identical, connecting statements in a very similar manner. Moreover, it is interesting that this occurs after a period of six to seven years and substantial criticism aimed at the World Bank's official position

30 See for example the World Bank website's publication section: http://www.worldbank.org/reference [April 8, 2008] or the data and research section: http://go.worldbank.org/45B5H20NV0 [April 8, 2008]

and limited understanding of knowledge (e.g. McFarlane, 2006; Mehta, 1999; 2001). As for instance Lyla Mehta (1999) anticipated, "Knowledge for Development" has indeed developed into an easily applicable catchphrase and has been added to the arsenal of development language, intensifying a long tradition. As such it has begun to resurface in different contexts including, as in our case, in research articles on scholarly communication.

We will see in the following section, dealing with what I have termed 'scientism' and 'scientific centralism', how powerful this conceptualisation of knowledge is and how it has successfully merged with earlier diffusionist accounts of science's spread throughout the world.

4.4.4 Scientific Centralism and Scientism

I have decided to refer here to scientism, rather than science or the discourse of science. There is a considerable difference between science as it is actually being undertaken, the way it is being represented (by non-scientists and also by scientists) (cf. also Latour, 1987) and the role it plays in the public imagination. More precisely perhaps, for my purpose, since the *public* is a hard to frame category, the role it plays, or seems to play, in the imagination of those making up the development apparatus and which filters through into representations of open access. What we are dealing with here is clearly a highly idealised version of science, its roots, its powers, the way it is being carried out and communicated and also of the people who do it. I am aware of this, and I assume some of the proponents of the open access movement are as well. Having said that, a certain version of the discourse of science, specifically the one which understands science as a neutral tool for discovering 'facts' about the actuality of nature, and which is synonymous with (positive) progress, also contributes to establishing and maintaining this idealised version, and it is also strongly present. This is salient also in the wordings of the statements issued by scientific organisations, as for instance the InterAcademy Panel or the Max-Planck society, which we have considered in more detail above. However, most important for us here is that there are strategic interests in science's representations. It is thus interesting to see which notions surface and which dominate in the open access debates when they relate to the 'developing world'. At its core lies a belief in science's power to engender something positive, however vague that might be, and to redress some of the inequalities that characterise relations between people and countries, including those dominating international relations. However, despite this claim at questioning existing power relations, what largely emerges, is the dominance of a perception of science that re-enforces rather than challenges these inequalities, along the pre-established lines of international – i.e. 'western' – vs. local, rural, or indigenous – i.e. from the 'non-West', the 'developing world'. In this sense, scientism is here also chosen to refer to the way in which

European/North-American science is still continuously being positioned above other forms of knowledge, and even of science, and not alongside them.

To illustrate my claims by way of example, *the Salvador Declaration's* second paragraph reads as follows:

> For the developing world Open Access will increase scientists and academics capacity to both access and contribute to world science. [34]

At first glance, this seems a reasonable statement to make. However, consider the subsequent paragraph:

> Historically the circulation of scientific information in developing countries has been impeded by a number of barriers including economic models, infrastructure, language, and culture. [34]

What we get is an image of 'world science' which has existed prior to most of the 'world' being part of it, having been locked out (or in) behind barriers relating amongst other things also to language and culture. Furthermore, 'world science' implies that there is a type of science that is not world science. This is interesting as such, since this also connotes that the developing world is not part of this world, that this is something to which it needs yet to be connected. Most importantly however, definitional power remains with the 'West'. Language and culture themselves become mere obstacles, detrimental to circulation of scientific information.

The association of international with 'western' or European is a very strong one, and it re-appears throughout:

> I would like you to imagine being a scientist in the developing world. You are very isolated, and you have minimal access to the research that the rest of the international community has the benefit of seeing. The cost of scientific journals has risen dramatically, and is seriously damaging science in your country. [14, p.150]

The 'developing world' is portrayed as being isolated from the rest of the world, which is understood to make up the 'international community'. Furthermore, the way in which the serials crisis is alluded to leads to the impression that problems with carrying out science in those non-international parts of the world can be explained by it, that somehow science was in 'good shape' before. Similarly here:

> The problem with the current system, therefore, is that the playing field is grossly uneven, and seriously handicaps researchers – who are unable to access all the publications they need to make academic progress because of the high cost of journals. [27]

Sure enough, what we are dealing with here is first and foremost a rhetorical move intended to

heighten the relevance of open access. This is understandable in the given context. At the same time, it has an effect, namely the effect of introducing a chronology of events based on a very straight-forward causality chain which presents a de-politicised version of science in the sense that it ignores a number of historical ties and actors that are contingent to its shape and which are relevant considering that the sciences were implicit in 'de-developing' the 'developing world' in the first place (see chapter 3).

For the open access movement the serials crises, has become its "founding moment of crisis", to borrow the concept Janet Lyon (1991, p.102) introduces to understand the manifesto form. Thus, frequently it has to stand in as explanation and root cause for a number of other inequalities in science. This includes the role of the 'developing world' in it, but also the public's access to and understanding of it.

The following excerpt employs the very term crisis to underpin the connection:

> In fact, many of the developing countries had adapted to their crisis by bringing up indigenous Journals, and adapted by creating their own circle, often prominently separated from the international scenario, similar to the scholarly communication in the cold-war era. [33]

A mere look at for instance the bibliometrics literature of the past few decades (e.g. Garfield, 1983; King, 2004; Osareh & Wilson, 1997; Rabkin & Inhaber, 1979) suffices to see that the lopsided presence of the 'developing world' in scholarly publishing has for one no relation with the serials crisis and furthermore that it has been lamented since a very long time. To a degree this is also a self-perpetuating argument, since the idea of "mainstream science" can also be interpreted, as Jean-Claude Guédon (2007) points out, as "nothing more than an artefact of the SCI [Science Citation Index]". Yet, I think, while this is accurate in a way, one needs to go further, since it is not by accident that this very index produces these results. If anything, the serials crisis' particular impact on researchers in the 'developing world' is a result of the inequalities in science's social structures, of which indexes to measure it are a result, never its reason. More accurately though, I believe, it is perhaps better seen as its mirror image. It can be argued that it is one of the very features of the shape of science as an institution. Moreover, of course the 'developing world', most of which was once called the 'colonies', has never been *excluded* from science. As, I have outlined in the previous chapter, it always was very much a part of it, as deliverers of raw materials, as research objects, as discoveries, as experiments, as recipients of results, and also as contributors of knowledge. It just never actively shaped the rules for its particular ways of working, or, for that matter, for its participation.

Since science is the sum of its institutions and practices, of which the peer-reviewed journal

clearly is one of the more relevant ones, it has also always been an essential part of the markers of power, manifest in particular in the application of definitional power. "The hegemony of the western academic journal is so complete that the superiority ascribed to them has been somewhat internalized by periphery scholars themselves", writes A. Suresh Canagarajah (2002, p.37), and one is tempted to add, internalised, it seems, also by those trying to challenge its ways of working. Canagarajah (2002) furthermore draws our attention to the strangeness contained in the fact that 'western'/European/North-American scholars publish 'western'/European/North-American journals with predominantly 'western'/European/North-American contributors, editorial boards, publishers and readers; in other words, they/we tend to operate in a very closed circle, yet they/we insist on calling their/our publications 'international journals'. Granted, at times editorial boards consist of scholars coming from different countries or authors might have different nationalities, and clearly, there are exceptions and editors or publishers actively trying to counter this tendency – also in our field –, yet the general trend is arguably one that points in this direction (e.g. Horton, 2003b; Keiser et al., 2004; Manchada & Saxena et al., 2003).

Sure enough, Canagarajah (2002) is not alone with this observation. However, he takes it further by pinning down some of its implications, or *motivations,* as he calls it.

> Perhaps this indicates a bloated perception of their importance – the belief that whatever appears in their pages is of global significance. Perhaps the motivation is more sinister – to thrust the knowledge produced in the pages of these journals on other communities as universally valid and relevant (Canagarajah, 2002, p.37).

While motivation – and its implied conscious intentionality – might not be a perfect choice of words in this context, this basic statement certainly holds up and admittedly as such it is not particularly surprising. International journals pertain to international science and universal as well as global validity is fundamental to a great deal of its workings. However, at least in the context of the open access movement, the premises cannot be seen as purposefully sinister and certainly there is no indication that open access journals re-produce the exact same structure, not to speak of open access archives. On the contrary, open access also wants to redress this distinction between central or 'mainstream' and peripheral scholarly journals (e.g. Guédon, 2007). Rather, what we encounter here seems to stem from a fundamental, and it seems to me fundamentally problematic, belief in science and research as ultimately neutral and solely positive forces. Thus, while there is certainly a drive to break up this dichotomy when it comes to publications, this never penetrates the tenets of the notion of science itself.

Here it is interesting to remember the way in which Arjun Appadurai (1996) imagined what he calls *ideoscape*, as composed of diasporic images and master signifiers on which a certain Euro-

American narrative hinges. I would like to propose a reading that inserts a certain ideal of 'globalisation' into this *-scape* of ideas. As such, it makes sense to relate it to Foucault's concept of pastoral power and thus to realise that a term like international, or at times global, in our context also translates into salvation. And it does so literally in the very worldly sense, Foucault was outlining when he traced pastoral power's missionary roots from Christianity to state bureaucracy, even though now it might be necessary to extend it beyond the state.

The *Statement on Open Access* issued by the Inter Academy Panel in 2003 contains the following paragraph:

> In an era in which global dissemination of the published results of scientific research is increasingly accomplished electronically, it is possible to give access to this body of knowledge to scientists worldwide, allowing them to participate in the scientific process and advance the scientific enterprise. Access to current, high quality, scientific databases and literature allows scientists in developing countries to base their own work on up-to-date advancements in their field and to strengthen the scientific infrastructure of their own countries. [16]

This statement pertains to a very similar way of thinking, yet here the distinction between global science and the 'developing world' is more explicit. Specifically, the salvation oriented character, referred to above, also underlies this extract and it is semantically quite distinct. In particular, it is captured in the way in which access is *given* and participation is *allowed*. This establishes and re-enforces an unequal relation, yet more interestingly it is also a relation of benevolence and an attempted inclusion. In fact this conflict between dominance and inclusion is one that repeatedly surfaces in the literature with regard to the relation between local research and international science. It is never explicitly addressed, yet similar to the unease present in the difficult attempts at circumscribing the 'developing world' (see chapter 4.4.1) the delineations between local and international, southern and northern, are here at times almost similarly uncomfortable. Or perhaps more to the point, they become issues in need of explanation and justification, problematic categories that defy clear labelling. Although, like above, the problematisation is never followed through.

> This paper focuses primary [sic] on access to and the production of journals as a potential measure of a country's participation in global science. The OA movement is also primarily concerned with freeing the peer-reviewed literature from toll access. Given the scope of this paper, other forms of "local" or "indigenous" knowledge that are often highly important for developing countries [...] will not be considered. [10, p.143]

What is interesting here is not that science is distinguished from other forms of knowledge. What is intriguing is rather that these other forms are portrayed as highly important, but for the developing world only. This way, once more, even the attempt at advancing a diversified

understanding of knowledge does not succeed in departing from an essentialist and de facto Eurocentric perspective on the developing world, as a more local, more indigenous society. The culturally contingent nature of knowledge is recognised and acknowledged, yet only that of the *Other*, of the 'indigenous' people, never that of the rational, supposedly culture-less scientist.

The distinction between local and global is also contained in the following extract. Here a further motif is introduced which is also very prominent in the literature, namely that of 'global knowledge'.

> Archiving initiatives described above are of great importance to all scientists, but particularly for those in the developing world. Free access to research information from the north would have incalculable benefits for local research. Of equal importance is the opportunity for researchers in these countries to contribute to the global knowledge base by archiving their own research literature, thereby reducing the south to north knowledge gap and professional isolation. [...] Equally, there now exists an increasingly available means to distribute local research in a way that is highly visible and without the difficulties that are sometimes met in publishing in journals [...]. [9]

An interesting conflict underlies much of the literature. This conflict derives from an equation of 'western' with international science, or even with global knowledge and of the 'developing world' with local or regional science, or more often knowledge. It can be compared to something Arjun Appadurai (2000, p.14) has described as "weak internationalization". This derives not least from a wish (of many) for science to be more inclusive and participatory, yet one which never questions the cultural conditionality of the premises on which it is based. Hence, science is supposed to be 'global', however it is seen to be so only in its reach, while its roots are never at issue. However, as I have tried to explicate in chapter three, in many ways science is precisely that, in its roots it is as much a local knowledge system as any other that has ever existed.

In fact, to inverse the argument, a lot of what is typically and commonly called a *traditional* or *local* knowledge can also be seen in its spread a very global phenomenon, very much like science is. One need only mention the very prominent examples of Yoga, or Ayurveda, or Chinese Medicine. That globalisation works on a number of different levels, and in no way needs to be exclusively homogenising or working in silent agreement with corporate capital, has equally been pointed out by Appadurai (1996, 2000) with regard to additional understandings of globalisation as 'indigenisation', as "grassroots globalization", or as "globalization from below" (Appadurai, 2000, p.15). The narratives of internationalisation and in particular of globalisation advanced in the example above contain moreover an element of inevitability which positions it as the latest logical step in historical development. I will try to develop this aspect further in the next section when we consider role and relevance of notions of temporal distance.

In the present context, it leads to one of the more fundamental problems underlying a great deal of the debates about the constitution of science in relation to other forms of knowledge production. Sandra Harding (1998) addressed the issue by posing the maybe rhetorical, yet certainly relevant question: "Is science multicultural?"[31]

She writes: "Clearly, Northerners have had a problem figuring out how to refer to the science and technology traditions of other cultures" (Harding, 1998, pp.9-10). According to her (1998), two distinct approaches are possible, each coming with its own set of difficulties. Firstly, a restrictive, or excluding approach, which reserves the term science for that which emerged in Europe from the time of Enlightenment onwards or even more precise from roughly the 19th century onwards. Before that time, as Harding (1998, p.10) points out, the preferred term even in Europe was 'natural philosophy'. Secondly, an all-inclusive approach, calling all systematic forms of knowledge production and circulation science, regardless of their cultural, geographic, or historic origins. Both are difficult and, almost ironically, both contain their own version of Eurocentrism.

First, insisting on the distinction between 'real' science and other forms of knowledge creation risks continuing the delineation between the rational European and the irrational, superstitious native, rooted in colonialism. However carefully the distinction is made – and there are certainly times when a lot speaks for making it – this 'original' distinction which is based on a hierarchy of values always plays into it. However, subsuming culturally very different forms of systematic knowledge production underneath the umbrella term science risks disregarding differences and being equally Eurocentric by forcing everything into the European or more generally 'western' taxonomy and frame of reference. After all science is the European term for a distinctly European form of knowledge production. This is, as Sandra Harding (1998, p.9) develops in more detail, a fundamental problem in post-colonial science studies, it is however also, a more practical problem whose implications can be felt in the literature we are dealing with here.

This is especially present in the delineation that is introduced between international science and local science, between mainstream and obscure, which is always and almost without fail drawn along the line of 'western' and 'non-western'. This can happen in very different guises. The following example is noteworthy since at first glance it seems to invert this gridlocked positioning. Yet at second reading it becomes obvious just how entrenched the coordinates of this relation are.

31 And it is Harding's opinion that it actually is.

> There is a great deal of information that remains hidden because it is not available to the scientific community in the developed world. [31, p.150]

What is visible and what is obscure is normally a question of perspective, it lies in the eye of the beholder. Here by default this eye is held by *the scientific community in the developed world*. The 'West' is positioned as the beholder, the subject who sees. It is important to note that here the claim is not that information remains hidden *to the scientific community in the developed world*, but that remains hidden *because* it is not available to this group. What is not visible to them remains hidden, it almost does not exist. This idea is often part of a recurring image which pictures scholarly communication in terms of so-called knowledge flows. These are typically seen to flow in four directions; north-north; north-south, south-north, and south-south. In this context research from the south is normally the one that is hidden, as above, or missing, as in the extract below.

> In particular, OAA enriches the global knowledge base by incorporating the 'missing' research from the less developed world and improves the south-north and south-south knowledge flow. [10, p.159]

Whatever the preferred term is, it is not available to 'us' in the 'West', which is implicitly seen to make it invisible and often almost irrelevant. The moment it becomes incorporated, it starts to exist and to become noteworthy; it becomes part of the 'real' *global knowledge*. The image of knowledge flows is frequently accompanied by introducing the issue of relevance of research for the 'developing country' setting. More often than not this is related to issues of health care and medical research. The 'developing countries' are once more presented as a homogeneous entity unified by their problems and their diseases. It is a strange conflict contained within the demand to make all research publications available to all, and to underline the global relevance and universal nature of science, and yet to insist on some form of filter when it comes to 'developing countries', almost as if 'their' problems were more basic than the more advanced ones 'we' face.

> Information relevance. One of the main problems with research access initiatives like HINARI is the implicit assumption that research findings from the rich countries could be directly transferred to the poor countries an assumption that has been seriously questioned in the past [...]. Is it useful for doctors in Nigeria to read about the latest high-tech treatments for infertility published in a western journal when it is not economically feasible to implement these procedures in cash-strapped public hospitals in Nigeria [...]?
>
> [...]
>
> Often what researchers or health workers in developing countries need is information generated in their own country or other developing countries with a similar socio-economic context and with similar problems that need to be solved. Further, locally generated research, such as that in traditional medicine and medicinal plants, may be highly relevant to diseases for local populations. [10, p.146]

What is relevant in the above extract is not the observation that different settings produce different problems and require different solutions; this is unquestionably a useful observation. Yet what is interesting are the lines along which this distinction is made. *High-tech* is set in opposition to *traditional*, *rich* – once more used to signify more advanced – in opposition to *local*. Infertility treatment is contrasted with medicinal plants, whereas plants, as providers of more traditional remedies, are relevant for the diseases of the local population. Again, the acknowledgement of culturally contingent knowledge as relevant and useful is certainly a move towards a more inclusive understanding of the value of different kinds of knowledges. At the same time, *infertility treatment* is an interesting choice of example to mark out the fault line between rich and poor, between more and less developed. It could be suggested that this links a very specific discursive arena into the text, namely that of population growth and population control. The so-called 'population problem' is a staple in development discourse (cf. Escobar, 1995a, p.35; Duden, 1992), which has its roots in a 18th century discourse of poverty and health. It is associated not only with improvements in public health and hygiene, but it stems also from a fear of the poor masses and of the need to control them, which in turn has been tied to questions of health and hygiene (cf. Foucault, 1980b). I am of course willing to accept that it is merely an accident, that here the one issue that is singled out as particularly useless for the 'developing world' in medical terms happens to be infertility treatment, yet at a discursive level it is not entirely without consequences. However subtly, it ultimately has the effect of tying into the text a discourse of population growth and population control that carries with it colonial perceptions of the uncontrolled and fertile 'native' as well as the child rich and often disease-ridden proletarian poor in 19th century Europe.

To reiterate once again, dominant in the literature is an unfettered belief in the ability of science and research to deliver progress, which at times goes to the extent of putting science in a privileged position vis-à-vis all other forms of knowledge production. From an opinion piece published in 2006 in *The Hindu*, an Indian newspaper:

> Research is the source from which future improvements in the quality, quantity, and availability of food, medicine, technology, and all other potential benefits to mankind will come, if they are to come at all. [15]

To make sure what is referred to by the term *research* does in fact mean 'academic research' published in peer-reviewed journals, a look into the surrounding article should suffice. It opens with reference to "the planet's 24,000 research journals" [15]. This is roughly the number of

active, refereed, scholarly/academic journals indexed in "Ulrich's Periodicals Directory"[32], a tool commonly used by libraries and for certain types of bibliometric analyses. 'Refereed' indicates 'academic' in the sense that the formal peer-review process has been adhered to. While disciplinary differences exist with regard to the significance of peer-review and its rigorousness, it is still one of the more important distinguishing characteristic of modern scholarly research (mostly captured by the notion of science) in opposition to non-scholarly ways of producing, negotiating, and communicating knowledge, specifically in regard to establishing trustworthiness (cf. Felt et al., 1995, pp.59 et seq.). Furthermore, as Blaise Cronin maintains:

> The conventions for evaluating research may have changed in the last few centuries, but trust […] and peer-review, the instrument for ensuring trustworthiness, remain central to the conduct of science in general [...]. (Cronin, 2005, p.25)

Thus, what we encounter in the above statement is a very all-encompassing belief in academic research which invests a lot in its ability to deliver, to be the root of virtually all improvements beneficial to *mankind*. To understand the implications of this perspective; it needs to be understood horizontally as well as vertically. By this I mean, it is prioritised not only over systems of knowledge rooted in other cultures, but de facto also over all other human practices, including, but not limited to, technology, design, agriculture, or art.

The distinction between traditional knowledge and high-tech, and specifically of using the notion of tradition to mark the *Other*, the poorer, the less scientific counterpart of the 'West', capitalises strongly on the very image from which development itself takes its strongest cue, that of a time difference between 'them' and 'us'. It is weaved so tightly into the narrative of the 'developing and the developed world', and thus into the texts we are dealing with here, it is almost impossible to carve out its precise shape without presenting a decontextualised image. Nonetheless, in the next section we will focus on some aspects at play adding to the shaping of a chronological distance. I will try to highlight some of the ways in which this idea of the time gap is more explicitly manifest as a discursive procedure in our material.

4.4.5 Temporal distancing

As we have seen throughout and discussed in more detail in chapter three, from the beginning, the strongest and most prominent element underlying the discursive construction of the

32 Available: http://www.ulrichsweb.com [December 12, 2007]. The exact figure was 23,884 on December 12, 2007.

'developing world' has been the maintenance of a dichotomy through positioning 'them' in a time different from 'us'; a proceeding which Johannes Fabian (2002 [1983]) has described by the term of allochronism. This trace of development discourse holds a strong position also in the literature on open access and development. First and foremost it is present in the continuous and unquestioned use of the terms development and the 'developing world' themselves, or also of 'industrialised' to signify the 'West'. It is furthermore manifest in the underlying assumption of the inevitability of sequential change following the path of Euro-American development which is a clearly distinguishable threat in much of the literature analysed.

The way in which the tradition and the traditional are operationalised essentially works to the same effect. We have seen this above with regard to scientific centralism, where traditional knowledge is invoked and put in opposition to high-tech fertility treatments in order to mark the distinction between the rich and the poor, the 'more' and the 'less' developed. As Vincent Tucker points out:

> Discourses of progress, development and modernization are constructed on the basis of false polarities of 'traditional' and 'modern'. These temporal metaphors used to conceptualize otherness and distance in historical time are transposed on to spatial realities and used to designate a normative development trajectory. Societies that deviate from the European techno-economic standards are designated as traditional or 'primitive' despite the fact that they are contemporaneous with those who label them as such. (Tucker, 1999, p.8)

This normative conceptualisation of otherness which relies on the simple image of opposition between traditional and modern and of progression is certainly influential in the literature on open access. Yet, having said that, while it is influential and present – often in the guise of high-tech, ICT, or 'information society' versus unconnected and local – it is rarely entirely straight forward nor does it lie directly on the surface. The use of temporal metaphors and temporal modifiers shapes the discourse in different ways.

For instance, it seems to me that it is also contained in the opposition between local and international or global science, discussed in more detail and illustrated with examples in the previous section. To explain, when the desired aim is an internationalisation of the local in terms of establishing a connection to international, i.e. 'western', science this also links into a certain discourse of globalisation, which operates as a strong authorisation tool. It provides, in other words, to use Pêcheux's term, a superordinate discursive formation on which to lean and from which to draw justification. As I suggested earlier, globalisation is arguably considered one of the latest 'stages' in the history of progress in which finally the existence of international connections becomes legitimised. Cynically formulated, the world finally becomes part of history. In this sense, ideas of incorporation into a global knowledge pool also contain an element of the idea of

progress and advancement in time. Put simply, the 'West' is already international, global, now the rest of the world needs to follow. I am aware that this argument can be challenged on a number of accounts. Certainly there is not one narrative of globalisation, but many, not least, that of "grassroots globalization" or "globalization from below" (Appadurai, 2000, p.15). Frederic Jameson (1998) develops an understanding of it as an intensification of prior developments into the current stage of late capitalism. He furthermore distinguishes between a cultural and an economic globalisation. At the same time, it has become an orthodoxy that the late capitalist system is a globalised system, positive or negative depending on political position, and importantly unavoidable. In this narrative globalisation means progress, once again positive or negative it might be, yet it is advancement. It seems that in the literature we are dealing with here, a strong undercurrent exists linking into this perception which positions globalisation as a further stage in the trajectory of development, now transcending modernity. In this sense *no longer remaining hidden*, becoming part of the global also means advancing along the pathway of development. It is certainly an interesting conflation of images of time and space.

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However, returning to the equally present more 'classical' development paradigm of progress from tradition to modernity. The following is an almost stereotypical use of the 'time-lag' metaphor used to signify the 'non-western', once again based on a conflation of cause and effect. It was published in 2003, in the CERN courier, an international journal of high energy physics, published by the 'European Organization of Nuclear Research'. The article was written on the occasion of the RSIS conference (Role of Science in the Information Society) held in the run-up to the WSIS and of which CERN was the host.

> Most developing countries experience great difficulties because of adverse economic and political instability, which means they lag behind in scientific and technological development. Building science facilities can be very expensive, so there is the potential for an enormous gap between the rich and the poor. However, science has been quite successful in leap-frogging this gap, enabling scientists from developing countries to participate in many scientific activities. [8]
>
> Renowed Ghanaian scientist Francis Allotey [...] has said: 'We have paid the price for not taking part in the Industrial Revolution of the late eighteenth century because we did not have the opportunity to see what was taking place in Europe. Now we see that information and communication technology (ICT) has become an indispensable tool. This time we should not miss out on this technological revolution'. [8]

> It is clear that Africa has decided to take Allotey's[33] words to ear, and has engaged in whatever may be necessary to bridge the technological divide. It is therefore more important than ever that the efforts to help them that have already begun do not stop; the results are there to see. If this ICT revolution is not to be missed, scientific institutions must keep up to date, and this in turn relies on the Internet connectivity of these institutions. But do they have it? [8]

Strongly shaped by the optimistic technologist narrative of the ICT revolution, this extract contains the common markers of allochronism as it is typically manifest in development discourse. The 'developing countries' are seen to *lag behind* in scientific and technological development; science has the potential to enable *leap-frogging*.

'Leap-frogging' is a popular metaphor suggesting the possibility to skip a stage of development and it strongly reinforces the idea of a one-dimensional trajectory of development. At the same time, to a degree, its mere existence also exposes this idea's untenability, in the sense that if a stage can be skipped then the whole idea of the inevitability of linear progression along one pathway, where one stage necessarily precedes the next, essentially becomes questionable. At the very least, as Merridy Wilson maintains (2003):

> [I]t can be argued that the ability to leapfrog in this sense demonstrates that there are multiples paths of development possible using ICTs.

However, this is not the image advanced here, where further reference is made to the industrial revolution, in which the 'developing countries' are said not to have taken part. The technological or ICT revolution is finally introduced marking the supposedly latest stage in European history, which becomes the default version of global history. Yet it becomes this in the very isolated way that allows for some to race ahead and leave others behind having to follow. The metaphor of the gap and the divide are introduced here incorporating connotations of a time gap, once again an amalgamation of time and space metaphors. What it amounts to, it seems to me, is to effectively position the trajectory of the commonly taught and accepted version of European history as the desirable and sole possibility. 'Leap-frogging' and 'catching-up' and 'narrowing the gap', are part of of the language repertoire of development in a further way. As Douglas Lummis (1992, pp. 44-45) observes:

> In polite development discourse there is never talk of levelling down, only of levelling up. That's what 'catching up' means.

33 Francis Kofi Ampenyin Allotey: Ghanaian physicist.

And he continues:

> [T]he idea of world development equality presupposes that everyone in the world is or ought to be playing the same game.

In our example 'politeness' and support is sought also by inserting a quote from a 'local' who, not accidentally, also happens to be a scientist, a person who should know. After all he is affected by the situation and is thus someone whose claims are hard to dispute without risking the accusation of cynicism and disrespect. Nonetheless, the trajectory of European historical development as it is presented, idealised, isolated, and made inevitable here effectively rids the rest of the world, and in particular Africa, of its own history. Ironically it rids it also of the role that it held in history from a European perspective and in the industrial revolution. The industrial revolution did of course not take place in isolation. Granted, industrialisation in the narrow sense of an increased presence of factories and mass production was a largely European and in the 18th century British, and predominantly English, phenomenon. Yet it was dependent to a large degree on the colonies, their people, knowledges, and natural resources. At the same time, this is not the full story, which of course can never be found, but it certainly is more complex than that. To understand the economic implications also for the colonised countries and peoples, it makes sense to link the histories of colonialism and of industrialisation with that of capitalism. As Ania Loomba (2005, p.9) reminds us:

> Modern colonialism did more than extract tribute, goods, and wealth from the countries it conquered – it restructured the economies of the latter, drawing them into a complex relationship with their own, so that there was a flow of human and natural resources between colonised and colonial countries. This flow worked in both directions – slaves and indentured labour as well as raw materials were transported to manufacture goods in the metropolis, or in other locations for metropolitan consumption, but the colonies also provided captive markets for European goods. [...] In whichever direction human beings and materials traveled, the profits always flowed back into the so called 'mother country'. [...] The essential point is that although European colonialism involved a variety of techniques and patterns of domination, penetrating deep into some societies and involving a comparatively superficial contact with others, all of them produced the economic imbalance that was necessary for the growth of European capitalism and industry.

Thus, to propose another interpretation, inverting the argument presented in the above extract, Africa can be said to have paid the price not for *not* taking part in the industrial revolution, but precisely for taking part in it.

Notions of temporal distance appear in a further thread which is particularly interesting. It shows the role open access itself is assigned in this marking of spatial and temporal distance. Open access becomes a marker of development in the sense that it is positioned as a sign of a more advanced system of science. This is at times also anchored in a more complex view of history that

moves away from simplistic and one-dimensional perceptions. The following two examples both date from 2006. The first extract is taken from a report on a workshop on open access held in India, the so-called "Bangalore workshop". It was dedicated to creating a national open access policy for 'developing countries' and it was funded by the Open Society Institute and organised by the Indian Academy of Science.[34] The report contains the following paragraph:

> Yet while awareness of OA in many developing countries remains low, the more scientifically advanced nations have already recognised the benefits of OA, and are making fast progress [...]. [27]

This is followed some paragraphs later by the following statement:

> [T]he Bangalore workshop was grounded on the principle that OA is the next logical step in the evolutionary process of scholarly communication. [27]

The second example, taken from a research article providing a 'developing country' view on open access publishing, introduces an additional perspective. It reads:

> Furthermore, in universities with colonial traditions and legacies like the UWI[35], there is still some hesitancy to recognize publication in electronic-only journals. The free availability of these journals via the World Wide Web does not help to alleviate the scepticism since free is often equated with 'poor quality' and expensive with 'high quality'. [25]

In both cases, the dichotomy of difference in time is not only built upon to support the construction of open access for development, it contributes to and perpetuates it, albeit in substantially different ways.

In the first example open access is literally and explicitly positioned as the next step in the *evolutionary process* of development. The scientifically advanced countries already have it, or at least they have seen its merits, now the 'developing countries' need to follow. It is unavoidable, it is evolutionary, it is a natural process. Open access is inscribed into the narrative of positive scientific advancement. It becomes one more element in the backdrop against which to judge backwardness.

The second example, written by two scholars from the University of the West Indies, on the other hand does something quite remarkable. Singling out late-adopters who still hesitate, it essentially draws on the same notion of backwardness. Yet, it also presents a more complex

34 Workshop on electronic publishing and open access. Indian Institute of Science, Bangalore, 2-3 November 2006: http://www.ncsi.iisc.ernet.in/OAworkshop2006/pdfs/NationalOAPolicyDCs.pdf [7 Dec 2007]

35 UWI – University of the West Indies

picture, by introducing colonialism as part of the tradition of the University of the West Indies. This is a relevant statement and it shows a move away from the perception of tradition as the essential and frozen property of the less developed, the poor. This opens up new perspectives and certainly allows elements of history and politics to enter the image.

An explicit problematisation occurs in the following extract, which we already examined in more detail above with regard to the difficulties inherent in finding an adequate name (chapter 4.4.1).

> The term developing country has always been difficult to define because of its inherent connotation that the industrialized state enjoyed by rich countries is what other countries are striving towards. [...] Because of inherent problems with defining developing countries, the terms low-income countries and The South are also used in this paper as a short hand to refer to the poorer less technologically advanced nations of the world, as opposed to the north which includes richer, industrialized states. [10, p.143]

It is very interesting, how here the idea of a mono-directional, and normative development path is first problematised, yet then immediately re-affirmed, by building a dichotomy based on the opposition between *less advanced* and *industrialised*. What both examples illustrate is that although problematisations occur, they never manage to entirely break away from the dominant and even foundational idea of a temporal distance.

Temporal distancing is fundamental to mainstream development discourse. It almost needs it to justify its continued existence and its influence. It is still one of the most authoritative and hegemonic discourses and even though it has of course changed over time in many respects, this is the one aspect that lies deepest in its core. As such, it is also the very aspect that is most motivating and that, admittedly, also continues to give hope. What we see in the texts analysed here and in particular in the last extract, with regard to this procedure of temporal distancing, seems – at least in part – to stem from an awareness of the problems inherent in this simple evolutionary notion of development which is however left standing, since it appears so common sense and also it simply functions as an authorisation tool in a variety of contexts.

4.5 Conclusion: Divides, Gaps, and Flows

The last examples in the section above show one thing very clearly, namely that the discursive system around which the connection between open access and development is constructed contains ruptures in some places. We have seen glimpses of it throughout this analysis. For instance, the problems arising from the (never explicitly addressed) question of how to name this supposedly *Other*, this 'developing world', or how to relate to science and forms of knowledge

production which are not 'western', also derive in part from the heterogeneous nature of the discursive system, if only implicitly. At the same time however, it seems to me, that what we are dealing with here is what is best described as 'imported' heterogeneity.

Let me explain. Sure enough, with regard to content, differences exist between the texts, I analysed. This is also quite visible in the extracts I quoted throughout. For example, in some instances the issue of which form of open access, i.e. archives or journals, is best for the purpose is addressed differently, or publication fees are problematised. Different conceptions exist with regard to which type of information is useful for the 'developing world', or in which direction the information should or can ideally 'flow'. Problematisations of power relations occur to different degrees or not at all. Moreover, technology is imagined as either a positive or a negative force.

At the same time, on a larger scale, basically no fundamental disagreement between the authors exists. There is a strong understanding that 'developing countries' exist, that development is essentially and unquestionably desirable and that it is possible, and that free access to scientific literature will eventually benefit development. Correspondingly, the fundamental understandings of what could a 'developing country' be, what is 'science', what is the role of publishing in science, or of how science relates to development, that shine through in the texts, vary very little. The discursive procedures are constructed quite homogeneously. The notions of technology, of knowledge and of science, of progress, and also of history and change capitalised on, tend to gain authority first and foremost from mainstream development discourse. However, development discourse and the idea of development have been deconstructed incessantly in the past two decades or so. Most importantly, questioning of its roots, its assumptions, its economy-centred character, its one-dimensionality, its vocabulary, its inherent power relations, and so forth, has filtered through into the public consciousness and of course into the media. This is most palpable in the proliferation of terms replacing 'developing countries', or in the way in which a term like indigenous knowledge has begun to inscribe itself into the language of development.

This also shines through in the discursive procedures which support the connection between open access and development here. However, at the same time as these insecurities surface, the more traditional understanding of development is still tangible. It functions as a support system upon which all the other, and also the critical notions are reliant in the current context. Thus, imported discursive heterogeneity seems a good way to describe a form of heterogeneity which remains at the surface. It articulates insecurities and divergences, stemming from surrounding discursive arenas, yet it has difficulties following them through and it does not break away from the underlying original conception. Articulations of conflicts, problematisations, if they occur, are frequently followed by an affirmation of that which went before.

What is striking is the dominance of a rather limited set of images which can be found throughout. It surfaces in all the discursive procedures presented that they tend to be constructed around a limited number of prominent tropes, i.e. figures of speech, which among other things also effectively contribute to concepts of information as a 'thing' that remains virtually unchanged and can be transmitted from and between contexts, countries and 'worlds'. I want to draw the attention to the two most prominent ones, which are also strongly interconnected: namely, images of divides and gaps, on the one hand, and on the other hand, the image of the flow. In particular, I want to emphasise the effect these metaphors bring to bear on the construction of 'information needs' of those that are portrayed as excluded.

Liangzhi Yu (2006, pp.231-232) distinguishes between different perspectives in the literature on 'knowledge gaps', depending on

> (1) whether knowledge gap phenomena are represented as naturally occurring or as voluntary human constructions, and (2) whether these phenomena are best explained by analysing the propensities of individual actors or those properties unique to collectivities.

This offers a useful grid for thinking about the way in which the texts analysed above frame these issues. Trying to position them within it – at least with regard to their main thrust – makes it clear that here gaps and divides tend to be understood as firstly, simply occurring and secondly, their explanation departs from the property of two collectivities, i.e. the 'developing countries' or the poor on the one hand, and the 'West', the 'developed countries', or the rich on the other. Constructionist perspectives are lacking. Gaps and divides of information, knowledge, or similar, are taken as factually existing, and they are modelled on the already pre-constructed dichotomy between the 'developed' and the 'developing world'.

> The knowledge gap between rich and poor must be overcome if we are to reduce poverty [20, p.1190],

writes one author in the British Medical Journal in 2004, thus capitalising on the already established dividing line between rich and poor and establishing knowledge as that which is lacking on the poor side.

What is interesting in this context is that the metaphors of gaps or divides are shaped in a way that supports a relation of unequal partners, which is for one taken from elsewhere and furthermore derives from confounding qualitative and quantitative measures. Taking one step back, neither gap nor divide necessarily need to imply that one side has more or less than the other. They merely denote that there are two sides, spatially distanced. In other words, a divide is

the non-space that defines a distance. As an image thus, a divide could merely signify that two entities are separated by a third entity that is characterised by being devoid of any perceivable properties, other than keeping those two entities apart. In addition to not having to refer to a quantitative difference, neither gaps nor divides, need to imply that a qualitative difference between the sides exists. In fact, everything could be entirely identical on either side of the gap, apart from the fact – if we continue understanding it as a spatial metaphor – that they exist in different places.

This is of course not how images of divides and gaps work. As images they almost always connote a quantitative or a qualitative difference, or both. In our context, these are very specifically differences in access to or availability of technology, financial differences, economic differences, differences in time, in scientific output, in possession of journals, and so forth. It is hard to keep quantitative and qualitative aspects apart, and usually quantitative increases are described in terms of qualitative improvements. This is not particularly surprising, especially not when, as in our case, the main issue is development, which by the most conventional understanding simply means growth, typically capital growth. Thus, quantity is here, quite simply, also a qualitative property.

Talk of divides or of gaps is typically accompanied by talk of 'bridges', or in our case very often also of 'flows', thus building on the *conduit metaphor* or the *communications model for information*, which advances a largely decontextualised understanding of information as "the flow and exchange of a message" (Day 2001, p.38). We have seen a number of examples throughout the analysis. What defines the difference and what forms the bridge varies to certain degrees. At the most fundamental level the difference lies in a difference in living standards, typically expressed as a difference in health. This is then taken to the next level as being a difference of knowledge. Knowledge is understood as scientific knowledge, which is again understood as being the journal literature, the computer or the money to acquire it.

Each step leaves out complex aspects adding to the understanding of the respective notion and further reduces meaning. Each of these is the difference and the bridge, carrier of the flow, depending on context. To clarify, what appears as the 'bridge' usually varies depending on the level at which we enter this chain of differences. At times, in some texts, the difference is identical with its 'bridge'. Most frequently it is technology, the internet more precisely; very often it is journals, which are of course also part of technology in a wider sense of the word. Thus, open access is conceived as the 'bridge', the carrier of the 'flow', across the 'divide'. At the same time however, this draws on and re-produces the conceptualisation of a world that consist of two essentially different entities, one re-presenting the state to aspire to.

To sum up, open access emerges in three guises, sometimes concurrently, as a development problem, as a tool for development, and finally as the measure of development itself. Knowledge is in large parts equated with science, which in its more 'mature' or more 'international' form is 'western' science. Information is shaped predominantly as a problem of technology, which is often also seen to be the reason for inequalities in the first place and consequently not only as the measure but also as the agent of progress. In turn, the knowledge and information of the 'developing world' is constructed as less 'mature', less international, more culturally contingent, and hence less transferable. Open access also emerges, and this is most salient in the way in which the statements and declarations are formally constructed, as being positioned against the dominant system, whilst in large parts being affirmative of it. This is also tangible in the ways in which mainstream development language is drawn on as well as ethically unchallengeable causes are implied. As such, open access itself is shaped as unquestionable. We will in the next chapter focus more directly on the operation of development discourse as tool-box for the construction of statements and for authorising speaking. Specifically, I will highlight how certain staples of development discourse are being used akin to building blocks which can be re-assembled for the construction of specific, more or less strategic, purposes, and the consequences this has.

5 DEBATING OPEN ACCESS WITHIN DEVELOPMENT: TICKING THE BOXES OF DEVELOPMENT DISCOURSE AND REVOLTING AGAINST IT

There is not only one version of open access and its relation to the 'developing world', but several. While it navigates the same problem space and narrative, namely that of the connection between open access and development and the discursive alliances on which it is based, the present chapter is concerned with presenting a different one. To be even more precise, in fact it is not even *one* different version, which is presented, but a number of them. As the title suggests, in this chapter I attempt to come to terms with how the connection between open access and development is *debated*. For this the analysis is based upon one particular setting: an email debate which took place in the spring of 2006. This email debate was organised by the Coady International Institute, a Canadian development organisation, and it ran under the title "open access and information for development". As suggested in the previous chapter, the term debate is here used as an operational term. I want to emphasise once more that I am aware that debating means representing as much as representation is part of the debate. At the same time, mediological conditions, to use once more the term derived from Maingueneau (1999), and formal characteristics are part of discourse and they have consequences, although presented here in an entirely different way as in the preceding chapter. This difference influences the analysis and thus the presentation, but I also consciously exploit it to work out divergences in the ways in which open access is related to development in different settings, and to see which discursive procedures emerge as significant. Thus, while the previous chapter served to mark out the more 'stable' coordinates around which the connection between open access and development is constructed in the most readily available texts on the issue, this chapter presents a much more fragmented picture riddled by instabilities, contestations, and also, at times, contradictions.

5.1 Organisational context

Before proceeding to present the mailing list and the emails analysed in some detail, I will briefly consider the organisational context in which it took place and present the institution which launched and organised it. The Coady International Institute is a Canadian development organisation, primarily dedicated to the education and further education of development professionals.[36] It was founded in 1959 at the St. Francis Xavier University in Antigonish in Nova Scotia. It is named after Reverend Dr. Moses Coady, a Catholic priest who, in the 1930s, was one of the founders of the so-called Antigonish movement. This was a very successful social movement for adult education and social improvement that started out in Nova Scotia, Canada, during the time of the depression (MacAuley, 2001). Aside from study circles, it advocated and supported co-operatives and credit-unions in the interest of worker empowerment (Bean, 2000). The Coady institute itself was founded in 1959, the year that Moses Coady died, and up to the present day it provides education to development practitioners, in the spirit of community-based development.

Community-based development is a form of participatory development that aims to integrate into the project at all stages the communities marked out as beneficiaries of a development project. Participatory development has a relatively long history and some situate its roots with the Ghandian ideal of village-self reliance and later with Paulo Freire's 'Pedagogy of the Oppressed' (e.g. Mansuri & Rao, 2004, p.4).

It has been instigated to counter the normalising tendencies that often were and still are the rule in many 'big' development projects. Community-based development starts ideally from the grassroots level. It is more open with regard to development goals, rejecting state-controlled development and top-down approaches as well as respecting community self-determination (Mohan, 2002). It is typically associated with NGOs and civil society movements, as well as with egalitarian ideals. While in its early days it was a marginal and marginalised concept, it has in the last decade developed into one of the mainstream forms of providing development assistance and channelling funds. For example, it is estimated that between 1996 and 2003 alone World Bank funding for community-based and community-driven projects increased from US$ 325 million to at least US$ 3 billion (Mansuri & Rao, 2004, p.2). Yet, while this is an interesting

36 See Coady International Institute website: URL: http://www.coady.stfx.ca [December 17, 2007]

development, this association with 'big' development necessarily leads to problems with accountability and in turn with credibility.

Without going into too much detail, there is one aspect of community-based development which is particularly interesting in our context and it relates to the understanding of knowledge. One of the cornerstones of participatory development is a re-conceptualisation of knowledge. According to Giles Mohan (2002, p.52):

> The systems of modernity relied upon scientific approaches where planners worked from normative social models so that the recipients of development where treated as passive or, more often conservative and obstructive. The research methods for accessing local knowledges were inspired by Paulo Freire and have grown into a veritable industry [...], but all centre upon the trying to see the world from the point of view of those directly affected by the development intervention.

Most strongly and most frequently associated with this approach is the notion of local knowledge. The key idea behind community-based development is to ground development project decisions on what is considered local knowledge. This is not without problems and some suggest that local knowledge has also developed into a label that is being applied post-factum, "a construct of the planning process" (Mansuri & Rao, 2004, p.7). Especially since community-based development has also been accused of treating communities as socially and culturally homogeneous as well as of favouring elite participation (Mansuri & Rao, 2004), this clearly influences what emerges as 'local' knowledge. Local knowledge is one of the key concepts in our context and it emerges time and time again. It is used to relate to non-scientific knowledge and also to denote 'non-western'. It is frequently connected to ideas and imaginary ideals of rural populations and also to the notion of indigenous knowledge.

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The Coady International Institute's own preoccupation with community-based development is a very long-standing one which goes back to the 1930s. It has its roots with the Antigonish movement's original concern of community development in Canada during the first half of the 20th century. It was a social justice movement with ideals of worker self-reliance and -control, betterment, and democracy, which is furthermore strongly rooted in Christianity, more precisely in Catholicism. The Antigonish Movement was, in any case, a product of its time, its place of origin, and sure enough also of the values of its two founders, Moses Coady and James Tompkins, both priests. It was also a child of its time in the sense that it amalgamated a number of other approaches, ideals, and ideologies, influential at the time.

Scott MacAulay (2001, p.113) explains:

> By most accounts the Antigonish Movement was an inspired and innovative effort to respond to the dismal social and economic conditions of farmers and fishers, and later, miners in eastern Nova Scotia in the 1930s. [...] Tompkins and Coady together fashioned a program of economic reform which drew variously on the ideals of Roman Catholic social philosophy; practical lessons in social reform from university extension and adult education programs in Europe, the United States and Western Canada; and the promise of economic gains for workers and primary producers, as evidenced in Great Britain, through the formation of co-operatives and credit unions. [...] The innovation of the Antigonish Movement was its combination of a commitment to economic democracy through consumer co-operatives with a program of adult education that was able to be brought directly to workers and primary producers [...]. The vision was all encompassing.

According to Wilf Bean (2000), lecturer at the Coady institute, Moses Coady himself was deeply influenced by Catholicism and religion and spirituality shaped his thinking and actions. In this sense, the Antigonish Movement was a spiritual movement as much as it was one of community development and social justice. This, according to Bean (2000), continues to influence the principles on which the Coady International Institute bases its work today. For example, he understands its community-based approach as an application of a spiritual principle (Bean, 2000, p.74). Bean develops a number of further spiritual principles which he sees as fundamental to the Antigonish Movement and as thus important for the work of the Coady Institute. He writes:

> Each [spiritual principle] is a strand in a larger interconnected vision of a more sustainable, equitable world in which both people and resources are honored as sacred and where everyone is more fulfilled through an increased awareness of their connection and contribution to the greater good of the entire Earth community. This is a vision in which spirituality, adult education, and development are inseparable, and one that challenges adult educators and development workers to understand their work as central to the project of human betterment. (Bean, 2000, p.75)

Thus, the image we encounter here is one of development as a project carried out by development workers and educators to advance one version of human betterment that is essentially rooted in Christianity, even if diluted. In effect this leads us back to Foucault's concept of pastoral power, more precisely even to its Christian roots and its promise of salvation. It is indeed, as Scott MacAulay (2001, p.113) says, an all-encompassing vision. This is precisely what for example Michael Welton (2000) criticises, when he describes Coady's vision as typically modernist with a strongly utopian and also dogmatic and normative slant. That is of course not to say that this necessarily applies to the work the Coady Institute does today.

Sure enough, not all contributors to the "open access and information for development" mailing list might be associated with the Coady Institute and its community-based approach. In fact, it

seems a safe assumption that a fair share of them are not; specifically since an announcement for the list and the discussion was posted to the "SPARC Open Access Forum"[37] mailing list, on May 25th 2006. This is a list and forum developed by ARL, Association of Research Libraries in the USA and Canada, and it is dedicated to more general issues concerning scholarly publishing, with a clear slant towards open access. However, the Coady International Institute, and thus community-based development as well as adult and professional education, still provides the institutional framework in which the debate takes place. Thus, it is interesting to see which concepts of community and of knowledge surface and how they relate to the concept of participation that is so central to community-based development. This is particularly interesting with regard to the professional roles as mediators of information and of development, which come to the fore.

5.2 Material and Corpus: Methodological Considerations

In late spring 2006 the Coady International Institute set up a mailing list for an email debate dedicated to open access and development which officially ran over a period of two weeks. Under the title "open access and information for development" this mailing list attracted 146 postings from 49 participants during the formal duration of the debate between May 29th and June 9th 2006. After the end of this official period, the list was kept live and emails continued to be posted. However, only those emails posted during the official period are being considered here.

Prior to the official launch of the list, six discussion papers were posted outlining and introducing the problem area. One text was a general introduction to open access while five papers were dedicated to discussing open access in relation to different countries or regions, namely East Africa, Vietnam, Nigeria, Mongolia, and Nepal. I will not include them in the presentation of the discursive procedures I want to focus on here. However, I will present them and consider their content prior to discussing the discursive procedures in the emails. This serves primarily two purposes. Firstly, it is the closest we can come to establishing from which understanding of open access the participants started. Secondly, already in these discussion papers a number of strategies

37 SPARC: Scholarly Publishing and Academic Resources Coalition, developed by the Association of Research Libraries (ARL)
SPARC USA and Canada: http://www.arl.org/sparc [April 8, 2008]
SPARC Europe: http://www.sparceurope.org [April 8, 2008]

and also themes are established that prove relevant for the analysis of the email debate. All emails and discussion papers are archived and made accessible on a website set up in conjunction with the list.[38]

5.2.1 Corpus and Formal Aspects of the Mailing List

Emails constitute a text form that is very different from articles, reports, or declarations. In fact, the genre concept, which we discussed in relation to mission statement and manifesto, might not be easily applicable to emails and even mailing lists as such. If we understand genre as a group of texts that share a communicative purpose which also translates into shared morphological characteristics, then the genre concept only makes sense when we specify further; for example, business email, private email, scholarly mailing list and so forth. However, while the text form is relevant to some degree, for our purpose here, genre plays a very different role than it did above in the case of manifesto and mission statement. To explain, the fact that the debate was carried out on a mailing list does, of course, contribute to the shaping of discourse; it is part of its *mediological* condition. On the other hand however, it is only minor part of its semiotic structure, that is to say, the mailing list as a genre does not, in our case and for the purpose of our analysis, carry purposeful meaning in the sense discussed above for formal references to manifesto or mission statement. Nevertheless, some details about the mailing list at issue, and also in relation to mailing lists more general, need to be introduced. The more so since, as I will explain in more detail in the next section, the fact that we are dealing with emails requires ethical considerations and thus it has clear consequences for the presentation of the discursive procedures.

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It has been said, especially in its early days, that emails occupy the middle ground between spoken and written communication (e.g. Günther & Wyss, 1996). Depending on context, social situation, speech register, communicative purpose and so forth, emails tend more strongly into one or the other direction, oral or written. Email lists, which allow for one person to send one and the same email to all subscribers of a mailing list at the same time, tend to display similarities with oral communication when they are open for members (or at times non-members) to post to and reply to relatively immediately. This often leads to seemingly more spontaneous (written) language, with vocabulary and grammatical constructions otherwise and previously typical for oral interactions. Thus, it can be argued, the possibility to reply immediately, and in the same

38 The discussion papers are also available at the following URL: http://www.coady.stfx.ca/work/openaccess [April 8, 2008]

format and forum, constitutes a significant part of the genre characteristics of this type of mailing list.

However, trying to understand email and mailing lists merely through the notions of oral and written is also very limiting, since they offer possibilities for interaction which did not previously exist and which cannot be understood in these terms. Depending on the purpose of a list these features vary and they are arguably different in lists primarily dedicated to discussing academic issues than, for example, in those concerned with informing about events in a certain area. In general, it can be distinguished between lists open for registered members to post to, and those to which only administrators have the right to post. The list we are dealing with here belongs to the first category. Furthermore, to access the archives page one needs to be a registered member and have a password.

Although this list was kept active afterwards, it was originally set up for a short while only and thus it was initiated specifically for interaction and discussion. This was especially obvious during the two weeks during which the list was officially open. After that, postings became less frequent and typically were announcements, rather than emails inviting discussion. Occasionally a question was posted which typically received one or two answers. Altogether however, after the end of the official period, the list became very low in traffic.

Like mailing lists in general, the "open access and information for development" list is built around the concept of the *thread*. For each new issue or topic someone wants to see raised he or she starts a new thread, in the form of an email with a new subject line. This email and all replies posted to it as well as to already received replies constitute a thread. Previous posts are contained in any answer and posted to all subscribers of the list. Several threads can be, and usually are, active simultaneously. However, especially in our case, there is a tendency for threads to be active for a certain time and then to be taken over by a new thread, in fact often limiting parallel threads. As Christine Hine (2000, p.125) points out with regard to newsgroups, which are a formally similar yet recently less used form of online communication based on a different technical protocol, "[any] statement made in a posting can subsequently be challenged by another". In fact, she writes "postings are [...] placed in a context where they are seen as quite likely to receive a direct challenge" (Hine, 2000, p.136). Hine furthermore points out that disagreement is not only more common but typically also more acceptable, in order to justify posting in the first place and often perceived as "adding something further to the discussion" (Hine, 2000, p.125). Disagreement as stated motivation for a reply is clearly important in the "Open access and information for development" list. Yet at the same time, it is also not uncommon that agreement is explicitly stated as the reason for a reply.

Furthermore, in the case of "open access and information for development" the feature of the thread tends to be used somewhat inconsistently. Some threads are very long and the replies often digress markedly from the original subject, which however keeps being carried along in the subject line. On the other hand, a great number of threads consist of only two emails, in other words of emails who received just one reply. Then again, occasionally replies are contained in emails formally belonging to another thread. Furthermore, the names of threads are being changed, and the subject lines do not always correspond with the themes of the thread. Considering all this, any quantitative information is bound to be neither very precise nor especially informative. Nevertheless, during the official two weeks, of the 146 postings, thirteen did not receive any replies (which are marked as such), while the remaining emails are grouped in twenty-nine threads. The longest thread contains eighteen emails by twelve senders under the subject line "Content: Reliable, Valid, and Relevant Information". It was posted over the duration of three days.

The participants in the discussion do not always state their profession, institutional affiliations or reason for participating. Neither do all emails contain signatures with contact details or information about profession, status, or organisation, and so forth. However, those that do state their affiliations or other details or whose emails contain signatures come in large parts from those countries commonly considered 'developing countries'. They also tend to work in the development sector. Both these factors also contribute strongly to the way the discussion develops and the themes that emerge most strongly.

5.2.2 Ethical Considerations, Analysis and Presentation

The fact that we are dealing with a mailing list has ethical implications. This influences the analysis as well as the presentation. For example, it is obvious from spelling and grammar that for a great many authors English is not the first language. This has obvious consequences for the way in which one can go about analysing the material, what one can say about it, what one is able to conclude and of course how to present it. Repeated reading and interpretative close reading also form the basis of the analysis here. Yet, close reading and interpretation have to take a different form when the texts one is reading are unedited, not proof-read, and contain grammatical errors or spelling mistakes which quite obviously stem from the fact that the person was writing in a foreign language.

For a number of reasons, described in more detail below, I avoid example quotations as far as possible. If necessary I limit them to a single word and I only include more substantial quotes if I have gained an author's consent.

This requires some qualification. While in discourse analysis, as Sanna Talja (2001, p.26) expresses it, "[t]ext extracts are a necessary basis for the researcher's argumentation, and they also provide the linguistic evidence for the researcher's interpretations", it is still necessary to consider the implicit hierarchy of texts. And my own text has a position in this hierarchy, since I am of course writing within the same problem space and I thus continue the narrative I investigate. This, mainly because of the greater formal distance between my text and the texts I interpret, is more obvious and also more acute here than it was in the previous chapter.

Having said that, obviously it is not the purpose of discourse analysis to accurately represent viewpoints or map out arguments between individuals in detail; rather we are interested in regularities on a higher level and also in interconnections between different discursive systems and ways of authorising certain ways of speaking. It is not an individual author that matters as much as the text in a wider context. This perspective has implications for the text as a research object. In discourse analysis, as Sanna Talja (2001, p.26, italics in original) maintains,

> extracts from the texts studied have a different role in the research report than in qualitative analysis which aims to capture participants' authentic opinions and attitudes. The texts [...] *are* the object of research.

It is important to bear this in mind, yet at the same time, the choice as to how to present the material has implications for my role as a researcher and as the author of this text. And since my understanding of discourse includes the assumption that mediological conditions and formal elements are important, this also means that I have to take them seriously from the (assumed) viewpoint of those whose utterances I re-contextualise and analyse by trying to position them in a macro-context.

First, I do not want to present extracts from texts that were not meant to be 'printed' in a printed form, thus attributing to them a status that was never part of their purpose in the first place. Second, I do not want to distort the authors' words by inserting their messages in a context that makes them vulnerable in the sense that they have no possibility to reply; while it was exactly the possibility to reply that most strongly characterised the forum in which messages were initially posted and which is a fundamental characteristic of the relevant genre. Finally, I want to avoid misrepresenting or misinterpreting the posters' stakes in the issues by presenting them in 'badly' or incorrectly written English, which is simply due to the fact that they are not native speakers. All these considerations, yet in particular the latter point, while not adding anything valuable to the presentation, has the potential to seem exploitative or could be perceived as demeaning. They are thus furthermore highly problematic with regard to my position as the writer of this text.

Moreover, in contrast to the previous chapter, form and also grammar are not such essential

parts of the analysis. The previous chapter has provided us with the major coordinates of the narrative. The present chapter, based on such different material, in some way, also serves to test out these coordinates, and, as we will see, to challenge them.

Thus, I focus on general trends as before, yet I do not hinge them as strongly on the presentation of example quotations of individual statements or disagreements as above. I paraphrase these as accurately as possible and only highlight individual words or phrases that appear frequently enough to make the identification of individual posters impossible or very difficult. Having said that, as indicated above, I do incorporate some direct quotations, yet only in cases where I have gained consent from an email's author.[39] In these cases, I state the author's full name in the corpus list (see Appendix C) and treat the email as published work. When presenting them in the text I use, as before, a numbering system and square brackets; this time the number is preceded by an upper-case E. All 146 emails have been assigned consecutive numbers corresponding to date and time of posting to the list, starting from the earliest. I also use these numbers to identify the emails from which I quote directly, but also others which I only refer to or paraphrase. Furthermore, while keeping word order and grammatical structures as they are in the emails, I do correct obvious spelling mistakes or typos.

To sum up, what I try to do is to not focus on individual perspectives or to work out in detail the lines of arguments on a content level. Rather, instead of dismissing differences in perspective, I also try to read these emails together as one text, a fragmented and incoherent and certainly not a linear one, but still one text, which contains disagreements and different voices. This furthermore helps to draw the attention away from individual authors and to focus on the discursive procedures at play, put simply on what is possible to say and what not, and what is being connected to each other and what remains isolated. Therefore, the context is provided by the fact that all are writing together on this one email list set up by this particular institution. All are writing on a text within the narrative that connects open access and development. In this sense, my analysis is concerned with interpreting this text as part of this larger narrative. It contains in it other texts, other authors, and other institutions, and thus even more different voices; however it can still be read and spoken about as one text. The most obvious texts contained in it are of course the six discussion papers, and I will present them in some detail in the following section.

39 I emailed 20 posters and asked for permission to quote from their messages. Of those emails 2 bounced. Of the remaining 18 email authors, 5 answered and consented to me quoting from their messages (see Appendix C)

5.3 Setting the Scene: The Discussion Papers

As already mentioned, prior to the starting date of the debate, six discussion papers were made available on the list homepage to provide the participants with background information and to introduce relevant topics; these were, one general introduction to open access, and a further five papers concerned with the situations in the following geographical regions or countries; East Africa, Nigeria, Mongolia, Nepal, and Vietnam. Each of these texts also considered a different perspective on open access and advanced different views of what open access is, what it should ideally incorporate as well as facilitate.

The only text not concerned with a specific geographical area is "Open access for librarians in developing countries" (Morrison, 2006).[40] It serves as a type of general introduction to the topic. The text presents a fairly straightforward definition of open access:

> Open Access literature is free online for anyone, anywhere, to read, download and use, providing that the author is properly cited. To be fully open access literature must be freely available as soon as it is published, if not before (as a preprint). (Morrison, 2006)

It is interesting that neither science nor research form part of the initial definition. This is redressed in the next paragraph:

> Open access is an obvious choice for works that authors have traditionally given away, such as scholarly, peer-reviewed journal articles, the focus of the open access movement. Open access makes sense for other documents too, such as government documents, theses, and conference proceedings. (Morrison, 2006)

This amounts to an unusually wide definition of open access which, while acknowledging that scholarly publishing is the original concern of open access, should apply to other types of documents as well, and essentially it could apply to any. It is not discussed that in some disciplines conference proceedings have exactly the same function as journal articles have in others.

As the title suggests, the text is directed at librarians, more specifically at librarians working in 'developing countries'. However, it refers to 'developing countries' just once. Once again, as before (chapter 4.4.1), any qualifications as to what a 'developing country' might be or how librarians in 'developing countries' can be understood as one group are omitted. The one mention of 'developing countries' occurs in the context of a discussion of increased citation

40 This text is also contained in the previous chapter's corpus.

impact attributed to open access. "The importance of this [citation] impact advantage, however, is much greater for researchers and publishers in the developing world", states the author.

The text provides a relatively eclectic list of resources on open access, links to a number of archives, journals, publishing software, funding bodies, and directories, as well as a short overview over a small number of open access policies. It is curious that neither the *Salvador Declaration* nor the *IFLA Statement* on open access are mentioned, given the papers stated target audience are librarians in 'developing countries'.

The text outlining the Nigerian situation, "Open access, adult education and development in Nigeria" (Mejiuni, 2006), contains a very similar definition of open access that is potentially equally wide. According to the author:

> What makes literature OA, then, is that is has to be available on the Internet and readers do not have to pay to read, copy, download and share information, so long as the author is acknowledged and is not misrepresented. (Mejiuni, 2006)

The author then draws the attention to her own experiences at her university as well as to technical issues. She refers to the 'digital divide', however she also notes that access to the internet is not a particular problem for researchers in Nigeria. Technical difficulties and expenses are related to the provision of material online, not to accessing the internet as such, at least not for those at universities. She points out however, that an access problem exists for those outside these institutions and for people without the financial means. As the title suggests this text is concerned specifically with adult education and consequently also with provision of online learning materials. The author decries in particular the deregulation education underwent in Nigeria, also at the demand of international financial institutions. This had the, she states, effect of commercialising higher education and of drawing funds away from the public sector education.

The author builds an interesting case in which she suggests a connection between the years of military rule during the 1980s and 1990s in Nigeria, which led to a crisis in research and scholarly publishing, result in part, so the author, of the demands of international creditors to reduce spending on higher education, and the increased publishing activity by non-profit and civil society organizations. "This was partly due", she writes,

> to the fact that education, training, research, and publishing were some of the strategies that civil society organizations adopted in response to the challenges posed by repressive military administrations and the HIV/AIDS pandemic. Through civil society organizations, international development agencies funded the activities they hoped would ensure respect for human rights, promote democracy, alleviate poverty and stem the tide of HIV/AIDS. (Mejiuni, 2006)

Sure enough, none of the material these various organisations publish and distribute through a range of different channels, including the internet, are peer-reviewed. And this, suggests the author, should be seen as an advantage, not as a weakness.

> Perhaps the strength of their published works lies in the fact that they have not been subjected to peer review which is sometimes about gatekeeping. (Mejiuni, 2006)

This is closely related to her understanding of knowledge as well as its position in the open access movement. She demands, and this is particularly interesting with regard to the role of science in relation to other forms of knowledge production, which we alluded to above (chapter 4.4.4), an expansion of the, as she calls it, "discourse of 'Open Access' ":

> In view of the foregoing, I think the Open Access discourse should include other forms of knowledge, other forms of knowing and other ways of knowledge production. There is so much information and knowledge all around the world, especially among people who are not academics and who are not in the mainstream, that may never make their way into peer-reviewed journals and scientific/scholarly publications. In other words, the open access movement needs to be more inclusive. (Mejiuni, 2006)

Moving from West to East Africa, we are confronted with an entirely different text (Anjiah, 2006), and one that draws on the more established images of development discourse. It is entitled "Open Access: Is it a futile option for developing countries?" It is essentially constructed around the procedure of temporal distancing and alludes to images of gaps, divides, and bridges. The poor, the starving, rural populations, the illiterate, and the uneducated also feature heavily. It contains the following definition of open access:

> Currently there is the Open Access movement, which according to Peter Suber means "open-access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restriction. What makes it possible is the internet and the consent of the author or copyright-holder. (Anjiah, 2006)

However, it is telling that, as in the article on Nigeria, here likewise science and research publishing are considered only marginally. The main focus lies with training materials and online learning. In this context, open access is interestingly also understood as providing an alternative to the printed book, mainly course books, which are perceived as too expensive. The author writes:

> [O]pen access is very important in the context of Africa, where issues of book availability is a key issue especially in the training sector (Anjiah, 2006).

In addition, the text focuses on access to technical infrastructure for the general public and the

situation of libraries, specifically also in rural areas. The text draws heavily on one example, namely the work of the MS-Training Centre for Development Cooperation[41]. This is a training centre for development workers funded by a Danish NGO for international co-operation.

The author's main concern lies with the barriers to open access. She relates them mainly to three issues; firstly, lack of infrastructure, secondly, lack of funds, and thirdly, lack of skills. The latter comprises, at least, literacy and language skills. She writes:

> For readers in Africa, language barriers is an issue Open Access enthusiasts should look into. Most online literature is in English, many people for instance in Tanzania are not well versed in English this is because of the widespread use [of] Kiswahili in school and in the country. In Tanzania there are 126 languages while in Kenya 42 tribes with their own dialects [...] For instance in Northern Tanzania, some of the Masai people do not speak Swahili. Would this be suitable? A rather rhetoric question! (Anjiah, 2006)

This carries with it of course not only ideas about the value of different languages, it stems from an entirely different understanding of open access and the forms of knowledge it relates to and it should relate to. While before, open access was unquestionably about science and research and thus 'obviously' in English, or another European language, here this is no longer so clear. Let us try to unpack this. It can safely be assumed that for the elite, and this includes researchers, scientists and university employees, in any East African country, like in any non-English speaking European country, English poses no real problem. Thus, introducing lacking English skills as an issue to be considered by *open access enthusiasts*, brings not only other audiences (and possibly producers) into the debate, it also raises the issue of other forms of knowledge and of knowing that these other audiences are assumed to be interested in or have to contribute.

The main thrust of the text however, revolves around the issue of technical infrastructure, including the availability of computers, electricity, access to the internet, questions of bandwidth. This agenda is presented as a 'development problem', which has to compete for attention with other development problems, such as water supply and food security. It is, the author claims, neither prioritised by governments nor by development organisations. "Therefore", she concludes:

> [A]dvocacy is needed for good libraries, money for infrastructure to enable ordinary citizens to enjoy the fruits of Open Access. This will enable Africans to bridge the distance. (Anjiah, 2006)

41 MS-Training Centre for Development Cooperation. URL: http://www.mstcdc.or.tz [April 8, 2008]
MS: Mellemfolkeligt Samvirke (Danish: 'interpersonal collaboration')

Education, infrastructure, as well as language skills are also touched upon in the text aimed at describing the situation in Mongolia (Yembuu, 2006). Under the title "Open and distance education in Mongolia: Possible relevance of open access", the author describes distance learning projects taking place in the country. The text sets out by framing the issue with data, that is, by providing a number of statistics and referring to a number of indexes, most notably the United Nations Human Development Index and the World Bank income statistics. This serves to set the scene, clarify the frame of reference, and position Mongolia as well as the author on it. Mongolia is a 'developing country' and he speaks as a development professional. He starts from the assumption that "[open] and distance learning is the main feature of education for this new century" (Yembuu, 2006) and sees a particularly high potential for a country as vast and sparsely populated as Mongolia. The author provides no definition of open access, however it can be deduced from the text that he refers to open access journals. He seems to see their main potential relevance with them publishing articles on good practice in distance learning which could be adapted to the situation in Mongolia. As in the text on East Africa, the author's main concern lies with infrastructure and internet connectivity in remote areas, lack of funds, as well as foreign language skills, in particular English.

A further text attempts to present the situation in South Asia, yet in fact it focuses almost exclusively on Nepal. It is called "The 'Open Access' (O.A.) movement and information for development" (DidiBahini Youth Forum, 2006) and presents the results of a discussion among eleven participants. Here equally the authors' prime concern lies with questions of technical infrastructure, access to the internet, literacy, and financial means. Furthermore, science and research are clearly not foremost at the minds of the authors. Rather, open access is understood, for one, as a form of free access to any kind of information online and furthermore, as information judged useful for development workers. This leads to a further topic; the role as mediators carved out for development professionals.

> Open access is beneficial and can be a good tool for development through globalisation. With the current IT trend there is a possibility of having O.A. made more available to people worldwide. [...] [Those] who have O.A. available to them will have great advantage and opportunity to be aware [of] different development issues and trends that can be shared by different organisation[s] to local people who have no direct access to O.A. At the same time people from the region can also share local technology that can be helpful and replicated in other countries. Thus O.A. will have great impact on development in the region through global learning and sharing of good practices, ideas and experiences. (DidiBahini Youth Forum, 2006)

It is obvious that the open access that is alluded to here, has here very little to do with the open access we encountered previously. It is far removed from what used to be its root concerns with science and scholarly publishing, and those definitions that understand open access as the

property of a single document. The open access the authors refer to here is a technical issue, a software property, it is a development tool, it is a skill, it is an issue of power and of professionalism, at the same time as it is merely a malleable catchphrase, part of the arsenal of development language.

Finally, the last text introduces the situation in Vietnam from the "perspective of a Canadian development worker", who incidentally also is a librarian (Whetter, 2006). Under the title "Open access and information for development in Vietnam" the author introduces a number of interesting aspects. First of all, the barriers to open access she mentions, includes in addition to languages, also and this is quite unique, possible government censorship.

The definition of open access she provides hinges predominantly on the copyright aspect and it takes a very interesting turn.

> The Open Access movement campaigns for information to be free from most copyright restrictions. Copyright infringement is widespread in Vietnam, but the government has been cracking down as Vietnam works to join the WTO in this year. Therefore, although photocopying of foreign books and journals is common, the Open Access campaign against copyright restrictions may be more relevant in the future if copyright is enforced in Vietnam. (Whetter, 2006)

Furthermore, she distinguishes between the needs of researchers and of development workers, whereas the first group is certain to profit "to some extent", she is less sure about the benefits the latter have to gain from open access. This group, development professionals, are the group the text revolves around and they are, in her experience, only marginally interested in scholarly materials which are after all the main concern of the open access movement. However, she concedes some benefits that might arise to development workers from open access, which might also lead to the solution of other problems – including insufficient internet access in the "countryside" and too little Vietnamese online content –, and that is through the idea that she sees to underpin open access. She writes:

> Although these issues are beyond the scope of the Open Access movement, their resolution draws inspiration from the same egalitarian philosophy that drives Open Access. (Whetter, 2006)

In conclusion, the versions of open access represented in the six discussion papers are, as we have seen, quite disparate. However, they all position open access in a very unspecific way that makes it very malleable and allows for it to be filled with a plethora of different meanings depending on context. This relates also to a wider perspective of knowledge, and in particular of forms of knowledge production which lies outside or besides those usually described as science, and which suddenly become virulently important. A number of issues and topical connections are

introduced, a great many of which revolve around the notion of barriers to open access. These include, aside from access to the internet and the cost of internet access, the role and the knowledge of rural populations, or of local populations more generally, the function of mediators, as well as of course the issue of language. We will see that these themes have been taken up in the debate and that in different constellations they also provide the coordinates for the most influential discursive procedures.

5.4 Discursive Procedures

The discursive procedures and discourse alliances emerging in the material here are in many ways similar to what we have seen in the previous chapter, yet at the same time, they are also very different. This is not surprising since, as for instance Sanna Talja (2001, p.22) points out, "[w]hen the same phenomenon is approached from different angles, different aspects of it come into view and hold a different position."

For instance, technological determinism greatly infuses also the debate we are dealing with here, as does temporal distancing. Furthermore, the construction of the key 'clients' of development and beneficiaries of open access as primarily rural people comes to the fore, and this largely occurs within the well-worn paths of development discourse. At the same time, a different picture emerges, specifically with regard to the image of what is a 'developing' or a 'third world', and who is to speak in its name. This particular thread greatly influences the debate and the need to establish an identity; how this is expressed surfaces as the most interesting procedure. A highly critical perspective on the normative violence of development discourse accompanies this. In addition, the question of the role of mediators is asked and it is answered in differing ways, as is the question regarding the relevance, accuracy and quality of information.

The following procedures emerge most clearly as the most relevant:

(1) Technologism

(2) The role of the profession: Mediation, translation, and control

(3) Rural people and the lack of education

(4) Developmentalism and anti-developmentalism: Positioning oneself in and against development

In terms of content it is clearly questions of availability and access to technology, mainly the internet, but also infrastructure more generally which dominate the debate. This is in large parts

played out along the same lines as in the texts analysed previously. Thus, to avoid repetition, I structure the presentation to emphasise a number of distinctive points and leave aside more general comments on technological determinism which have been covered in the previous chapter. Technology, furthermore plays a significant role in virtually all the other discursive constructions and it features strongly in the shaping of what is considered local knowledge as well as when it comes to control and mediation, and with it the question of literacy arises.

While in the previous chapter the image of the divide was emphasised as the key metaphor under girding the texts, here it is talk of barriers. We will concern ourselves with this aspect in some more detail in the conclusion to this chapter. There I will also consider problems arising from the Foucauldian conception of the subject as the result of discourse, which becomes problematic when trying to come to terms with the reasons behind the sustained success of the perpetually failing project of development and of the unchanging constitution of development discourse.

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Before proceeding to discuss these procedures in more detail, I want to make a qualifying statement with regard to the interpretations I present. I want to emphasise once more that my own position and knowledge are also an effect of discourse and of power. Thus, the connections I make to highlight certain issues may sometimes, or often even, stem from an inclined perspective and might be unorthodox, yet I make them within the space of discourse that is available to me as it is for others and not from somewhere outside or above. Moreover, the interpretations I present are not the only ones that can be made. They are one reading of certain regularities that it is possible to make, and I hope this particular reading highlights some connections and problems that can help us to understand better how development discourse works, how open access operates within it and how those to be 'developed', their knowledge and their 'information needs' are imagined and also how those speaking *as* 'from the developing world' try to come to terms with this specific regime of representation. Therefore, I hope the readings I present in the following can be understood as provocative or as being made with a magnifying glass, but will not be cast aside as extraneous.

5.4.1 Technologism and the Politics of the Digital Divide

Technologism, and with it technological determinism, shape the debate to a substantial degree. Great emphasis is put on access to the internet, availability of technology, and also affordability. Typically technology is taken to mean computers and software, often open source, telecommunications infrastructure and it also relates to electricity supply. Clearly, in terms of

content this is the dominating theme, more so even than it was in the literature on open access, analysed in the previous chapter. This is already laid out in the introductory discussion papers, and, given the context of the debate it is not entirely surprising. Technology, specifically the internet, becomes even more central, since science and academic research are considered only marginally – which, as some posters also point out, typically take place in areas and at institutions privileged enough to be well connected. Yet, there is a strong tendency to shift the concern to forms of knowledge and knowledge creation lying outside the concern of academic research and most notably to people and groups which would not normally be concerned with access to the peer-reviewed journal literature. These are what are called the local population, or rural people, but at times also development workers themselves. And they live and operate in areas in which internet connections are harder to come by and more unreliable, as is stable electricity supply.

In terms of discourse, there is a generally unfettered belief in technology's association with progress underlying the debate and which remains unchallenged. This appears in three main guises. First, through technology the ability to *connect* to the 'developed world', to the world where progress happens and where it is defined, is perceived. Secondly, taking the connection further, technology is understood as the *deliverer* of progress, in the quite literal sense that information which is seen to facilitate progress could through technology, i.e. the internet, 'flow' to those who need it. Finally, technology is associated with progress in the sense that it itself *is* progress, or at least its manifestation. Open access becomes associated with technology and its progressive image so strongly that it, in turn, itself becomes synonymous with progress, which is being withheld from the 'developing world'.

The following excerpt introduces the delivery perspective and it also strongly re-enforces the image of open access as progressive.

> It is almost stressful to imagine that the least developed countries with limited ICT infrastructure would not benefit immediately from development oriented information resources that we are advocating be placed on OA. The case of health, agriculture, scientific and technological information which eliminates poverty, ensure a healthy nation and bring about sustained growth and development becomes unreachable and unattainable because of the digital divide.[E102]

Here, open access is related to materials concerned with development issues. Although science, alongside agriculture, health, and also technology, is introduced, it is primarily understood as a development oriented resource. Underlying the connection between ICTs and development is the belief in technology's ability to literally deliver information resources, which will, in turn, directly lead to growth, less poverty, and generally an improved life. However, these d*evelopment oriented information resources*, are on the other side of the digital divide; they are unreachable. It

seems almost as if the digital divide was, if not the cause of all inequality, then at least it is the main reason for its persistence. This understanding of technology and of information in relation to development is very similar to the way in which the World Bank and other mainstream development institutions portray knowledge and its transfer. As Colin McFarlane (2006, p.289) argues:

> Knowledge transfer is conceived as instrumental, reducing knowledge itself to a technology that can be applied, that is, a static entity that can be shifted around to do the job of development (McFarlane, 2006, p.289).

Also, in this understanding, development is not the property of those that are 'to develop', but development comes from the outside. This being said, this perspective of development is not entirely uncontested in the debate. We will see how it is being problematised and raised to a meta-level, where questions of dominance and of violence surface, when we discuss the construction of a group identity of those speaking *as* 'we from the developing world'.

Particularly interesting, as a general thread in the postings, is the way in which government, politicians, or at times also NGOs are invoked in relation to provision of infrastructure. The following is an extract from a message posted by a Vietnamese official:

> But developing countries have to face many things to improve OA. There are some things in my country, for example. The first thing, I want to mention about the infrastructures of information technology. It depends on the government policy to develop IT through the country. In the cities, it seems to be easy to solve this problem. [...] But in the countrysides the infrastructures of IT are very poor. Many projects of IT from NGOs and government organizations have done, but not enough. The second one is the high prices of telecommunications in comparison with peoples' income. [E42]

Not enough is being done by governments or NGOs is the claim and similar statements are made throughout the debate. Very often a strong sense of frustration or disappointment shines through. The frustration lies with the 'developed world', but also quite strongly with the governments and politicians of the 'developing countries', with 'our leaders' [e.g. E62, E81], as it is for example expressed.

This relates to the way in which promises are not being kept, but also to the possibility of censorship or suppression of information, however most frequently it concerns the neglect of building and providing infrastructure. While it is also being pointed out that perhaps, under certain circumstances other issues could be more pressing than internet access; it is still singled out as a pressing concern. In this way, internet access is successfully inscribed into the system of lacks that define the 'developing world'. Furthermore, despite the omnipresence and prominence of the 'digital divide' as a policy issue in an international context, exemplified not least in the case

of a high-profile summit such as the WSIS, it is also presented as neglected and as being continuously overlooked and sidelined. This, I would suggest, adds to equipping the issue with an urgency that contributes strongly to its shaping as a development problem. It is closely related to the way in which international institutions relate ICT and development, as has been observed by Merridy Wilson (2003), who argues:

> ICT is being placed within a range of basic needs that are part of currently accepted definitions of poverty (Wilson, 2003).

In this reading, internet access becomes, first and foremost, a development problem, and since open access is so strongly related to it, it equally emerges as such.

However, it is more complicated than that; clearly, the way in which ICT is inserted here as the deliverer of progress happens in the long-standing tradition of technology transfer. And it is interesting to remember once again Harry Truman's words from more than half century ago:

> We must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas. (Truman, 1949, quoted in Rist, 2006, p.259)

Since presently, in the so-called information-based economy, the main resource is said to be information, it makes inherent sense for the main thrust of the argument to be directed towards information transfer, rather than industry. Given the dominance of a technology oriented paradigm which persistently confounds information with presence of ICTs, it is furthermore not surprising that a great deal of attention is being paid to computers and internet access, typically captured in the notion of the 'digital divide'. Yet, it is essentially the same argument, which was presented by Truman – drawn on ever since – and clearly the position of science in it has shifted remarkably little.

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Yet, there is another side to it still and the picture that emerges in the email debate with regard to technologism is by no means a homogeneous one. Firstly, it contains a conflicting position on the transfer version of development. It is conflicting in the sense that it is being hold on to, while at the same time frustration emerges which implicitly relates to the way in which it never actually occurs and certainly not delivers; hence, the references to 'our leaders', the 'government', the 'development partners', who do not fulfil the promise, who are corrupt, or who fail to recognize the 'urgency' of the need to have ICT infrastructure. The latter of course also contributes to the construction of ICT as a development problem. Doubt about the simple transfer version is also contained in recurring references to the suitability of materials to be 'transferred' and in questions

as to whether these would be useful for all contexts. The latter in particular is also connected to issues of control and mediation and thus to a professional role that is shaped around the idea of being the interpreters of information and the facilitators of development, which will be discussed in the subsequent section.

Secondly, internet access and thus access to open access resources, widely defined, as well as frustration with the lack of it, is also related to what are called 'civil society organisations' or sometimes the 'grassroots'. Again, this was laid out in the discussion papers (cf. Mejiuni, 2006). This is not unlike the way in which the 'digital divide' issue in general can be considered as a diversified one.

As Brendan Luyt (2004) argues, in response to the perhaps provocative question, "who benefits from the digital divide?" different groups have different, and at times conflicting, stakes in the issue. He points out that those benefiting from it might not be limited to the groups that are singled out as the ostensible primary beneficiaries of the various initiatives and programmes aimed at 'bridging' the divide. In particular, he describes four groups whose interests promote and shape the 'digital divide' as a policy issue and who can be described as beneficiaries of the 'digital divide'.

> Information capital achieves a new market for its products as well as an educated workforce capable of producing those products in the first place. The state in the South benefits through the legitimation conferred through programs designed to combat the divide. Not only do these offer new accumulation opportunities for its elite, they also hold the possibility of defusing discontent over poor economic prospects for the middle class, a volatile section of the population. The development industry [...] also benefits from the digital divide. Another gap has been opened up that requires the expertise these agencies believe they can provide. And finally, the organs of civil society are also winners, as they attempt to capture information and communication technologies for their own increasingly successful projects. (Luyt, 2004)

In our context, when open access is discussed primarily as a technology issue, we see a very similar picture, specifically with regard to the voices of the 'development industry' and the 'organs of civil society', yet the fault-lines are not always so obvious. Rather, what emerges is a picture in which these different stakes and their argumentations and language repertoires are drawn in as already established and as a way of authorising speaking and a perspective as well as to establish an interest. This is not left entirely uncontested and the relation between the development industry and the 'digital divide' is also directly being challenged in the debate, at least in one instance [E34]. An African participant denounces precisely the construction of the 'digital divide' as a development problem and positions it in a series of other problems and lacks drawn on to define the 'developing world', all depicted as violent and more beneficial for

development industry than for the claimed beneficiaries.

Furthermore, and this is obvious from the continued insistence to include marginalised groups and their knowledges and to extend the open access paradigm beyond its perceived current limits, there is also a perspective that aims at being more integrative. This perspective tries to be more aware of interests and possibilities other than merely development as an aim in itself, and to be enabling rather than just mediating. This has in part to do with the fact that as Brendan Luyt (2004) also points out "parts of the development community belong to civil society". Yet there are also other groups and NGOs who fall into this rather broad category and "[d]evelopment of one form or other may be considered by these organizations as essential, but the essence of their mission lies elsewhere" (Luyt, 2004). These include for instance human rights or environmental organisations, but also more political groups and social movements with more specific concerns in certain regions or countries. However, their main interest with having access to reliable ICT lies with connecting their activists or offices to further their various aims. This is also present in the "open access and information for development" mailing list [e.g. E138], yet the main focus is clearly on providing access for the 'poor', the 'rural population' or the 'locals', at least on the surface.

Nevertheless, these positions are never clear-cut and there are interests at stake that lie beyond those proclaimed at the surface of the text. This is frequently apparent in talk about mediation and control and often in terms of literacy. In the next section we will look at how this contributes to the shaping of a professional role that is constructed around information control and translation, and also as facilitating development.

5.4.2 The Role of the Profession: Mediation, Translation and Control

Given the fact that the Coady Institute is dedicated to education and to the further education of development professionals, it is not surprising that a great number of postings are written from the perspective of this group. Already one of the earliest emails written by a list moderator [E8] explicitly asks for the information requirements of development workers and their relation to open access.

However, while development professionals' own information requirements and also provision are key features of the debate; other roles emerge as significant and contribute to the shaping of the professional role and image. One of the most visible images appears in relation to their role as mediators of information for the 'locals' or the 'rural populations'. This is often also contained in talk about lack of skills or low literacy levels and consequently the need to provide education.

This, in turn, strongly shapes the image of the development worker as a deliverer of progress, or as an agent of salvation. Clearly this has implications for the emerging image of their 'clients', the recipients of development. It furthermore influences which types of information are considered relevant and explicitly or implicitly being talked about and importantly also how these are imagined, but also being problematised. In addition, further components exist which are equally significant. These are the roles of the 'development worker' as educator and spokesperson, and as translator and interpreter, not necessarily translator of natural languages, but of materials from diverging contexts and also of concerns.

At the same time, the image is also shaped by an explicit problematisation of development discourse and of its violence which necessarily contains the problematisation of the development agencies' and workers' role themselves [e.g. E34]. After all, development is a professional endeavour. It is an area of expertise and what made it so dominant in the second half of the 20th century was precisely its professionalisation and the increasingly powerful role of experts (cf. Escobar, 1995a, pp.44 et seq.). Ultimately, development manifests itself not only through those to be 'developed', but also in and through the work of people engaged in this sector in various positions; people who produce, circulate and apply knowledge, who measure and value, who label and categorise, who develop policies and are being trained to apply them, in short, who shape as well as reproduce discourse, the development experts. Thus, a problematisation of development necessarily always contains a problematisation of its professionals. We will concern ourselves with this in more detail in the subsequent section, when we discuss the construction of two speaking identities, simultaneously conflicting and conspiring – the 'we from the developing world' and the 'we' of the 'development workers'.

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To return to the more immediately visible role of the development worker; this is constituted here not only in relation the 'clients' and target groups, or to the 'goals' of development, but strongly in relation to information. Obviously, in contemporary discourses information is a freely floating signifier and generally having 'it' and preferably having more of 'it' is always considered a good thing which in and of itself often qualifies as a desirable development outcome. Yet, if we look more closely, the emerging role of the self-identified development workers in their relation to information is a lot more diversified. Open access serves usually as an entry point for bringing up and also for problematising these.

Development workers, not unlike librarians, at least in our context, are deliverers as well as consumers of information: deliverers of information to their constituency and consumers of

professional information. They are furthermore producers of professional information, i.e. mainly development case studies and reports, relevant for their peers as well as recipients of training and providers of such. The development worker is never imagined as a neutral deliverer of information, however, and this is also made explicit, in the sense that consistently delivery is understood as translation and interpretation. It is furthermore being problematised in relation to information control.

The latter is contained in the way in which the discussion returns time and time again to the issue of relevance and quality of information available on an open access basis. Specifically, quality and also trustworthiness are singled out as problematic with regard to open access, whereas relevance is often related back to the 'developing world' or the 'community'. In particular, there are seen to be insecurities as to who functions as the last instance to vouch for a document's 'truth' and factual accuracy.

The following example quotation contains a brief discussion of the quality of open access resources:

> Which is good OA source or which is bad? I think the OA articles may be good and may be bad. For the news, it is easy, but for the academic articles it seems to be difficult to believe. Yes, it depends on the subjects, which you are looking for and you can check in other sources also such as printed journal and ondiscCD such as [name] has showed us. [E58]

Here the reliability of open access information is being problematised in terms of quality – *good* versus *bad*. It is furthermore extended to include news, yet the problem is seen to lie not with those, but precisely with what used to be the original concern of open access, namely academic articles. It is concluded that open access as such cannot be a guarantor of high quality neither can it necessarily be seen as a sign for low quality. The instance for control is perceived to lie elsewhere, with printed journals and CDs. This is interesting since the problem is constituted as lying with the fact that it is online and free, while reliable information control for new formats still lies with the older, better established and supposedly better known sources, which in turn are not questioned; source criticism and control occurs via other older formats. In fact, this is a very academic way of proceeding.

The problematisation of open access in relation to trustworthiness and quality is a common thread in the debate. The general thrust is that insecurities increase with open access, yet it is the individual reader's responsibility to establish it on a case-to-case basis. However, insecurity and even suspicion is attached to it and generally open access is bound to an increased uncertainty about trustworthiness and consequently a heightened need for such individual judgement. There is a sense that the 'traditional' means of source and form criticism are being challenged with

regard to open access [e.g. E17].

In addition to quality and trustworthiness, the issue of relevance arises throughout. As alluded to above, it is frequently, being connected to the 'developing world' or the 'community'. In this sense, it can be argued that it is also part of the professional role to be able to judge or at least to question relevance of another type of professional information, that which is meant to more directly benefit the 'clients'.

> I must mention here that, as someone mentioned earlier, contexts and relevance of what is being availed for OA should be assessed. A 'copy-and-paste' (for luck of a better word) of development related material from one situation to the other might not work. There are the special issues, that are local to a particular situation that a global or universal approach will not address. [E65]

Here provision of *material* is connected to the question of relevance, which first of all is an issue of concern with regard to open access. It is furthermore connected to a specific situation, that of development, which itself is contained in *development related material.* Thus, development is very much related to its documents and relevance is a question of context. Sure enough, this statement contains an explicit questioning of a universalistic approach to development in which development is seen as something that is merely delivered, often from the outside and regardless of context. However, it also contains an implicit demand for an instance of control over development and over open access.

This can be related to a general insecurity attached to open access in which 'open' is laden not only with 'free to use' and 'free of copyright restrictions', but also 'free to produce and distribute' and 'free of control'. Necessarily, one would assume this to become more problematic the further away the concept of open access is positioned from its original concern with academic articles and the scholarly community. However, as we have seen above it is also directly related to academic publications.

Delivery to the 'constituency' is also discussed in a more direct way, for instance, as follows:

> In regard to the relevance of research, it is the duty of development practitioners to simplify these materials to suit the community they work with.
>
> [...]
>
> For example avian flu is a case in point, when talking to appropriate information. Explaining the avian flu virus, to a layperson could be a difficult task, but different organizations have translated the difficult scientific research and explained to some of their communities to try understand what the threat is about. I think it is a challenge to us development practitioners to urge our organizations, to take information dissemination more seriously so that it is mainstreamed from the grassroots level. Practitioners in capacity building roles,

> should advocate for the mainstreaming of information, so that managers are able to change their mindset hoping that this will feed upwards to policy makers. [E99]

Here, translation is first of all taken to mean simplification. It is part of the development practitioner's job to mediate between contexts and this means translation in the sense of rendering appropriate, making understandable. It is their *duty* to simplify *difficult scientific research* for their 'clients', the *community*. This of course comprises an element of expertise and with it goes control over the sources, the decision of what is relevant and how to simplify and translate it, and finally also how to mediate to the *community* and not who to in this *community*.

However, the extract contains a second assertion with regard to the practitioner's role as a translator, which is closer to that of a spokesperson liaising between different interest groups. They are placed in a hierarchy of information translation from the grassroots via the *practitioner* to *managers* and finally to *policy makers*. Thus, the task of translating and mediating, works in two directions, 'downwards', from science to the *community*, but also 'upwards', from the *grassroots* to government into bureaucratic knowledge. This is visualised as a hierarchical relationship, insofar as the first is understood as simplification, and the latter as *mainstreaming* and *feeding upwards*. A similar hierarchical relationship is also established subsequently, even though in a more decontextualised way:

> The lab-to-land and land-to-lab knowledge transfer would ensure that OA information acquired in the lab-to-lab strategy reaches the intended beneficiaries. There is need however for rigorous information repackaging so that the lab-to-lab information is amenable for grassroots use. [E102]

The understanding of information underlying this statement is one which – as we encountered already earlier – operates within the paradigm of a sender/receiver model, in which, as for instance Olof Sundin (2003, p.171) puts it "information [...] is seen as essentially external facts that the individual prior to information seeking does not have." Translation, which previously was conceptualised as interpretation according to context and as an activity performed by mediators operating within a hierarchy of relations, is here *information repackaging*. This of course has the inverse effect of writing the hierarchical relations out of the text, yet by doing this it also ignores power relations and neglects the situational character of knowledge or information.

In a different vein, strong emphasis is put on collaboration, networking, and sharing, typically between professionals and organisations, but also in a wider context with all parties involved. Consider the following extracts:

> Question can be asked what we are doing to provide OA to the little that we have? However, the issue of collaboration and partnership should be addressed

> when any information is being provided for OA. I believe meaningful collaboration and partnership takes in the needs of the parties involved and strikes a balance on what to work on. [E65]

In another instance it is envisioned as follows:

> Networking among information personnel is one way to bridge the gap. Sharing resources is another way to bridge the gap. [E99]

Both statements identify a lack. In the first case it is by referring to "the little we have", in the second by using the metaphor of a gap. However, while the latter, precisely by using this metaphor, first and foremost establishes a pre-existing problem (cf. Sundin, 2003, p.171) that can be solved by networking, in the first instance we get a different picture. By relating to *collaboration* and *partnership* to establish first what the problem might be in a certain context the perception is widened and it is also more integrative. It can be understood as a move away from a decontextualised and hierarchical understanding of information, which of course also relates back to a decontextualised understanding of development.

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On a more general level, open access is used as entry point to problematise various aspects of information access and distribution which are seen to gain virulence when 'openness' also signifies a lack of control. This can be put in relation to the professional role of development workers, which as we have seen emerges explicitly as a strand in the debate. This role is shaped on the intersection between four communities and their relation to information, that of development organisations (at times also NGOs), that of the constituency, that of science, and that of 'policy makers' or otherwise imagined decision-makers in a hierarchically super-ordinate position. Thus, the notion of information fulfils a discursive role that is much wider than one which understands it mainly as a resource to solve a certain problem.

It is interesting here to consider information's symbolic uses, as for example Olof Sundin (2003) has done with regard to professional information. Professional information is, as Sundin (2003, p.179) maintains, and I think this is evident in the present context as well, "not just used for rationalistic problem solving, but also as a symbolic tool to mediate norms and values". He introduces this perspective specifically in defiance of the simple sender/receiver model typically captured in the so-called conduit metaphor and of a narrow focus on problem solving. In our accounts this symbolic role becomes very obvious, not just with regard to professional information but through the way in which the role of the profession is constituted against various kinds of information and information practices, which are often not even superficially seen to be concerned with 'problem solving'. Rather, emphasis is put on networking, collaboration, sharing,

learning, and educating, as well as on making visible and communicating between arenas. This contains strongly symbolic aspects, which contribute to the shaping of the image of the profession as spokespersons and mediators, but also as instances of control and filtering. This impacts, as we have seen, which types of information or knowledge are privileged and it clearly has bearing on the image of those that are seen to benefit from the professional activities, as well as of course on their relation to each other. This becomes also obvious in the succeeding section, concerned with rural people and how they are constructed and re-constructed as a group.

5.4.3 Rural People and the Lack of Education

While in the previous chapter the main focus was on science, often by relating international science to global knowledge and in turn distinguishing it from local science, here emphasis is more strongly on non-academic types of information resources. This has already become apparent in the discussion papers and we have seen in the two previous sections how open access is seen to be more relevant for information resources lying outside this paradigm; that is, teaching materials as well as resources by and for development organisations. Science is talked about mainly with regard to translation for *local* contexts, adaptation and simplification, often invoking the professional role of the development worker. Provision of open access materials by 'developing countries', i.e. *local* resources, is discussed predominantly with regard to development related materials, that is those produced by development organisations or NGOs – case studies, reports and such like.

However, what is interesting is the construction of the groups constructed as the local people, or more precisely as those groups at whom development efforts, here provision of information or open access materials, are or should be targeted. These are groups of disadvantaged and underprivileged people or peoples, typically described as poor rural people, farmers, nomads, gypsies, pastoralists, natives, and so forth, sometimes also women and girls. Two elements bind them together in our accounts; first, their lack of knowledge or information, and secondly their lack of (formal) education, literacy, or skills.

Describing problems standing in the way for the success of open access in Vietnam, one participant writes:

> Also, we have 70% farmers of our total population, so the professional level in the rural areas is low, especially in mountainous areas. The last one of these many things is the barrier of foreign languages.[E42]

Here talk is not directly about education, but about *professional levels,* yet basically this refers to the same thing, and that is lack of training. Being a farmer is the ultimate 'un-profession', since it is

not something one is typically being trained for in what are considered formal environments. Especially this is the case the further away one gets from the 'centre', the urban areas, and into the *mountains*. Being a farmer, and especially one in more isolated areas, signifies being uneducated, at least in a discourse which reduces education to formal education. Quite often this is captured by reference to low literacy levels, at times also information literacy. While it is most frequently used to describe rural populations, it is at times also extended to pertain to the 'developing world' more generally [e.g. E137, E140] or in one instance to women [e.g. E126]. Yet, it is typically introduced as a property of the *local*, the non-urban, the excluded, the *Other*. As such, it is also being connected to the responsibility of the profession, as it occurs in the following example:

> Many of the pastoralists may not be able to read and write but video resources are used to impart the animal husbandry skills. The extension staff is able to read up and impart information to them in an appropriate manner (in local language). [E99]

Without wanting to be cynical, it is interesting how, in the text at least, the *extension staff* by virtue of their ability to read and produce or at least have access to videos, get to fulfil the role of experts on animal husbandry, while the *pastoralists* – after all by definition people working with animals, – are put in the position of students who are less knowledgeable. This, I would suggest, is a result of the professional discourse which draws on images of the uneducated rural population and introduces a teacher/student relationship between development practitioners and their constituency, a relationship which is never free from hierarchical connections.

In both excerpts reference is also made to foreign languages, as barriers to information access. This, it seems to me, also carries with it, however subtly, the idea that information is something foreign, it comes from the outside, and it needs translation and interpretation by experts before it can gain meaning.

Furthermore, the strong insistence on literacy, as it appears throughout, is also anchored in an oversimplified image of social and cultural change which, it can be argued with Francis Miksa (1992, p.236) suggests a perception of social advancement similar to that found during the nineteenth century , "where the idea of society's upward progress tends to be identical with the growth of the 'West's' dependence on written records for the conduct of social and personal life" (cf. Haider & Bawden, 2007). Since currently the *next* step in "society's upward progress" is use of and dependence on ICTs, it is only understandable that failure to do just this is being taken to signify backwardness. For example, in one email [E61] it is the rural population's persistent failure to be interested in ICTs and their continued preference for oral communication and written text that is constructed as their main deficiency, requiring bureaucratic intervention to

correct them. The following excerpt works on slightly more differentiated, yet still similar lines:

> The grassroots reality in several rural areas is that lot of people are still not very comfortable in reading on the computer screen. They think computer is okay for younger generation. They prefer a printed text and often request the organisers to take a print out and give to them for reading. [E56]

Backwardness is connected to non-use of ICTs and it is a characteristic of the rural population, the older generation admittedly, yet still, rural people. The use of the term *still*, here, without wanting to give in to over-interpretations, could also be read as implying backwardness and it suggests a future change and, in a certain way, also a need for that change to occur.

One notable exception exists to the otherwise quite dominant way in which rural and local populations are constructed primarily as lacking and backwards and that is when indigenous knowledge is invoked. Indigenous knowledge is imagined as something that is an almost essential property of 'developing countries' [E106]. It seems to me that this is anchored in a view that envisions indigenous peoples as somehow *more* traditional, yet here, at first reading at least, *traditional* is an almost positive property. Obviously indigenous knowledge is also, especially more recently, understood as a forgotten knowledge that could and should be incorporated into the body of 'global knowledge' by giving it scientific approval. Specifically this has been the case with regard to knowledge of plants for pharmaceutical uses and there has been increased interest in it in development and other international organisations. For example, the World Bank has initiated a programme entitled "Indigenous Knowledge for Development" already in 1998 (Gorjestani, 2000; World Bank, 1998), the World Intellectual Property Organisation (WIPO) has launched a series of reports on traditional and indigenous knowledge[42], the United Nations Development Program has been concerned with indigenous knowledge (UNDP, 2005), as has the International Council for Science together with UNESCO (ICSU, 2002)[43]. The relation between so-called indigenous knowledge and science is a very complex one, as is its relationship with the dominant intellectual property regimes. However, the, admittedly somewhat simplified, yet still general argument is based on the idea that indigenous knowledge is *something* poor, local people, more *traditional* people and peoples have as part of their culture. However, in order for it to be really useful for their development, it first needs to pass through the processes of scientific approval so it can then be fed back to them through development institutions to help them 'develop' or

42 WIPO: Tradition knowledge and cultural expressions, URL: http://www.wipo.int/freepublications/en/index.jsp?cat=tk [April 8, 2008]

43 I am grateful to Karolina Lindh for bringing these programmes to my attention.

overcome poverty or however else reform is imagined. It is in any case curious that these knowledges which were previously constructed as the barrier to development now are seen to be its enablers. However, almost paradoxically, while the emergence of indigenous, or often traditional, knowledge in development parlance points to a shift away from a solely technology oriented paradigm, the way in which it is constructed – in a very *orientalist* manner – also re-enforces simple dichotomies. It builds on a homogenisation of these knowledges, which are of course as different as they can be (cf. Agrawal, 2004).

In the words of Stephen Marglin (1996, p.227):

> In the encounter of modern knowledge with itk [indigenous and traditional knowledge], the real danger is not that modern knowledge will appropriate itk, but that it will do so only partially and will return this partial knowledge to the cultivator as the solid core of truth extracted from a web of superstition and false belief.

In the emails posted to the "open access and information for development" list, the idea of indigenous knowledge is not at the centre, yet it appears and when it comes up, it does that precisely as an essential property of the poor and of 'developing countries' [E106] and also as needing to go through the system of expert, i.e. scientific, endorsement to be incorporated and given the stamp of approval. In the following example this is achieved by talking about knowledges as systems to be integrated with each other:

> While the land-to-lab transfer also allows for the immediate feedback on the suitability and usefulness of this information to local condition and indigenous knowledge systems. The latter would ensure that the local indigenous knowledge systems are incorporated into the OA via such feedback loops. The lab technocrats invariably become the immediate team of translators in the information repackaging cycle where the OA information is targeted for local beneficiaries. [E102]

Ultimately, it is the scientist (*lab technocrats*) who are the *information re-packers* and who assure that the system of feeds and loops works. They are the only active subjects here, the second group of people, presumably the 'source' of this *indigenous knowledge*, the *local beneficiaries* appear as *targets*.

The notion of indigenous knowledge is one of the more recent additions to the repertoire of development, yet it is set within one of the oldest strata of its discourse system, rural development. Thus, invoking peasants, farmers, or the rural population more generally in the context of development is much more than merely identifying a group. It is, I suggest, a way to indicate a position within development discourse.

It is interesting here to return to Arturo Escobar's (1995a) account of the discursive creation of the 'third world'. The development apparatus functions, as he points out, to a considerable degree by creating or 'discovering' new target groups as "abnormalities" (Escobar, 1995a, p.41) and applying labels to them. As Escobar argues, when describing the historical processes of how development discourse came into being as a professional project of, amongst other things, labelling, constructions of rural populations emerged from the earliest days onwards:

> The constitution of peasantry as a persistent client category for development programs was associated with a broad range of economic, political, cultural, and discursive processes. It rested on the ability of the development apparatus systematically to create client categories such as the 'malnourished', 'small farmers', 'landless laborers', 'lactating women', and the like which allow institutions to distribute socially individuals and populations in ways consistent with the creation and reproduction of modern capitalist relations. Discourses of hunger and rural development mediate and organize the constitution of peasantry as producers or as elements to be displaced in the order of things. (Escobar, 1995a, pp.106-107)

Especially as in the 1970s problems with the industrialisation of agriculture during the time of the so-called Green Revolution became apparent – failure to produce locally needed grains, displacement of populations, or environmental damage – 'small farmers' and a whole host of subcategories emerged as a favoured clientèle and attention to rural development became state of the art. As a result, peasantry and the rural population have become, and have stayed, persistent categories in development discourse, constructed through relations between developers and those to be developed, i.e. modernised, and through an apparatus of texts, practices, and bureaucratic knowledges (Escobar, 1995a, pp.103 et seq.). They have, as we can see in our own texts, managed to maintain this position and they continue to be imagined along the coordinates of backwards vs. modern and literate vs. uneducated, which were originally employed to position them. In the words of Arturo Escobar (1995a, p.162):

> The rural development discourse repeats the same relations that have defined development discourse since its emergence: the fact that development is about growth, about capital, about technology, about becoming modern. Nothing else. [...] The persistence of such a monotonous discourse is precisely what is most puzzling.

Obviously, by now the various categories of rural populations are established ones and what we see, I suggest, is less an active process of construction, but more a process of re-production or of maintenance. Sure enough, construction never ends and reproducing discourse is also a part of constructing it, yet it takes different forms depending on when in a historical process it occurs and of course it also takes a different shape depending on who reproduces and where the reproduction occurs. At the same time, using categories like farmers, peasants, nomads, mountain people, pastoralists, and so forth today and connecting these to illiteracy, lack of skills, or other

deficiencies to be reformed, is first and foremost a way to signal development discourse. Here it helps to remember once more Michel Pêcheux's (1982) conceptualisation of how elements with pre-established meanings travel between and within discourses. This can here be imagined as akin to using building blocks and constructing a slightly different, but in the end pre-fabricated argument which is so well established that its basic foundations and *design principles* will not be doubted.

Clearly, it is not entirely one-dimensional and the emerging picture is a complex one. First, obviously, if the focus lies chiefly with access to ICTs and information is seen as resulting from being connected to these, then clearly people who are not connected have no information. The more so, since open access of course depends on access to the internet and it is thus understandable that availability of ICT is being discussed. However, it is still interesting that such a narrow understanding of information gets to hold such a strong position in particular so when it comes to the 'clients' of development activities. Especially since we have seen that a much more diversified and contextualised notion is also present, yet this is mainly reserved for the practitioners' information activities. Secondly, 'rural' people, as I have argued drawing largely on Arturo Escobar's (1995a) work, emerge also as a construction from the specific constellations within development discourse.

This discursive system has been at the centre throughout large parts of this thesis. It is also the system from which most of the analysed texts have drawn their main arguments and in whose terms the "open access and information for development" email debate is couched. Yet, during this debate, a meta-debate precisely about development discourse was also led – sometimes implicit, sometimes explicit –, and strong criticism has been voiced with regard to its regime of representation. This occurred in ways which were sometimes conflicting, and it certainly adds a layer which shows just how multi-dimensional the issue is. We will concern ourselves in the next section with anti-developmentalism as it emerged as a procedure predominantly in relation to developmentalism. This will also leads us back to the idea of counter-discourse as established against dominant discourse which we discussed in chapter two.

5.4.4 Developmentalism and Anti-Developmentalism

In terms of language, one observation seems particularly striking. As I suggested in the previous section, certain issues appear almost like ready-made building blocks in the postings. Escobar (1995a) pointed to the curiously unchanging nature of discursive practice in development discourse and it seems that this is exactly what we are seeing here. Frozen elements of the development discourse repertoire are arranged in ways that, at least at first glance, appear to

signify just that: 'development talk'.

Moreover, the postings oscillate strongly between, on the one hand, expressions of untainted belief in development and open access' positive role in it and, on the other hand, of disillusionment or even frustration. Rather unsurprisingly allusions to grand concepts of hope and to the dominant images of development discourse provide much of the framework for the debate as they do for the official petitions, mission statements of the open access movement as well as the more general literature concerned with open access and the 'developing world'. Staples like rural people, the illiterate, hunger, malnourishment, gaps, barriers, civil war, poverty and so forth appear throughout. Furthermore, there is a sense of alienation or disappointment with regard to development and at times also open access' role in it. This becomes for example apparent in the following excerpt:

> Will this actually happen with the kind of conditions the 'development partners' put even for resumption of talks on critical issues that affect the developing countries? Aren't we going to see another collapse of a noble idea like the WTO talks? [E65]

This was posted in reply to an email which positions open access as an issue of critical interest for the 'developing world' from which it however might yet again be excluded [E58]. In the extract above open access is understood as yet another 'solution' in a long chain which all have failed to deliver what they set out to do. Clear criticism of the development apparatus and its politics is expressed and a sense of 'we have been there before' is established. This does not challenge development as such, yet it certainly is highly critical of its expression in bureaucratic processes which *collapse* and do not fulfil, and as something which is dictated from the outside, by *development partners*. It is also a criticism of the way in which open access is construed as yet another tool of development.

In other instances, the 'developing world' or the 'third world' is imagined as a fixed entity, a homogeneous block, at times its inhabitants are described as consumed with the bare essentials of survival, which makes open access a somewhat illusory or meaningless proposition [e.g. E72]. Often the depiction relies on the negative stereotypical representations all too well known, however in other instances positive constructions are attempted. Then again there are moments when stereotypical representations are actively defied. A strong tendency exists to insist on the 'developing world's' otherness. However, how this is attempted, specifically how the *positive* against which the demarcation takes place is implicitly positioned varies considerably. It is not achieved in a consistent or streamlined way, but it is almost pieced together by using elements from different repertoires; for example, by drawing on the staples of development discourse at the same time as introducing other elements, like being more inclined to sharing [E19], or being

less profit oriented [E18]. Sure enough, none of this is particularly surprising, what is interesting however, is the way in which the various constructions conflict and co-occur. It would certainly be too simple and also arrogant to dismiss these strategies and cast them aside as either 'naive' or as merely reproducing hegemonic discourse. There are different facets to it and it relates closely to a number of relevant issues, not least, it aids to establishing an identity. Being from the 'developing world' or the 'third world' clearly also presents a form of positive identification, even though the terms as such and in their history are fundamentally negative ones.

Furthermore, the way in which the language of development is frequently used in a manner which reduces it to signify just that, namely 'development talk', has an important function in and of itself. It is a way to talk in a manner that in certain arenas and certainly in popular discourse by and large needs no further justification. It is moreover part of a professional discourse, and as such it has, I think, a strongly *pragmatic* component. To be precise, it has its roots in the practice of labelling that has been foundational to the development project from its onset. And, as Escobar (1995a, p.110) maintains,

> [l]abels determine access to resources, so that people must adjust to such categorization to be successful in their dealings with the institution.

However, at the same time, as he goes on to say (ibid.):

> Labels are invented by organizations on an ongoing basis, as part of an apparently rational process that is essentially political. Although the whole process has at times devastating effects on the labeled groups - through stereotyping, normalizing, fragmentation of people's experience, disorganization of the poor - it also implies the possibility of counterlabeling [...] as part of democratization and debureaucratization of institutions and knowledge.

Both these observations are acutely relevant for what we see in our context. First of all, speaking about the 'developing world' and all the shortcomings which constitute it, is for some of those who do the talking not just a way to name facts, to point to material restraints, or to express compassion, it is also a way to talk with and within organisations and not least to address funding bodies and to be understood. Yet secondly, it is also clear that by now development discourse has been criticised for a considerable amount of time. Part of this has filtered back into the development apparatus, changing it in the process, but also legitimising it further, not least by adding new schools and further sub-categories or 'clients', most prominently perhaps, women. Granted, this is a cynical view, abdicating even, and there is something more to it. And that is, I believe, a serious and lived frustration with the 'development apparatus' and its violent regime of representation which expresses itself also in positive attempts at counter-labelling and at constructing a counter-discourse. Thus, both, labelling and counter-labelling are happening simultaneously and they are, more or less expressedly strategic, political processes.

We see this in the "open access and information for development" mailing list mainly in three co-occurrences, all already hinted at; firstly, positive and negative labelling of the 'developing world'; secondly, expressions of grand hopes that are displaced by pronouncements of disappointment and frustration; and finally, and most acutely and interestingly, in the construction of two speaking group identities, a 'we from the developing world' and the 'we' of the professional development practitioners. We have already concerned ourselves with the latter to some degree in the previous section, yet there is another aspect to it which was not considered above. Namely that those who are speaking in their professional roles here, at times also speak as those to be 'developed', and who have to come to terms with being described almost exclusively as inversions of an ideal defined elsewhere. They have to establish a position from which to speak and to be understood.

A significant proportion of emails came from participants apparently resident in the very countries usually described as 'developing countries'. Most importantly, the senders also identify themselves as such. There is a distinct need, it seems, to carve out a 'developing country' position, or perhaps more precisely, positions. This is done by introducing a 'we' that speaks and that identifies itself *as* 'from the developing world' [e.g. E18, E25, E26, E72].

This is interesting in and of itself. However, these positions also tell us something about the different conceptions of the 'developing world' drawn on and shaped here and which, as I suggest, contain an interesting conflict. On the one hand, phrases like 'we from the developing world', suggest the existence of a group essentially constructed around a paradigm of deficiency. Most importantly, it affirms conceptions of 'the developing world' as one homogeneous block, a strategy that has been criticised countless times precisely, but not only, by actors from the regions described as such. On the other hand however, the fact that it is still used and appropriated and that undeniably such a phrase also contains a powerful element of positive identification cannot simply be dismissed as unreflective or as resulting from a lack of awareness of critical reflection happening elsewhere. Rather, these statements need to be read as part of a negotiation that aims at constructing a collective identity which is a positive one, but which still acknowledges the matter of exclusion, or put bluntly the uneven distribution of resources.

This is largely in accordance with what we observed about labelling practice before. It also tends to follow certain patterns. The classical metaphors of gaps, divides, backwardness, and similar are employed throughout. At times, it appears as if a list of boxes with typical characteristics of development discourse was ticked. Granted, this is not always the case and explicit expressions of unease with and even strong criticism of stereotypical representations do exist. Yet, the presence of such a tendency cannot be denied and it is interesting to try and come to terms with its effects.

Specifically, the manner in which the pre-built elements are used, almost like building blocks which can be re-arranged, tells us a lot about status and position development discourse has reached; meaningless and meaningful at the same time.

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A certain, curiously homogeneous and even monotonous way of representing development and the 'developing world' does indeed exist and it is also drawn upon here. Most interestingly, this procedure can also be found in expressions of resistance to simple reductionist images of poverty and destitution. Not infrequently, and this is perhaps the most striking aspect, criticism – at times full of anger and disappointment – is expressed in a way that affirms development, at least as an idea or as a hope. Furthermore, it affirms the dichotomy of 'they' and 'us', 'we' and 'them', or of distance in time upon which the concept is built. The strategy is a very curious one that pertains to an almost schizophrenic position, and one that is affirmative as well as subversive at the same time.

For example, in one posting [E60], which introduces precisely the 'we from the third world', the binary opposition between the 'developed' and the 'developing' is upheld, at the same time as anger is expressed by describing the usual relationship between those two as one of exclusion and alienation and one which is based on arrogant ideas dictated by the 'developed countries'. This expression of concern contains two distinct elements which need to be distinguished. Firstly, a positive identification is contained in a phrase like 'we from the third world' and this is closely related to criticism of the usual situation which is one of perpetual disappointment, put simply 'development does not seem to work'. Secondly however, in the same email, this is strangely interfered with by the way in which the positive identification is backed up by expressing the hope of giving 'the third world' an opportunity to raise to the level of the 'developed world'. The imagery employed is one of 'coming up' and one which connotes suppression, and in doing so it also advances the idea of an hierarchical relationship between two entities, one subservient to the other. This relationship is further confirmed, when the hope to rise in status is seen as dependent on being given the opportunity to do so by those already on top. Thus, a norm or an 'ideal' is created and it is that of the 'developed country'. Paradoxically, criticism of development practice in essence affirms the status quo through the use of images which advance and also justify powerlessness and passivity.

Expressions of alienation and exclusion recur throughout the debate. It seems to me that these expressions play a significant role in the process of constructing a group identity, in particular when they are connected to a speaking we. It is a strategy, which on the one hand, is underpinned

by the idea of there being an 'inner circle', to which one could and should gain access, but is hindered to do so by various barriers which lie either with the excluded – for instance language [e.g.E42, E92, E96] – or with those on the 'inside'. The latter is sometimes expressed in very strong words, and in one instance the relationship between the 'developing' and the 'developed world' is described as one of enslavement [E84].

On the other hand, it is closely related to defining exclusion in a positive sense, in other words establishing a sense of otherness; yet one that accepts difference and aims at finding a positive form of identification by claiming back the otherness of the 'developing world' and assigning it positive traits. This is of course never a clear-cut situation and not infrequently these positive characteristics can also contain stereotypical elements. This is for instance the case when certain traits are applied in a way which, yet again, conceptualises the 'developing world' as one homogeneous block. It is also present in mirroring images of the 'developing world' as, for example, more inclined to sharing [E19]. Yet, having said that, I would still like to suggest that this inverted form of alienation or self-affirming exclusion is an important element in establishing a positive sense of belonging and group identity. It is however founded on a conflict between reproducing discourse and subverting it.

This conflict can be found throughout and it is perhaps most striking, but of course also most complex, when the language of development is critically reflected upon, that is when the debate is raised to a meta-level. One of the most interesting positions in this context is related to a strongly critical attitude towards images, mostly media images, of the 'underdeveloped'. Representations of the 'developing world' by referring to what are considered debasing images are criticised strongly [e.g.E25, E30, E34, E40]. However, continuously while this criticism is expressed, this is also done in ways that are often affirmative of the power relations contained in the binary opposition of 'first' and 'third world', 'developed' and 'developing', 'North' and 'South'.

In part this conflict is grounded in the way in which the identities of professional development workers collide with the identity derived from being from the 'developing world'. This is for instance contained in one message [E25], in which the images used in the media to represent the 'third world' are very vocally criticised and described as embarrassing for 'us from the third world'. Yet the author simultaneously puts himself in a position – and also questions it – complicit in producing the humiliating representations as part of his professional role as helper, primarily in order to attract funds.

In another posting, in reply to the message just discussed, the role of the development worker in relation to the media's representation is taken a step further:

> This is an interesting turn of issues. Personally, I have always felt the same....in the saturated world of CNN, Sky, BBC. I think it now our challenge as information professionals in the world of development. How do I highlight the positive?
> Back to my training experiences, the first day in class we go through "what governs our information world at present?" - of course time and time again we conclude there is an imbalance. By the end of the session, we usually go home convinced that we need to begin with the first step. That first step is documenting within our own organisations - what do we do? And we should make the media notice. I know development news does not sell. But organisations like Africa Women and Child feature service, highlights development issues and their news gets carried in the mainstream media. [E40]

Here, the role of the development professional gets to hold an interesting position with regard to development. It is extended to include translation not only within the apparatus, but also outside, to the *mainstream media*. This contains one of the most striking conflicts the profession and alas development itself is confronted with. That is, to justify its continued existence, it relies to a large extent on a labelling practice that is based on naming deficiencies, lacks, failures, shortcomings, and so forth, yet at the same time it needs positive representations, i.e. successes. Thus, here *highlighting the positive* means less a positive representation of those that are marginalised, but of the successes of development, of their reform so to speak. This, in particular when read together with the previous statement, underlies much of the problem of development, the organisational, professional side of it, but also that which has become the common-sense way of referring to it in popular discourse, as well as by those trying to speak *as* 'from the developing world'. In essence, development can never be fulfilled.

We will consider how this can be interpreted in relation to identity construction in the subsequent section, in which I will try to widen the perspective, specifically in terms of the Foucauldian understanding of discourse that has so far guided my interpretation. We will also look at the metaphor which can be interpreted as the guiding one for the discussion that took place on the "open access and information for development" mailing list, namely that of the barrier.

5.5 Conclusions: Barriers and Identities

The issues raised in the debate are very wide. As we have seen, the topics mentioned range from rural illiteracy to distance education, and from civil war and censorship to power failures and development workers' information requirements, to name just a few. Issues that are typically associated with the open access debates and which usually prevail in much of the literature when it is not concerned with the 'developing world', such as the different ways to achieve open access

or the attitudes of publishing houses, are considered only peripherally.

The most dominant thread uniting them is talk of barriers and of lacks, language barriers, or inadequate literacy levels, or censorship, mentioning just some. While talk of barriers is a uniting theme, what it is that is being blocked by these barriers is less clearly spelled out and often remains a blank to be filled. Yet, this is also where different positions can be made out most clearly. At which level problematisations occurs and where barriers are seen to lie can be related to different positions on information, on science, on open access and also of perceptions of 'information needs' and of the possibility of development. Put bluntly, the barriers are seen to be technological, individual, or social. They are cause or consequence of being 'less developed'. They are positioned as pre-dating or post-dating information, for instance they might be seen to lie in its delivery, in its mediation, or in its interpretation. This not only has bearing on the understanding of information or of development, but subsequently also on what are considered 'information needs', or, albeit to a lesser degree, what constitutes development.

On a more detailed level, four barriers can be distinguished: (1) technological barriers, (2) the 'developed world' and the development apparatus, (3) the people, (4) government or politicians of the 'developing countries'.

The single most discussed issue concerns the infrastructure, whereas this extends to discussions about internet access, electricity and power failures, server maintenance, or simply the availability of computers. Open access is linked, as we have seen, more strongly to ICTs, specifically the internet, than to science. This is one area in which it is problematised, in its relation to technology, its technology dependence, and less in its connection with science.

A further area in which open access is being problematised is in relation to development. This happens in two ways. Either it is seen as inserted into the development apparatus, as providing yet another 'solution' in a long line which all failed to 'deliver', or concerning the types of materials available on an open access basis and also with regard to quality and suitability of these materials and in turn of their control. Furthermore, the 'developed world' is construed as a barrier, in the sense that it is seen as having a strong role to play in letting the 'less developed' into the club, yet somehow does not fulfil this role. Less frequently but still, this aspect is also contained in the way in which publishers and rarely scientists, both by default associated with the 'developed world', refuse to provide access to their materials.

As we have seen with regard to construction and reproduction of rural people as the key clientele for development, these are also constructed in a manner that shapes them as their own barriers. Frequently this is connected to the issues of language and education, of which they lack the 'right'

kind to be able to fully benefit from the materials intended to deliver their reform and betterment. It is also contained in the way in which they are localised in isolated and remote areas, which in of itself is seen to constitute a barrier to access and thus to the possibility of development.

Governments and politicians of the 'developing world' emerge as further barriers to participation and to the promise of development. This is because they are either seen to refuse to recognize the relevance of ICT infrastructure and to provide funds to install and maintain it, or because of censorship and political restrictions to information access and distribution.

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Thus, while in the previous chapter the image of the divide emerged as the key metaphor under girding the texts, here talk of barriers comes to the fore. Sure enough, the picture is not entirely clear-cut and barriers were present also in the material analysed for the previous chapter. For example, the *Budapest Open Access Initiative* calls for a removal of barriers to open access. Then again, divides and gaps feature in the "open access and information for development" mailing list as well, very similar to what we have seen before. We have encountered a number of examples throughout, not least the way in which the 'digital divide' is introduced. Yet, at the same time, as I have just outlined, the notion of the barrier features strongly and in doing so it adds a feature which, I suggest, substantially changes the shape of the discourse. As a topos, the barrier is a lot less popularised and it does not have as prominent representatives as the 'digital divide' or the 'knowledge gap'. In some ways it operates quite similarly in that it tends to construct binary opposition, yet it carries with it one important characteristic that makes it fundamentally different from the image of the divide. While divides can be bridged, barriers need to be removed and this calls for an entirely different set of assumptions. Divides and gaps occur, they happen, barriers on the other hand are largely voluntary constructions, defensive or offensive, or both. This is fundamental to the way in which the identity of those speaking as from the 'developing world' is shaped and it is central to the expression of criticism, frustration, and also anger that we encountered, vis-à-vis, the 'developed countries', the development apparatus, or governments and politicians in 'developing countries'. It is a lot less diffuse and much more directed towards concrete instances, people, countries, or organisations. In turn, this also makes the identities of those doing the speaking 'as' a lot less abstract and this is where we encounter a fundamental problem with relation to the Foucauldian understanding of the subject as a result of discourse. 'Speaking as', as Spivak (1993, p.194) reminds us also, always involves a considerable a amount of role-play, since "it involves a distancing from oneself".

> There are many subject positions which one must inhabit; one is not just one thing. That is when a political consciousness comes in. So that in fact, for the person doing the 'speaking as' something, it is a problem of distancing from one's self, whatever that self might be. But when the cardcarrying listeners, the hegemonic people, the dominant people, talk about listening to someone 'speaking as' something or the other, I think *there* one encounters a problem. When *they* want to hear an Indian speaking as an Indian, a Third World woman speaking as a Third World woman, they cover over the fact that they are allowed to possess, into a kind of homogenization. (Spivak, 1993, p.195, emphasis in original)

Hence, 'speaking as' is always also a *play,* and conscious engagement with generalisation and homogenisation, it is a "slogan", as Spivak (1993, p.194) calls it, and it wants to be listened to. This need for self-distancing and political consciousness is particularly manifest when we consider how development, as we have seen, in the previous section, functions as an extremely unchanging regime of representation and one that carries with it its own constant failure, i.e. it never actually occurs, yet it still provides for a form of identification as well as constant repetition.

It seems that here, when we consider the continuous deferral of fulfilment which constitutes such a fundamental part of development and also how the two collective identities collude and conflict, we have reached a point, where it is necessary to widen our conception of discourse, specifically in relation to the subject which in a Foucauldian framework is always understood as the result of discourse. In particular this is necessary to be able to make sense of the voices of those identifying themselves 'as underdeveloped' and to relate them to those that claim to be doing the 'developing', specifically when, as it happens here, they co-occur. Also, this can enable a different way of understanding how, after almost six decades of non-delivery and of actual and at times brutal failures; development is capable of continuing to be such an attractive proposition.

Sure enough, what we have seen contains a strong element of reproducing discourse, yet at the same time there is also a strong sense of resistance, and counter-discourse, which can also be understood within the Foucauldian framework, yet only up to a point. More precisely, it seems that the Foucauldian theories work well when trying to trace specific discursive changes in regimes of representation as well as when investigating a moment in a discursive regime, and this is what we have done. Yet there are limitations when we attempt to come to terms with a system which is so unchanging over time that it becomes its own relic, as development discourse has done. In other words, with Foucault and his concept of discourse and the power knowledge link we can understand what and we see how, but in these instances we cannot come really any closer to why.

Here we have to return to the concept of governmentality, that is the technologies, discursive and

otherwise, of government or governing, in other words the study of who governs, who is governed, how this relationship is legitimised and sustained, and the manifold levels on which this occurs. This is very useful if we, with Foucault, consider power as relational and as having to continuously repeat itself and re-negotiate its expression, rather than as an absolute and dominating force that is merely 'used' to exercise control. In this way, as we have also seen, resistance is inscribed into governance, it is part of power. This also allows us to take resistance more seriously, in the sense that it becomes a real possibility that can work on a diffused level throughout the various relations that constitute the networks of power. The way in which the development professionals' identities, shaped within this apparatus, collide and conflict with their identity as those that are acted upon and shaped by development's instruments is a good example of this – almost too good –, as is the way in which development's regime of representation is continuously being deposed of and reaffirmed simultaneously. At the same time, while the concept of governmentality, successfully allows us to see these relational aspects of power through making visible its discursive technologies, there are also certain limitations to it. Quite simply, it comes down to the question, why and how can this actually happen? How is it that development never fails, although, ironically, it continuously does precisely that; it fails? This, it seems, cannot be understood easily within the framework of discourse and governmentality. The reason seems to lie with the way in which the subject is conceptualised as non-intentional and as a product of discourse. At least insofar as the marginalised, and their positioning, are concerned this poses real problems for understanding, if we want to take them seriously and not just see them as willingly compliant. Thus, I think, while it makes sense to keep true to the idea of power as distributed and of the relation between power and knowledge, it is also seems useful here to step back from this Foucauldian conception of the subject and to try introduce a further perspective.

Development and more specifically the 'development apparatus' can also, as Pieter De Vries (2007) does, and I think fruitfully so, be considered as a 'desiring machine', one that produces hope, yet always delays its fulfilment. He does this within a Lacanian/Deleuzian framework, specifically moving away from the Foucauldian notion of governmentality towards one that takes the subject's consciousness and desires more seriously, even though the subject is always one of a lack, or precisely because of that.

> The fantasies of development give raise to a subject that identifies herself in terms of that which she is not. Accordingly this 'lack in the subject' transforms itself into a 'subject of lack'. The subject of development is a de-centred subject, in the precise sense that she is subject to endless desires that originate outside her [...] And it is this radical decentredness as a 'subject of lack' that produces a desiring subject who keeps searching for what is in development more than itself; in other words for the 'promise of development'. (De Vries, 2007, p.33)

It is never the aim of development to deliver, to fulfil its promises, at least not all of them, always, but to sustain an aspiration. Therefore, in certain ways, continuing to move within the seemingly fossilised fragments of 'development discourse' can also be read as a refusal to give up hope for a better society and a different life, even if it means to conspire with a hegemonic and largely violent regime of representation. And this refusal is an active one and one which persists, despite all the failures of development and its arrogance, and of all the criticism unleashed against it. Sure enough, such a reading of development has consequences for how we see the apparatus and its working. Specifically, it impacts on those speaking as from the 'developing world' and it certainly contributes to understanding how such an, at first glance, almost schizophrenic positioning occurs and why.

The idea of envisioning development as a desiring machine, almost ironically, stems in fact from James Ferguson (1990), whose work on the anti-politics machine was one of the first and certainly most influential to consider development from a Foucauldian perspective as a discursive regime, whose most consequential effects always tend to be incongruent with those that were stated as intended. Ferguson however, while introducing the concept, did not develop it further. Yet, this perspective has a lot to say for it. Within it, we can, perhaps not understand, but come closer to appreciating why this is happening. The question is posed and answered by De Vries followingly:

> Development thus points to a utopian element that is always already out of place. Since it is constitutively impossible, it functions as its own critique. The question to be answered therefore is why people in the Third World persist in desiring development in spite of all its failures. My answer to this question is that the desire for development fills the gap between the promise and their meager actual realisations [...]. (De Vries, 2007, p.30)

Perhaps the reason why this becomes so obviously acute in our context has to do with the way in which identities collide, that is those who reproduce and shape hegemonic discourse are at the same time those who have to come to terms with its effects on their own subject positions. In this perspective, that takes seriously the hope vested in development despite everything, the way in which criticism tends to be affirmative of that which is questioned and the manner in which the identity of a group emerges primarily constructed around a lack makes a lot more sense. It is not only a way to speak within an organisation, to juggle ready-made pieces of discourse, and to address bureaucracy and potential funders – although of course it is all these –, it is also and very importantly an acknowledgement that there are in fact scandalous inequalities and a refusal to give up hope to address these.

I will in the next and concluding chapter propose a reading of open access that positions it

precisely in this desiring machine. However, I will also draw the attention to a possible way for open access to break out of the trap that it also is, while not giving up the hope it creates and sustains.

6 CONCLUSIONS: OPEN ACCESS AND CLOSED DISCOURSES

Open access is a highly adaptable term and in many ways it is also very malleable. It fits neatly into different contexts and can be charged with different meanings. Open access, as Joseph Esposito (2004) puts it, "promises to be all things to all people". Despite the fact that it has a specific history and clear roots within science and scholarly communication, it also forms an ideal projection screen for dispersed sets of ideas which might be anchored in entirely different areas. My focus is on open access in its relation to the 'developing world'. This is a connection it entered already in its early days and which has continued to be influential ever since. I tried to consider this connection mainly from the perspective provided by post-development studies and with a strong focus on discourse and language practice, specifically also with a view to how an already established discursive formation can function as a tool to legitimise speaking and authorise certain positions, including positions of resistance to its regime of representation. Most of all I was trying to show, with Foucault (1972a, p.209),

> that to speak is to do something – something other than to express what one thinks; and something other than to play with the structures of a language [...]; to show that to add a statement to a pre-existing series of statements is to perform a complicated and costly gesture.

In order to bring these gestures and their consequences to the surface, I concentrated on making visible a number of discursive procedures that underpin the connection between open access and the 'developing world'. In this context certain perceptions of development itself, of knowledge and science, as well as of information and technology emerged as influential. The following few pages are concerned with providing a sum-up of these procedures and concepts as well as conceptual ties and what they mean for the present of open access and could mean for its future.

I will begin by considering the key notions capitalised on and advanced in the texts I analysed, specifically with a view to their discursive resources and effects. I will also draw the attention to the influential position development apparatus and its stakeholders hold and how their interests shape the discourse. This will be followed by an attempt to establish a sense of future for open access,

specifically in its relation to the 'developing world', before moving on to providing a short outlook considering issues possibly interesting for future research.

6.1 Discursive Resources and Effects: Re-enforcing Oppositions

Open access in its relation to the 'developing world' emerges as a development 'problem' in itself, as a measure of development and also as a tool for development, that is as one solution in a long series that went before it to deliver knowledge to the 'developing world'. It furthermore emerges tied to a whole set of ideas about development itself and what it means to be developed or developing as well as to specific conceptions of knowledge and information. Mostly these adhere to the idea of (scientific) information as neutral facts, easily transferable between different contexts, and which is more often than not based on techno-centric and also economy-centric understandings not only of information, but also of communication, and societal change in which technology is the "driving force of history" (Marx & Smith, 1994, p.x) and the economy is its measure. As such, it is anchored in a long-standing discourse of development as growth, predominantly economic growth, through technology transfer; a discourse which is fundamentally based on defining a deficient *Other* which needs to be reformed. Importantly, as I show in chapter three, this is a discursive system which has part of its roots in the quite violent discourse of colonialism as well as in 19th century ideas of pauperism and philanthropy, and not least in cold war politics, but more recently also in economic globalisation.

At the same time of course, open access is also founded on the intention to re-install more strongly one of the central, and potentially *pro-democratic*, tenets of science; that is that the results of research be publicly available. This means it is also founded on the idea of resistance to current inequalities stemming from restrictive intellectual property regimes and of course also on the intention to redress the very inequalities colonialism and also science were complicit in causing. These are the centralisation (and 'scientification') of knowledge resources and the exclusion of periphery perspectives as well as in the course the way in which costs and benefits of science tend to be distributed unequally and in the interest of those that are already privileged. However, while this is acutely relevant, it is rarely made explicit, and one reason for that, I suggest, lies with the way in which the issue is framed and which tends to work in accordance with development discourse. Specifically it complies with it in one very important way and that is its *forgetfulness* which constantly allows for similar lines of reasoning to be seen as relatively recent recognitions. This forgetfulness applies to at least two instances, namely the relation with development discourse itself, in which

open access is situated in a tradition of science and technology transfer that can be traced back at least to the early post-war years and secondly in its relation with the history of colonial and concurrently scientific expansion more generally. Both issues tend to be repressed, at least as far as the main thrust of the narrative goes. Specifically the history of the 'developing world' is written, if at all, as one of exclusion from the *real* history of Europe and in which the 'developing world' had the 'misfortune' of not participating, something which ICTs in general and open access in particular will be able to redress by providing the means to be connected, so the argument goes.

This being said, of course critical considerations on both issues appear, yet the do so only marginally. Considerations of the colonial past of most 'developing countries' exist and certainly we have seen how the failures of development to deliver are being problematised. We have seen this particularly in the preceding chapter, where more critical voices added a further layer of reflection, not least in relation to those who see themselves as the targets of development's labelling practice and where open access is very well criticised for its attachment to development discourse as yet another external solution that will probably not fulfil its promise, precisely because it is an external solution. This contains also a critical reflection on the very forgetfulness of development discourse and which, as we have seen, underpins so much of the connection that is introduced between open access and development.

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The main support for most of the procedures identified stems from mainstream development thinking and its apparatus. This happens in two ways. Firstly, it provides the frame of reference and the building blocks with which to structure the arguments and against which to lean to authorise speaking; and of course also, albeit to a lesser degree, against which to resist. Secondly, it is also present as a stakeholder itself, not least by providing forums for the debates take to place in, as is the case with the "open access and information for development" mailing list, but also a great number of articles are, as we have seen, published on a website funded by large development organisations.

Hence, what becomes apparent, I think, is that the notion of development, which provides for the main support and which is also perpetuated is largely one which concurs with that provided by mainstream development thinking and which understands development and also progress as economic growth or growth more generally. It is also one which works chiefly on the lines of temporal distancing and which supports the narrative of development as evolutionary progress through stages. In this sense, open access is inscribed into development, not only as a development issue that allows for knowledge and instruments for knowledge creation to be transferred as external solutions, but also open access becomes itself a measure of progress.

Yet, what is most intriguing, it seems to me, is the way in which ruptures occur, and when unease with the dominant development paradigm filter through. This is most apparent in cases where the definition of what a 'developing country' might be in the first place and how to circumscribe it is turned into a problem, often giving way to omissions or conflation of different concepts, and also when the debate is raised to a meta-level and the imagery used to describe the 'developing world' are criticised precisely for its violence and focus on deficiencies. Thus, while a great deal of the narrative is built within the well-worn paths of development discourse and affirmative of it, the recourse to this discursive system, probably precisely because it is so well established and rigid, also shows strains in many places. There is, in short, a sense of unease with its limitations and limiting ways of presenting the world, yet only rarely does this give way to an explicit problematisation.

Similar conflicts and strains are also present in relation to what constitutes knowledge and whose knowledge we are talking about. Sure enough, the main concept of knowledge that emerges is one which to a large degree equates knowledge with science, or more precisely 'western' science and furthermore with financial resources. This stems not the least from the fact that organisations behind open access are also academies of science, scientific publishers, and other scientific organisations. However, in the relation between local and global science as well as local and global knowledge and how to delineate them as well as how to refer to other cultures' knowledge systems a number of problems were also present, albeit, once more, these were rarely explicitly addressed. The general idea is clearly one which positions 'western' science as international and consequently global, while local science is the reserve of the 'developing world'; likewise, in the case of local knowledge. Whereby local knowledge, unlike local science, also incorporates other forms of knowing, typically equated with traditional or indigenous knowledge, once again, these are the 'privilege' of the developing world. Interestingly, the email debate differs markedly from the more traditional texts in this regard. Here, open access is seen not only to pertain to science but a clear sense of the need to expand it to other forms of knowledge and specifically other types of materials is also present. At the same time, this is also where open access is being problematised, that is with regard to the way in which open is seen to mean not only open to access and distribute, but also lacking instances of control.

The chief metaphors under girding most of the connection between open access and development are images of binary opposition, largely perpetuating the notion of a world consisting of a more and a less 'developed' part. These are the 'divide' on the one hand and the 'barrier' on the other. In addition to capitalising on and advancing the narrative of the 'developing world' as the 'West's' incomplete *Other*, this also has strong bearing on the notion 'information' itself. This becomes not least apparent in talk of 'bridges' and 'flows' which for the most part draw on an understanding of

information that is in accordance with a simple sender/receiver model and in which information is seen to consist of 'facts' that can be losslessly transferred between situations, people, and 'worlds'. This is mainly shaped by the way in which information and technology are seen to co-occur and which was most obvious in the way in which open access is constructed as an issue of technology. Technologically deterministic views of an information society, in which technology is almost always an agent of progress, even when criticised, are clearly influential throughout. This has furthermore bearing, together with the way in which development itself is conceived, for the emergent 'information needs' of those that are seen to be on the wrong side of the divide, or the barrier for that matter. These are strongly guided not only by a transfer model of information, but also one which is grounded in privileging the idea of the 'developing world' as a less mature or still deficient counterpart of the 'West'. Correspondingly, a lot of the representation is couched in ideas of establishing connections, building bridges, enabling flows, removing barriers and so forth, in large parts giving way to a construction of those to be developed as recipients of 'facts' and also, to a degree, as in need of change to accommodate and adapt to these. Furthermore, since information in contemporary discourse has almost exclusively positive connotations and more of it, however it is measured, is typically seen as a sign of progress in itself, this can also be read in the light of the concept of pastoral power and thus with a view to reform and salvation. Concurrently, the knowledge and information of the 'developing world' and its people are constructed as local, as traditional, as regional, as rural, and as not transferable, unless filtered through a system of scientific approval or expert translation.

However, this being said, more contextualised notions of information also exist. Most obviously this is the case in relation to information and 'information needs' of development professionals themselves. Here, information gets to hold a highly symbolic position against which the professional image is established, that is information use is conceptualised as translation, networking, and not least as liaising between different arenas. Moreover, the professional image of the development worker clearly influences the discursive effects also on another level, namely with regard to the process of translating information for their 'clients'. Once more, this is based on a highly hierarchical relation, which privileges certain forms of knowledge over others and which is largely captured in notions of simplification. Yet, it is also strongly shaped by the way in which development workers understand themselves as spokespeople for their 'clients' and which, I suggest, works on the level of re-enforcing this relation.

To sum up, the chief discursive resources operationalised in establishing and maintaining the connection between open access and the 'developing world' are provided by two discourse systems, a certain discourse of science, in which 'western' science, removed from the realm of the *social*, is

equated with universal and also global knowledge and a discourse of development as modernisation. These two look back on a long marriage and it is precisely by capitalising on this established connection that open access manages to successfully establish itself as both a measure of development as well as its solution.

6.2 A Future for Open Access: From Stasis to Change?

I would like to return to two issues, one which appeared throughout this thesis and one which only became obvious towards the end of the last chapter. Firstly, this is the conflict contained in the way in which open access stems very well from a resistance to developments in current society and which means it tries to establish a way to open up the otherwise closed system of science to marginalised groups, but it does that to large degree by leaning on and advancing a very hegemonic form of representation. This observation guides large parts of my analyses. Not least, it becomes very tangible in the way in which the open access statements themselves amalgamate characteristic of two such diverging genres, as the manifesto and the mission statement. Secondly, it is the reading of development as a desiring machine and as offering, despite its failures, a way to articulate inequalities and to formulate hope.

Both, in large parts stem from a friction arising from articulating openness within particularly rigid and closed discourses. These are so entrenched in the public consciousness that they and their demands themselves can be formulated as ethically unquestionable positions and as disconnected from the political contexts in which they are situated. This is something open access shares also with other open and free movements. For instance, David Berry and Giles 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

> are 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. (Berry & Moss, 2006, emphasis in original)

This is an important statement and it also rings true for open access. Here equally claims are made based on dominant discourses that are positioned as a priori and universal and this not seldom forecloses any serious engagement with the historic and political contingencies of these claims. The construction of open access as an issue of unquestionable ethical necessity, while understandable from the perspective of the protagonists involved, also impedes its contextualisation, historic and contemporary. Eva Hemmungs-Wirtén (2006) makes a slightly different, yet acutely relevant

observation with regard to conflicting positions contained in many of the critiques of intellectual property. These tend to be formulated in ways which are in some of their claims, almost paradoxically, laden with assumptions that are in effect affirmative of culturally hegemonic positions. Not least, she points out that these work on a level of establishing binary oppositions which might not always be helpful for advancing the discussion. In fact, she argues, the "binary system of discourse", while understandable, also "sets the stage for oversimplification" (Hemmungs-Wirtén, 2006, pp.289-290).

This danger of oversimplification lies not only with the open access movement itself. It can also lie with its critics and certainly I do not want to be guilty of it myself. I also do not want to be dismissive of expressions of very real concerns. Clearly, the issues addressed by the open access movement in relation to the 'developing world' are very relevant, even if throughout much of this thesis my position was a highly critical one. However, my main concern lies primarily with the reductive ways in which dominant discourses are drawn on and re-affirmed while more reflective positions are almost invisible.

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Thus, to bring up, one last time, the conflicts contained in the representation of open access as an issue of development and the understanding of development as a machine that sustains hope and enables to formulate concerns, but never fulfils the desires it creates; read together, they certainly allow for a re-positioning of open access as part of this desiring machine. Open access, when related to the 'developing world', can clearly be understood in this perspective, as a refusal to give up hope, and as an expression of the will to redress inequalities. In this reading it makes inherent sense for it to be so tightly woven into development discourse. At the same time, while being appreciative of the need to express concerns and have aspirations, these closed discourses can also be read also traps which never allow the resistance formulated to be formulated in a way that is reflective of history and appreciative of other knowledges while still allowing for increased equality and participation, or at least a hope for it.

One way for open access, specifically in its relation to the 'developing world' to move out of this trap, it seems to me, is to consider an idea provided by Arjun Appadurai. He writes:

> If we are serious about building a genuinely international and democratic community of researchers – especially on matters that involve cross-cultural variation and intersocietal comparison – then we have two choices. One is to take the elements that constitute the hidden armature of our research ethic as given and unquestionable and proceed to look around for those who wish to join us. This is what may be called 'weak internationalization' (Appadurai, 2000, p.14).

This is precisely what we encounter in the main narrative that sustains the relation between open access and the 'developing world'; an interest in being inclusive and opening up science to marginalised people and voices, yet one which never goes all the way. For this, Appadurai proposes another idea:

> The other is to imagine and invite a conversation about research in which [...] the very elements of this ethic could be subjects of debate. Scholars from other societies and traditions of inquiry could bring to this debate their own ideas about what counts as new knowledge and what communities of judgment and accountability they might judge to be central in the pursuit of such knowledge. This latter option – which might be called strong internationalization – might be more laborious, even contentious. But it is the surer way to create communities and conventions of research in which membership does not require unquestioned prior adherence to a quite specific research ethic. In the end, the elements […] belonging to our research ethic may well emerge from this dialogue all the more robust for having been exposed to a critical internationalism. In this sense, Western scholarship has nothing to fear and much to gain from principled internationalization. (Appadurai, 2000. p.15)

It seems to me, for open access to move away from the closed systems of discourse and their not infrequently violent regimes of representation, and self-perpetuating ones for that matter, to one which is more inclusive and appreciative of other ways of knowing and other ways of 'developing', while not being dismissive of the achievements of science and academic research which clearly exist, this idea of *strong internationalisation* and of a *critical internationalism* has a lot to offer. Positioning it in this framework could enable an explicit politicisation and problematisation of open access' own heritage, a re-evaluation of the understanding of science it is and wants to be associated with, but also a more contextualised understanding of the role of science and information more generally in contemporary society, not least one with more strongly positive connotations. Possibly, even though it might be more *laborious,* entering this *conversation* and taking it seriously, could be where open access' alternative potential for change, which I certainly believe exists, might be situated.

6.3 Possible Future Research

In the light of these considerations a number of questions arise that could be of interest for future research. Obviously, there are many issues that emerged in the thesis and which I could not develop further, however there are also more overarching concerns and different ones which could be brought up and which would add a layer of reflection to this thesis also. This is not only common practice, it is also a way to pose further questions which just by being asked situate this thesis in a wider context but also relate it back to narrower concerns.

For instance, it would certainly be interesting to establish how the connection between open access and the 'developing world' is discussed and maintained in languages other than English. Furthermore, an investigation into how the open access movement relates to other 'information for development' initiatives could also be revealing. Are the concepts drawn on essentially the same or does open access differ because of its strong focus on scientific information and scholarly materials? Moreover, given the way in which open access is in many ways so strongly tied to libraries and librarianship, it would certainly be relevant to gain an understanding of how the interests of this group influence the concept, specifically also with a view to open access' possible future within the scholarly publishing system and its relation to libraries.

It would also be of interest to establish how the notions and procedures established through the connection of open access and development concur with or differ from those that are established in the open access movement more generally. In this context, it always struck me as particularly worthwhile also to establish a sense of how the connection between open access and the idea of scientific information for the so-called public comes into being and is maintained. What are the main arguments for this relation and how is it discursively supported? And not least, of course, who is the 'public' imagined?

Furthermore, and specifically, I think what is required is a strong focus on the concept of openness itself, and specifically its histories, roles, functions, and meanings in and for the open access movement. This would certainly be a very interesting endeavour which could help shed further light on the conflicts contained in the open access movement and other open movements more generally; the very conflicts making it so hard to pin down their positions with regard to societal changes more generally, but also which make them for many, and not least for myself, such attractive propositions and areas of research.

However, the main issue that I see to arise relates to questions of an information commons and in turn also public spaces in online environments more generally. How is it that there is a such strong drive to open up access, change restrictive intellectual property regimes, increase participation and collaboration, and keep at least enclaves free from commercialisation, yet so much of the argument is drawn precisely from market driven views of society and change? This is not least acutely relevant in the case of (public) libraries. These traditionally understand themselves as guardians of a public and free information space, yet at the same time they aim to maintain this space and their status by embracing predominately market driven ideas. This is exemplified best by the way in which the various so-called web 2.0 platforms are gaining ground in the library community and libraries are beginning to move into these spaces and web-based communities, which are after all privately owned online spaces. Not least the concept of a library 2.0 needs to be seen in this light. Specifically, it

strikes me as intriguing to ask, why is it that so often the discourses of openness and public participation rely so strongly on an ideology of the market? This relates to a whole set of questions about the privatisation of online spaces and of information, but it seems to me, the question that needs to be asked most of all, is probably, whose commons is the information commons anyway? And I would like to think that it can be more than merely a rhetoric question.

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Appendices

Appendix A

Corpus for Chapter 4

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Appendix B

Open Access Declarations and Statements: Overview

B.1 Budapest Open Access Initiative
URL: http://www.soros.org/openaccess/spreadsheet
Year: 2002
'Open Access': "The literature that should be freely accessible online is that which scholars give to the world without expectation of payment. Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed preprints that they might wish to put online for comment or to alert colleagues to important research findings. There are many degrees and kinds of wider and easier access to this literature. By 'open access' to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."
Signatories: 6 original signatories (Leslie Chan (Bioline International), Darius Cuplinskas (Information Program Open Society Institute), Michael Eisen (Public Library of Science), Fred Friend (Scholarly Communication, University College London), Yana Genova (Next Page Foundation), Jean-Claude Guédon (University of Montreal), Melissa Hagemann (Information Program, Open Society Institute), Stevan Harnad (University of Southampton, Universite du Quebec a Montreal), Rick Johnson (Scholarly Publishing and Academic Resources Coalition), Rima Kupryte (Open Society Institute), Manfredi La Manna (Electronic Society for Social Scientists), István Rév (Open Society Institute, Open Society Archives), Monika Segbert (eIFL Project consultant), Sidnei de Souza (CRIA, Bioline International), Peter Suber (Earlham College & The Free Online Scholarship Newsletter), Jan Velterop (BioMed Central)) 395 organisations (incl. universities, library associations, libraries, research councils, journals, NGOs, scholarly associations etc.) 4423 individual signatories
Open for signatures: yes
Languages: English, German, French, Spanish, Russian, Chinese (Taiwan)

B.2 Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities
URL: http://oa.mpg.de/openaccess-berlin/berlindeclaration.html
Year: 2003
'Open Access': "Open access contributions include original scientific research results, raw data and metadata, source materials, digital representations of pictorial and graphical materials and scholarly multimedia material. 1.The author(s) and right holder(s) of such contributions grant(s) to all users a free, irrevocable, worldwide, right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship (community standards, will continue to provide the mechanism for enforcement of proper attribution and responsible use of the published work, as they do now), as well as the right to make small numbers of printed copies for their personal use. 2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in an appropriate standard electronic format is deposited (and thus published) in at least one online repository using suitable technical standards (such as the Open Archive definitions) that is supported and maintained by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable open access, unrestricted distribution, inter operability, and long-term archiving.
Signatories:246 institutions (mostly universities or university departments, also libraries, research councils and government departments. 29 countries are represented: 20 European countries, incl. Russia, 5 Latin- and South American countries, no African signatory)
Open for signatures: yes (institutional)
Languages: English, German, French, Spanish, Italian, Portuguese, Polish, Greek

B.3 Inter Academy Panel Statement on Access to Scientific Information
URL: http://www.interacademies.net/?id=3429
Year: 2003
'Open Access': Contains no explicit definition, only the following recommendation: "The InterAcademy Panel on International Issues (IAP), recognizing that many efforts in this regard are under way worldwide and that the business models of scientific publishers need to be taken into consideration, recommends that:

1. electronic access to journal content be made available worldwide without cost as soon as possible, within one year or less of publication for scientists in industrialized nations, and immediately upon publication for scientists in developing countries; 2. journal content and, to the extent possible, data upon which research is based, be prepared and presented in a standard format for electronic distribution to facilitate ease of use; 3. journal content be archived collectively, either by private or government organizations; 4. governments and publishers work together to raise awareness, in the scientific community, of the availability of free electronic access to scientific journals; 5. scientific databases obtained by intergovernmental organizations (for example in meteorology and epidemiology) be made available without cost or restrictions on reuse.
Signatories: 67 academies of science (incl. Academy of Sciences for the Developing World/TWAS)
Open for signatures: no
Languages: English, French

B.4 IFLA Statement on Open Access to Scholarly Literature an Research Documentation
URL: http://www.ifla.org/V/cdoc/open-access04.html
Year: 2003
'Open Access': "An open access publication is one that meets the following two conditions: 1. The author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, world-wide, perpetual (for the lifetime of the applicable copyright) right of access to, and a licence to copy, use, distribute, perform and display the work publicly and to make and distribute derivative works in any digital medium for any reasonable purpose, subject to proper attribution of authorship, as well as the right to make small numbers of printed copies for their personal use. 2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in a suitable standard electronic format is deposited immediately upon initial publication in at least one online repository that is supported by an academic institution, scholarly society, government agency, or other well-established organisation that seeks to enable open access, unrestricted distribution, interoperability, and long-term archiving. An open access publication is a property of individual works, not necessarily of journals or of publishers."
Signatories: adopted by the Governing Board of IFLA
Open for signatures: no

Languages: English, French

B.5 The Salvador Declaration on Open Access: The Developing World Perspective
URL: http://www.icml.org/channel.php?lang=en&channel=91&content=439
Year: 2005
'Open Access': “Open access means unrestricted access to and use of scientific information.”
Signatories: Participants of the International Seminar on Open Access - parallel meeting of the 9th World Congress on Health Information and Libraries and the 7th Regional Congress of Information in Health Sciences, Salvador, Bahia, Brazil.
Open for signatures: no
Languages: English, Portuguese, Spanish

Appendix C

Corpus for Chapter 5: Emails quoted verbatim

Dung, H.K. (2006), "Beginning of OA discussion", *Open access and information for development*, discussion list, 31 May [Retrieved: May 31, 2006, from duylinh386@yahoo.com]

Anjiah, L. (2006), "Re: Beginning the Discussion", *Open access and information for development*, discussion list, 31 May [Retrieved: May 31, 2006, from AnjiahL@mstcdc.or.tz]

Shah, S.Y. (2006), "Re: Eldis OnDisc", *Open access and information for development*, discussion list, 1 June [Retrieved: June 1, 2006, from drsyshah@gmail.com]

Linh, D. (2006), "Re: Beginning of OA discussion and : Lets Look At This From Third World Perspective", *Open access and information for development*, discussion list, 1 June [Retrieved: 1 June 1, 2006, from duylinh386@yahoo.com]

Kariuki, James (2006), "Re: Give the Third Worl Oppotunity to Have Open Access", *Open access and information for development*, discussion list, 1 June [Retrieved: June 1, 2006, from: jkariuki@gmail.com]

Anjiah, L. (2006), "Information needs", *Open access and information for development*, discussion list, 5 June [Retrieved: June 5, 2006, from AnjiahL@mstcdc.or.tz]

Maenzanise, J.L. (2006), "Re: Content: Reliable, Valid, and Relevant Information", *Open access and information for development*, discussion list, 6 June [Retrieved: June 6, 2006, from: jmaenzanise@yahoo.com]