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On the role of openness in education: A historical reconstruction

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Abstract

In the context of education, "open(ness)" has become the watermark for a fast growing number of learning materials and associated platforms and practices from a variety of institutions and individuals. Open Educational Resources (OER), Massive Open Online Courses (MOOC), and more recently, initiatives such as Coursera are just some of the forms this movement has embraced under the "open" banner. Yet, ongoing calls to discuss and elucidate the "meaning" and particularities of openness in education point to a lack of clarity around the concept. "Open" in education is currently mostly debated in the context of the technological developments that allowed it to emerge in its current forms. More in-depth explorations of the philosophical underpinnings are moved to the backstage. Therefore, this paper proposes a historical approach to bring clarity to the concept and unmask the tensions that have played out in the past. It will then show how this knowledge can inform current debates around different open initiatives.

Keywords: Distance Education; History of Access; Open Educational Resources; Openness in Higher Education

Introduction

A call for papers aimed at stimulating research on the theme "Openness in higher education" is in a way a remarkable challenge given the impact of Open Educational Resources (OER), Open Educational Practices, and Massive Open Online Course, to name just a few, on the educational landscape over the past decade. Indeed, it has been called the "open-decade" (Materu, 2004) and there has been a plethora of open-terms such as "Open Scholar", "Open Professor", or "Open Assessment", i.e. core business components are relabelled in order to align them to the overall openness movement which is characterised as a political and a social project (Peters, 2008).

So why reflect on a topic that seems so commonly used in education nowadays and obviously no educator would earnestly reject the importance of openness for education? Should we not be concerned with issues that are beyond openness such as new educational practices? As illustrated by the current debate on "Flipped Classroom" (see for instance Reich, 2012), openness (here in the form of open access and OER), is more or less taken for granted and questions like "What is the best use of our class time?" are now on top of the research agenda. Moreover, as demonstrated in the recently emerged phenomenon "Massive Open Online Courses" (MOOC), more and more people from all over the world capitalise on openness in various forms (e.g. open collaborations). Yet research seems to be more inspired by new models of learning such as connectivism (Siemens, 2005), which also regards openness as a commonly agreed prerequisite.

However, as this call insinuates, there is (still) a considerable lack of clarity concerning the breath and the depth of openness in education and indeed there has been some rather pragmatic solutions

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to define openness. Widely spread are the “4Rs” by Wiley (2009) to express core dimensions of Open Content: Reuse, Revise, Remix, and Redistribute.

During the early period of the Open Educational Resources movement many reports attempted to shed light on openness and proposed significances for education. For instance, the OECD report “Giving knowledge for free” (Hylen, 2006) differentiates three areas of openness that are perceived to make a difference for education (technical and social characteristics, and the nature of the resources) which are in a way tracing back the trends as far as technological aspects (Open Sources Software) are concerned. Wiley and Gurrell (2009), present a historical sketch of the idea of OER, which also puts much emphasis on technological aspects (legal issues are also covered but to a minor degree). And as Weller wrote, open education can be regarded as “(. . .) a response to, or at least as part of, a broader social change made possible by digital technologies” (Weller, 2011, p. 21).

But is technology the only driver for openness in education? What about the fundamental claim that knowledge should be considered a common good and be accessible as openly as possible? In this regard, D’Antoni and Savage (2009, p. 138) state in a somewhat florid language, that:

> “Openness is the breath of life for education and research. Resources created by educators and researchers should be open for anyone to use and reuse. Ultimately this argument resonates with the Universal Declaration of Human Rights, which states: ‘Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages’ (United Nations, 1948, Art. 26, para. 1).”

Moreover, the perception of the importance of openness has been attributed to a relatively recent period: “The discourse around the role of openness in higher education can be said to have seriously started with the inception of the United Kingdom Open University (UKOU) in 1969 (Lane, 2009, p. 1). Although the foundation of the UKOU is certainly a milestone in the Open Education movement, the debate should not be limited to such singular events which might facilitate the impression that openness was more or less irrelevant because of the lack of appropriate technological infrastructure. Moreover, the time frame to analyse openness should be far more expanded to grasp the various notions that have emerged throughout the history some of which may not be explicitly labelled as “open”. In this regard Peters (2008) provides an exception by looking at the history of five Utopian moments in terms of mostly political and psychological initiatives driven by institutions since the beginning of the 20th century (open classroom, open schooling and distance education) and gives one account of a more or less cohesive movement whose 21st century features are open educational resources. Peter and Farrell (2009, forthcoming) look at 17th century coffee houses when learners had somewhat similar dispositions to those of potential users of open educational resources today and develop a more nuanced understanding of open access from the learner’s perspective.

It is therefore against this background that the present paper aims at providing a deeper understanding of the various meanings of openness by means of a historical review to reconstruct the developments of openness throughout the centuries. In particular, we will investigate how education has become more open over the time and which aspects of openness were important for certain periods. This knowledge will then be integrated into a systematic framework that can inform current debates (Flipped Classroom, MOOC) in a more balanced way.

A historical reconstruction of openness

In order to reconstruct openness, it is valuable to look at earlier time periods, going back to embryonic forms of open adult education of the late middle ages (twelfth century onward), before education

became comprehensively institutionalised. The periods reviewed constitute moments of population growth and diffusion of technological innovations, accompanied by intellectual and social ferment, not unlike the moment users and producers of open educational resources face today.

Late Middle Ages—A short lived student driven education

The late Middle Ages were characterised by a number of changes that "opened" education from what had been, until then, one mostly restricted to monastery open schools. A major factor was the growth of medieval towns and increasing urbanisation of society. Across Europe, the population was becoming increasingly mobile and there was a rising demand for "expert knowledge", matched by an overall growing intellectual curiosity (Riddle, 1993; Southern, 1970). Eventual gradual restrictions imposed on outsider access lead to the rise of cathedral (and later municipal) schools run by secular clergy, thus greatly thrusting education in the public sphere (Riddle, 1993).

As participation rose, students themselves started seeking out scholars and knowledge. This resulted in the spontaneous growth of universities, marked by a common lack of permanent sites—groups of students often rented private houses and invited scholars to lecture them—as well as widespread migration of students and scholars, including across national boundaries. Student universities were governed by informal rules, and were in large part attended by working class or poor background individuals, sometimes already members of a profession.

Knowledge was sought out not only by students and scholars, but by all citizens. In 1373 as reading spread, the people of Florence petitioned the Signoria of Florence to provide public lectures of Dante's work, resulting in a year's course where a lecturer, paid 100 gold florins, spoke every day except holy days (Tuchman, 1987).

Out of the cathedral schools grew what we today recognise as institutions of higher learning, then termed "studium generale". The "generale" or general nature already recognised the importance and signified that it was "intended for entire Christendom without regard for national or territorial boundaries" (Paulsen & Conrad, 1894, p. 254, cited in Riddle, 1993), teaching rhetoric, grammar, dialectic, music arithmetic, geometry and astronomy (Perkin, 2006). The universities of Paris, Bologna, Oxford and Cambridge emerged shaped by their students (the latter two by English students returning from France).

Such embryonic universities already contained in them the idea of openness, albeit by no means comprehensive. This period highlights "open" as learner driven, resting on a growing curiosity and increasing awareness of educational opportunities. Scholars from all parts of the continent delivered lectures at no cost (for as long as knowledge was defined as a gift from God (Baldwin, 1971)) and there was, to a large extent, an open curriculum, a preliminary form of an international institution.

This form of openness was however relatively short-lived. By the late 1500s access to knowledge and learning had become very different. No longer a place for the free exchange of students, teachers and ideas, the higher education institution had become increasingly closed. The pope and the king had begun confirming privileges to institutions, slowly followed by changes to the nature of the university that reflected "an institution controlled by public authority" (Riddle, 1993). Although in the beginning power tended to be largely located with the students, who dominated everything short of the curriculum (Perkin, 2006), by the 15th century power was shared equally between students and professors. Scholars begin collecting fees from the students, later supplemented by the community (Perkin, 2006) which further diluted the students' control. Universities became increasingly tied to a permanent location and state, and gradually lost their international scholars and students.

The 15th and 16th century also saw another force that started to reshape the landscape of access to knowledge and learning. Affordable printed works (after Gutenberg's invention of the

printing press in 1450-55) had started a cultural transformation. Fifty years later, Manutius invented the small format, inexpensive, vellum bound portable books. It is all too easy to assume that such changes alone are responsible for enabling openness. It was more than the technology that lead to the changes of the times. Pettegree (2010) notes that books were more than a technological innovation; they were a product of a new economic system as well as of religious upheaval. It is within this consciousness that open practices are enabled. They are made possible because society comes to regard it as important, not merely possible.

Renaissance to the industrial revolution—Open teaching and self-education

In the wake of technological innovation, intellectual and social ferment, 17th century coffee-houses provide us with another instance of openness. Here patrons from all walks of life were given access to the premises and could sit down and read (or listen) to the latest news, pamphlets and books and participate in lively discussions covering science, religion, business, literature and of course the latest gossip. Some coffee houses had libraries with as many as 2000 volumes (Ellis, 1956; Kelly, 1992) and provided access to yet unpublished material, at times preceding actual publication by a few years (Levere, Turner, Golinski, & Stewart, 2002). All for a penny—earning them the name of Penny Universities—at a time established universities everywhere were "very dead for want of students" (Perkin, 2006, p. 172), which are driven away by the very ideas of the scientific revolution and a new found distrust of the institutions that seemed to teach the "old doctrine".

The 18th century is marked by wide-ranging popular literacy among men (Ohmann, 1985). The popular response to Thomas Paine's 1791 Rights of Man fuelled "literacy from below" as artisans and the new industrial working class taught one another to read and established growing numbers of self-education societies (Donald, 1983; Ohman, 1985). Education is open through self-education societies. Around the same time, the development of the rail networks in the United Kingdom and Germany lead to the formation and expansion of new mail services across the country and eventually gave rise to education by correspondence in areas of England, Germany, the U.S. and Sweden (Simonson, Smaldino, Albright, & Zvacek, 2000; Tait, 2003).

Another initiative that opens education comes in the form of the University of London's External System. The University of London aimed to "hold forth to all classes and denominations . . . without any distinction whatever, an encouragement for pursuing a regular and liberal education" (University of London Royal Charter, 1836). The establishment of the External System in 1858 delinked access to its examinations from study for any student in any institution. The system was not free (each part of the examination set students back five pounds), but nevertheless allowed students from around the world to attend London University without ever visiting the city, earning it the name of first "Open University" (Bell and Tight, 1993, cited in Tait, 2003).

The 20th century—the right access knowledge

From the late 19th century until the end of the Second World War, miners' libraries emerged as the thirst for knowledge and rise of interest in self-education coincided with the growth of the coal industry. With few exceptions, every mining town and village had its own "workmen's institute", containing, among other a reading room and a library that would be at the heart of the establishment. Hywel (1976, p. 190) notes that "there was no comparable educational institution, generated entirely by a proletarian culture, existing anywhere else in the world during this period".

The 20th century continued to see education "open" as the belief in the people's right to access society's knowledge grew. In Argentina for instance, this is particularly visible in the University of

Buenos Aires, as shaped by the ideas of the 1918 Cordoba reform (Altbach, 1999). The university was open to anyone to enter, with enrolment to any faculty only restricted by having graduated from high school. After one year general training, students could choose any faculty they wanted, without paying any fees at any time.

Openness was also enabled by further developments in distance learning. Best known is probably the British Open University (OU) founded in the 1960s, at a time of significant developments in communications technology and mass media. The OU also removed the barrier of having formal qualifications, more however as a means of increasing access to an elite organization, rather than a transformation of the institution itself (Trow, 2006). The University of South Africa, offered distance learning after the end of the Second World War, and was open to all, even, remarkably, during the apartheid period (Tait, 2003); similarly, the Indira Gandhi National Open University in India provided education to remote areas around the country (Rao, 2001).

What are the lessons learned and how can they inform the current debate?

This historical reconstruction of "openness" (summarised in Figure 1) shows us not only a technological, but also a social, cultural and economic phenomenon, not bound by institutional or national

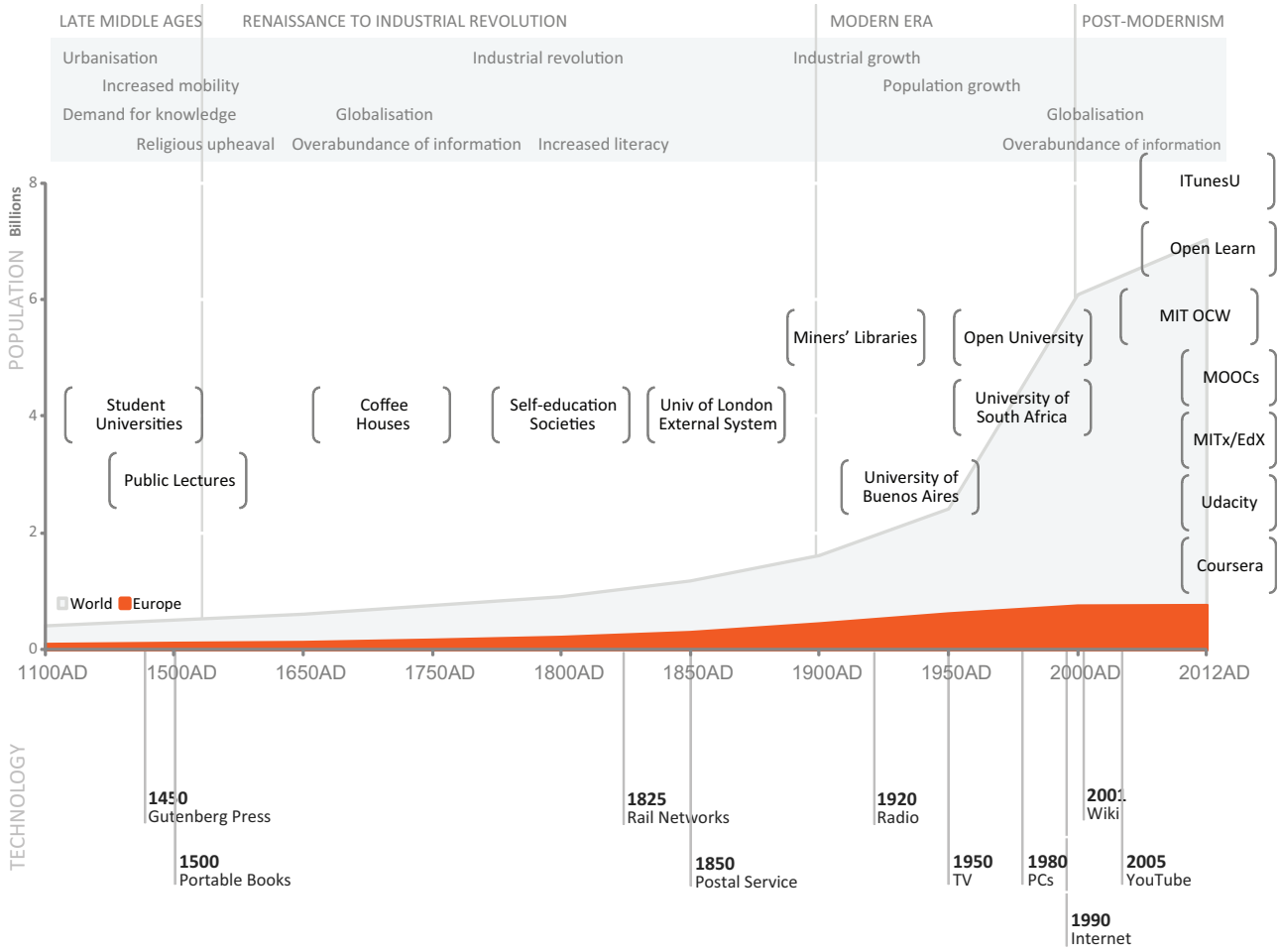

Figure 1: Visualisation of the History of Openness in Education

boundaries. It highlights the danger of emphasising one aspect of openness while backgrounding others and how unrestricted practices can quickly, and repeatedly, become institutionalised.

In order to keep the word limit of this paper, the following conclusions are aimed at shedding light on a selection of patterns that have emerged within different notions of openness and how they can inspire current open practices. They are thus not intended to be exhaustive.

Throughout the centuries there has been a strong connection between socio-technological improvements and increased opportunities for teaching and learning. This pertains not only to institutional settings but also to self-organised forms. Today this is reflected in virtual learning spaces such as Peer-To-Peer-University or Open Study which offer free courses and an open platform for international study groups. However, a similar strong alliance between students and teachers that had occurred during the Late Middle Ages has not yet emerged. There is a rather loose connection in the Massive Open Online Courses given the very low formal structure (McAuley, Stewart, Siemens, & Cormier, 2010). On the other side, ITunesU can be regarded as a digital resemblance of the historic practice of inviting scholars/lecturers to a group of students.

Historical forms of openness caution us against assuming that particular configurations will prevail, or that social aspects should be assumed as desired by default. The 18th and 19th century self-education societies emphasised community while correspondence institutions of this period downplayed it. The exact form that learners would choose (or not) to provide support for their individual learning is hard to infer. There is a risk of assuming that all learners require, or even prefer to be part of a larger community. In the context of Open University's Open Learn initiative, Godwin and McAndrew (2008) point out that we should refrain from assuming that social communication or networking is sought-after by all learners, nor that we should promote it as such.

After a period of open movements many times there have been slight but important shifts from "pure" openness towards "pretended" openness, i.e. some aspects have been modified to offer more control for producers and other stakeholders. For instance, the historic culture of the coffeehouses had been transformed to private clubs and closed, exclusive societies. The original MOOC concept has been utilised for the development of platforms like Udacity or Coursera both of which are providing free courses containing material that cannot be adapted according to the 4Rs (see above). Similarly, Open Study is a for profit platform. History emphasizes the risk in failing to preserve the openness that made initiatives successful in the first place. The development of free but not entirely open courses needs to be examined more closely. While not immediately altering public perception, the shift from humanistic values to more "efficient" and "productive" educational opportunities can undermine the significance of openness.

There is still much to be learned from the history of openness in education. There is a clear need to further theorise current open education (Deimann, forthcoming). While researching the (institutional) development, sustainability and potential for reforming formal education of OERs, we also need to look past such issues to explore other facets of the concept of openness. What are the implications of the interplay between economic and educational factors for the future of OERs? To what extent is open education today a way of coping with a new informational overload, as it has been in the past? Historically, public debate and the popular media played a large role in shaping not only the conversation but the future of open initiatives. Similarly today, it is often the case that the media narratives are attempting to define the new open space faster than the academic community. History can help us examine not only "open" practices, but also the enablers and drivers for "open" social consciousness. Such research will help further theorise and examine the implications of the rapidly developing current forms of open education.

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