Can learning be free?

An investigation of open access from a learner perspective

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Certificate of authorship

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Note to the reader

When I first set out my outline of intended research I made a case for the importance of open educational resources to open access to learning and education. MIT's OpenCourseWare initiative was only five years old, many of those engaged in higher education were not familiar with any of the many open initiatives that were being developed around the world, and no one had participated in a massive open online course. There was relatively little discussion of such initiatives in areas outside academic, organizational and policy conversations directly concerned with their creation or use. The field was in its relative infancy.

As I complete my research study, the Massachusetts Institute of Technology's OpenCourseWare initiative is more than a decade old, massive open online courses are regularly mainstream news and overall attention to openness in education and its meaning to traditional higher education is increasing exponentially. In the past 10 months alone tremendous changes have begun to reshape the landscape: MIT partnered with Harvard University and created the new online platform edX, newly founded for-profit educational technology company Coursera already has more than 2 million participants from almost 2000 countries in its online courses and Udacity, another for-profit educational venture, promises to "democratize" education. At the same time the popular media are attempting to define these practices, and their meaning to learning and education, faster than the academic communities of which they are a part.

Whilst such rapid development has provided some challenges to this study, it has also afforded a unique opportunity to examine the contemporary manifestation of 'open access' as it is in the process of transforming. Analysing a phenomenon that is still emerging has been both methodologically and theoretically challenging. It has been incredibly exciting, rewarding me with substantial insights and allowing me to consider critical interventions to the social imaginary of access to ensure that learning can be free.

Parts of this thesis have been published or have been accepted for publication (in earlier versions) in peer-reviewed publications, conference proceedings and online repositories.

Peter, S. and Farrell, L. (2013) From learning in coffee houses to learning with open educational resources, *E-Learning and Digital Media,* 10(2), 174-189.
Peter, S. and Deimann, M. (2013) On the role of openness in education: An historical reconstruction, *Open Praxis*, 5(1), 7-14.

Peter, S. and Farrell, L. (2013) Massive Open Online Courses and Open Courseware: emerging challenges, promises and futures, presented at OCWC Global 2013, Bali

Peter, S. and Deimann, M. (2013) Open education: Are we at the crossroads?, presented at OCWC Global 2013, Bali

Peter, S. and Deimann, M. (2012), Open vs. Free Online Courses: More than a petty difference?, paper presented at WERA 2012, Sydney

Peter, S. and Farrell, L. (2012), Constituting data: experiencing and/ or remembering, paper presented at AARE-APERA 2012, Sydney

Patterson, C. and Peter, S. (2012) Compatibility and Complementarity: Using Multiple Methodologies, paper presented at AARE-APERA 2012, Sydney

Peter, S. and Farrell, L. (2010), Global education: an examination through the lens of Institutional Ethnography, paper presented at AARE 2010, Melbourne.

Peter, S. and Farrell, L. (2009), From café education to internet café education, paper presented at AARE 2009, Canberra.

ABSTRACT

This thesis addresses the question of access to education, focussing particularly on the potential opening up of access to higher education that open educational resources (OER) seem to offer.

Starting with MIT's OpenCourseWare initiative, continuing with massive open online courses and emerging commercial start-ups, OERs promise free access to anyone, anywhere at any time. I am interested in open access that is expressed as the learner's ability to claim his or her learning (or educational) opportunity to achieve his or her learning goals. My research is conceptualised as a 'project of exploration' (Smith, 2005). I want to know how open access to learning is enabled through open educational resources, from the learner's perspective.

I propose three avenues for understanding open access. First, I draw on the little explored history of open learning to chart its development, ground the current discussion and provide a basis for understanding ways in which OERs may help meet today's opportunities and challenges. I explore how openness was then, as it is now, a matter of degree, the importance of the context in which open access becomes enabled and reconsider notions of literacy, technology, time and location. I also highlight the importance of association and stress the significant role that awareness plays.

Second, I investigate learner experience with OERs and use analytic autoethnography (Anderson, 2006a) to develop theoretical understandings of access through my own practice. I then move to a macro level perspective and use Institutional Ethnography (Smith, 2005) to analyse that experience in the context of an ambiguously bounded, emerging, global education. I expand on the theoretical discussions around the possibilities afforded by analytic autoethnography and institutional ethnography. The two methodologies in conversation allow me to extend the framework for understanding access and learner profiles. They also throw light on the role of both traditional and new texts in organising experience, unmasking more profound instances of power, as embodied by search engines.

These insights challenge me to address a third dimension to examine the imaginary of access as it comes into existence and understand avenues for possible interventions. I examine how media representations come together to produce the imaginary around open access to learning. I also examine how institutional ethnography's commitment to social justice can be achieved by revealing the complexities of this phenomenon and setting the terms of current debates, if people are to achieve access for themselves.

“Mine is not a systematic study, but the other kind where, knowing that you must have affinities with a subject or theme because of the way it keeps appearing in your life, but always differently aspected... you wait for things to happen: a book you didn't know existed found on a library shelf; a chance meeting… This way of studying means you may be unaware of facts known to even apprentice researchers, but if you keep facts and possibilities floating about in your head, they can combine in unexpected ways.”

Doris Lessing, ***The Making of the Representative for Planet 8*** (1994, p. 163)

Introduction

"Imagine a world in which anyone could learn anything anywhere anytime for free."

Gary Matkin, Dean UC Irvine[1]

There are some ideas about education that are durable and have always been part of educational discourse. The question of what makes education free is one of these ideas. Open access to learning and education has been a fundamental problematic. Today, freely available university course material, publicly available video lectures and textbooks seem to provide unparalleled opportunities increasing access. Since the Massachusetts Institute of Technology first made freely available their courses online, at no cost, to anyone interested, I was fascinated by the potential to study any subject from material provided by some of the most prestigious institutions around the world.

Today people enter virtual environments, unrestricted, in theory at least, by time, place and social position, to promote, gain access to, and participate in, the vast educational opportunities offered by open educational resources. I began my research with an interest in those people accessing and using open educational resources to learn. As will be discussed in more detail, while everyone recognizes that such individual learners are important, very little is being said about them. How do they access open educational resources to learn (or indeed do they learn), what, how and why do they come to do as they do? These were the questions that I was asking myself at the start of this study. They helped frame my problematic and served as the basis for structuring my research.

I came to recognize that attempting to understand how, and indeed if, learning could be free and how open access to learning might be enabled through open educational resources. This challenged me to consider multiple perspectives of open access. I propose three avenues to understanding open access to learning, from the learner's perspective: first as a profound shift today, but also one in a line of such transformations throughout history; second as an individual experience in the context of an ambiguously bounded, emerging, global education emerging in the midst of more profound instances of power, and third as an imaginary that is currently being shaped and allows us to intervene before it again becomes settled.

[1] in "Beyond Optimism: Why the Future of OER/OCW is Assured", OpenCourseWare Consortium Global Conference, Cambridge, U.K., April 18, 2012

The organisation of this thesis emphasises the three lenses I bring to understanding the question of access to education, as I focus on the potential opening up of access to higher education that open educational resources seem to offer. Together they contribute to the understanding of the different dimensions that frame a phenomenon as it is in the process of transforming. The organisation of this thesis is as follows:

In Part 1, *Understanding the concept of 'openness'*, I examine current as well as previous persistent but elusive claims to 'openness' in education. Chapter 1 looks at the current state of open educational resources, specifically the suggestion that there is a unique and fundamental shift in access to the highest quality of education and makes the case for examining 'access' from the learner perspective if we are to realise the promise of real access to education. In Chapter 2, I analyse historical moments when education seemed to be released from institutional constraints to be accessible to 'everyone' in order to re-examine the promise but also the inherent challenges current educational initiatives present and refocus current debates away from producers of content and technology concerns. These arguments provide the grounding for the next part of my thesis.

In Part 2, *Investigating open access to learning*, I consider learner experience with open educational resources. Chapter 3 outlines my methodological approach and addresses the conceptual and practical challenges to examining how access is achieved at the individual level but is shaped by the larger context in which his or her experiences take place. Chapter 4 explores both my own experience with a current form of open educational resources, as well as the social relations that organised how I experienced access to learning.

Finally in Part 3, *Re-imagining education*, I explore how the 'social imaginary' provides a useful framework for examining another facet of open access and provides an avenue for answering provocations to address people in their everyday lives and conceive the current time as a moment of intervention. In the concluding chapter I offer a discussion of how I came to understand the central question of this study as well as the new challenges posed by more recent developments, such as the rapid growth and attention received by massive open online courses.

Part 1: Understanding the idea of ‘openness’

1 The question of free education

> **"…once we have computer outlets in every home, each of them hooked up to enormous libraries, where anyone can ask any questions and be given answers, be given reference material…If there's something you are interested in knowing, from an early age, however silly it might seem to someone else – that's what you're interested in, you can ask and you can find out, and you can follow it up, and you can do it in your own home, at your own speed, in your own direction in your own time. Then everyone will enjoy learning."**
>
> **Isaac Asimov** (Bill Moyers Rewind: Isaac Asimov (1988) – original interview for *World Of Ideas*)[2]

The revolution in personal learning Asimov imagined 25 years ago was not just for young people, it was free learning for all, from any background, at any age. In 2001, the Massachusetts Institute of Technology (MIT) announced that it would make its course materials freely available for everyone on the Internet. The former president of MIT, Charles Vest, said about the initiative: "It expresses our belief in the way that education can be advanced by constantly widening access to knowledge and information, and by inspiring others to participate".

It has been claimed that the Internet revolution and its subsequent developments – including the provision of educational content at virtually no cost and free of copyright restrictions – is a unique moment in learning and educational practice and should be understood as a fundamental shift in how we conceptualize open access and its promise (Iiyoshi and Kumar, 2008, Wiley and Hilton, 2009).

Many commentators claim that we are in the midst of revolutionary times for education as we can enable learning and education for all. Open educational resources could deliver on the promise of a universal *right* to education. Caswell, Henson, Jensen, and Wiley (2008) articulate such a view: "We believe that all human beings are endowed with a capacity to learn, improve, and progress. Educational opportunity is the mechanism by which we fulfil that capacity. Therefore, free and open access to educational opportunity is a basic human right." Open educational resources and the promise of access have the potential to significantly alter the future of education.

[2] Interview available at http://www.pbs.org/moyers/journal/blog/2008/03/bill_moyers_rewind_isaac_asimo_1.html

Over the past decade, researchers have followed the development of open initiatives. Their focus has however been on analysing, developing and increasing the number of available resources and learning how they are being used and/or adopted – mostly by educators, often in traditional educational settings (see for instance Atkins, Brown and Hammond, 2007, OECD, 2007, Geser, 2007, Butcher, 2011, Downes, 2007, Morgan and Carey, 2009, Lane 2009). The public story of open educational resources has largely tended to be one of institutional development, sustainability and the ultimate reformation of formal higher education.

While this is an important perspective, it often takes for granted the concept of openness. It backgrounds that the story of open educational resources is also one of open access and learning, not only in formal but also largely outside formal education. The few studies that focus on learning and open access invariably look at learning from the perspective of students already enrolled in postsecondary educational institutions, and the vast majority regard investigating learner experience as "the next step" (for a review see Bacsich, Phillips and Bristow, 2011).

This chapter looks at the current state of open educational resources, specifically the suggestion that there is a unique and fundamental shift in access to the highest quality of education occurring that will make the very best education available not just to elites but to everyone. I place open educational resources in the context of an increasingly 'open' mindset that extends beyond the domain of academia and education. I then outline a number of pragmatic, economic and social reasons that highlight the importance of investigating open access to learning. This chapter makes the case that while this is still an emerging phenomenon that has yet to take a clear shape, the idea of 'access' from the learner perspective needs to be investigated if we are to realise the potential of Asimov's visionary revolution in personal learning and today's (seductive) promise of real access to education.

1.1 The 'open' world

The intuitive elegance and simplicity that 'openness' in general and open access to learning/ education in particular imply masks the complexity of this concept. What should be 'open', how, for whom and by whom? In order to recognize in what senses we can understand openness and what its implications are – not only for research but also for the educational revolution open educational resources are purported to enable – it is useful to look at what the term has come to be used for today. At this point I only wish to set the stage for exploring open access; I will return to refine and further explore this notion in the next two sections of Part one.

'Open' has been a general, umbrella term used in the context of a number of revolutionary education initiatives that have emerged in the last decade[3]. The first was MIT's OpenCourseWare initiative. It was designed to let the world see what was being taught at MIT. Ultimately however, it pioneered what has come to be known as open educational resources. Open educational resources (OER) are widely understood to be "digitized educational materials" that are offered freely and can be used by anyone for teaching and learning (UNESCO, 2002, OECD, 2007).

Six years after MIT, UC Berkley announced its intention to follow suit and make its courses available on Apple's iTunes U, which manages, distributes, and allows access to educational content. UC Berkley has now had over 120 million downloads since first sharing videos online. This trend was not only followed by Yale, Stanford, Harvard and Oxford (who have all opened access to a section of their courses) but also by universities around the world.

China joined the movement in 2003, and now the China Open Resources for Education (CORE) consortium consists of 35 Chinese universities and 44 provincial radio and TV universities translating, working and collaborating around open educational resources. Mexico's largest university, the National Autonomous University of Mexico (UNAM) has promised to make virtually all of its courses and publications freely available on the Internet over the next few years.

Open educational resources have continually expanded, and are now produced by hundreds of institutions around the world, from Australia to Norway and from Pakistan and Iran to Indonesia and Malaysia. They include a range of "digitised materials offered freely and openly

[3] Of course 'open' initiatives have existed previously, and they will be discussed in the following sections. However at this point I am interested in exploring the concept as it appears today.

for educators, students and self-learners to use and re-use for teaching, learning and research" (OECD, 2007). As such resources are rapidly growing and taking shape, they have become an increasingly significant consideration in academic, organizational and policy conversations regarding the future of higher education (Atkins et al., 2007, Geser, 2007, Lane, 2008).

In the past five years, Massive Open Online Courses (known as MOOCs) have also started to emerge as another form of openly accessible educational resources. Since the introduction of George Siemens's and Stephen Downes' "Connectivism and Connective Knowledge" a number of such courses have been offered. Traditionally, most of them offer little structure and rely on a community environment and the learner's exploration of this environment:

> "You are NOT expected to read and watch everything. Even we, the facilitators, cannot do that. Instead, what you should do is PICK AND CHOOSE content that looks interesting to you and is appropriate for you. If it looks too complicated, don't read it. If it looks boring, move on to the next item." (Learning Analytics 2012 MOOC, http://lak12.mooc.ca/how.htm)

They do not provide a clear learning pathway as is the case with more traditional open educational resources/open courseware. Also, until recently most massive open online courses were concerned with topics that revolved around (open) education, learning, social networks and digital technologies. This is however changing rapidly with the introduction of Stanford's *Artificial Intelligence* open course last year and the emergence of commercial start-ups like Udacity and Coursera, which offer courses not only in science and engineering but also humanities and the arts. Courses offered in the context of these initiatives also rely on a more traditional pedagogy and have hence been termed xMOOCs as opposed to earlier forms termed cMOOCs.

Overall, open educational initiatives can be considered across a number of dimensions of openness: while there are no admission/ enrolment requirements, and all provide (cost) free access to the knowledge (whether synchronous or asynchronous), only some provide a form of recognition upon completion and most certificate programs will require payment for certification (see table 1.1 for an overview of selected major 'open' initiatives). What is more, it should be recognised that many initiatives (see for instance the newly established Coursera and Udacity) are for-profit platforms. Some have gone as far as to call the later 'not open' (see for instance Wiley, 2012). Although Udacity provides "classes that are available to anyone, anywhere, for free" (Udacity, 2012b), their content is protected by copyright, may not be

reused/modified and official credentialing is done for a fee. I will return to a more in-depth discussion of the range and degrees of openness in the final chapter.

	Provider	Since	Funding	Cost	Knowledge	Credential
MIT OCW	MIT	2003	MIT, grants	0	Asynchronous courses	None
edX	Harvard and MIT	2012	MIT, Harvard	0*	Synchronous self-paced courses	Certificate
Stanford AI course	Stanford	2011	Stanford	0	Synchronous self-paced courses	Certificate
Udacity	ex-Stanford professors	2012	VC	0*	Synchronous self-paced courses	Certificate
Coursera	Princeton, Stanford, UC Berkeley, UPenn	2012	VC	0*	Synchronous self-paced courses	Certificate
Peer2Peer University	Various facilitators	2010	VC	0	Asynchronous courses	Badges
Khan Academy**	Khan Academy	2008	Grants	0	Asynchronous courses	Badges

Table 1.1 Comparison of selected major open initiatives

* free access, free to complete but paid certification

** although the Khan Academy does not have a higher education focus, it is considered a significant newcomer to the educational landscape; it is also emerging as an important consideration for the types of educational ventures that could enter the higher education open landscape and I will refer to it further in my final chapter

There are, of course, countless other open educational initiatives. OpenStax for instance is a non-profit organisation providing free academic peer reviewed textbooks; Udemy is an open online learning platform that allows educators and other instructors to host courses; The Floating University features open online courses and lectures by public intellectuals, conductors, investors and popularisers of science and iTunes U is a free service that makes available educational audio, video content and so on. Open educational resources continue to develop in the context of the possibilities afforded by the environment, increasing almost exponentially in number and complexity (see figure 1.2).

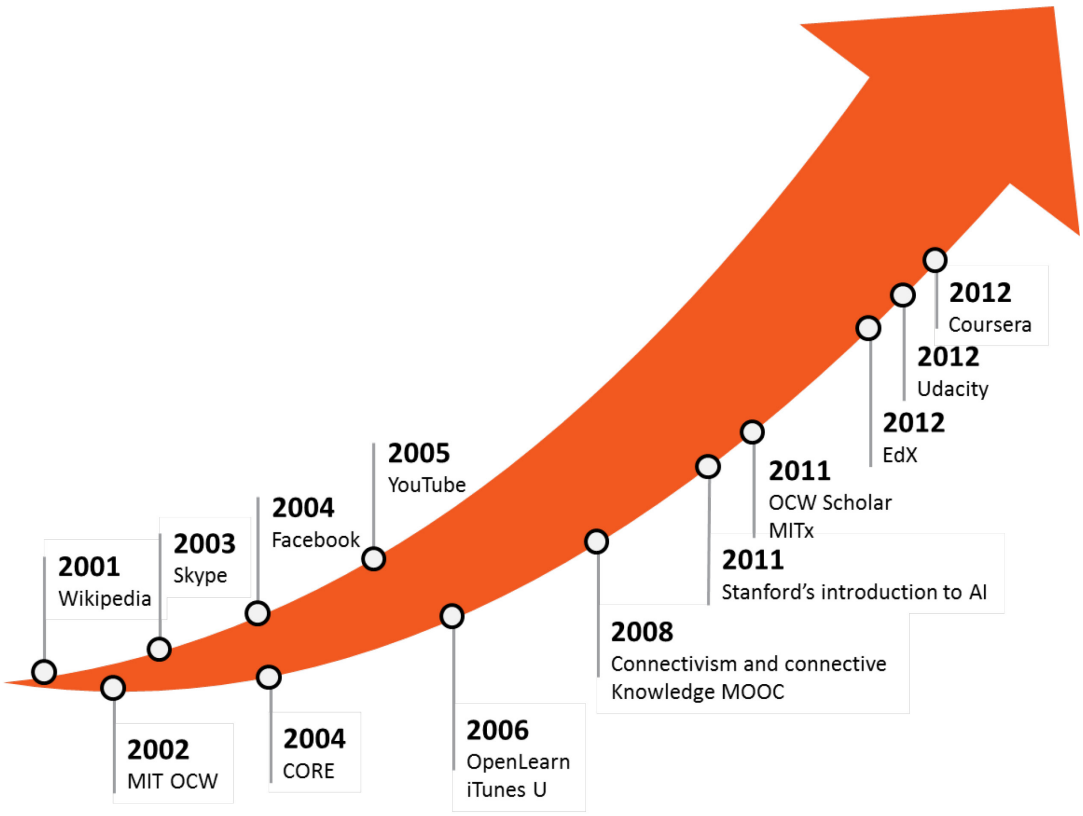


Fig. 1.2 Major open education initiatives and ICT developments in the past ten years

However, these are not the only forms of 'openness' in today's world. Another facet of openness to come out of the academic arena since the 1990s is that of open access publication, providing unrestricted access to mainly peer-reviewed scholarly journals and articles, but also books and book chapters as well as PhD theses and other academic work. This is done either by the authors themselves (after having published in a journal) or, more directly by journals that offer immediate open access to their published materials. The incentives range from the belief and desire to freely share knowledge to increase research readership and impact. Making the case for open access and the right to read research, John Willinsky termed the access principle as "a commitment to the value and quality of research carries with it a responsibility to extend the circulation of such work as far as possible and ideally to all who are interested in it and all who might profit by it" (2006, p. xii).

In 2012, The Directory of Open Access Journals (DOAJ) lists 6965 journals of which 2186 have full text, with almost half a million articles currently available. A study of openly published research in 2010 put the total openly published articles in 2008 at over 20% (Björk, Welling, Laakso, Majlender, Hedlund and Guðnason, 2010). An increasing number of universities (including some of the most prestigious universities in the world, such as Harvard University, Cornell University, Princeton University and many others) have embraced open access by

reducing the number of subscriptions to closed repositories and introducing open access policies advising staff to use open alternatives instead. In Australia, the Australian Research Council (the country's main government agency for allocating research funding to researchers and academics) has introduced in 2013 an open access policy for all new research projects it funds, requiring all publications arising from research it supports to be deposited into an open access institutional repository[4].Open access to journals is growing rapidly, supported by scholars, universities, foundations, governments and increasingly, the public. It is also developing under the umbrella of open science in general, the movement aiming not only for open access, but making the entire research process open.

The 'open' mindset extends beyond the domain of academia and education. It is the "mark of our time" and creates a context in which educational initiatives can take hold and thrive. 'Open' initiatives have emerged prior to the advent of open educational resources, in various unrelated domains. One of the most visible initiatives was the emergence of open source software, launched in the 1980s and 1990s. Software developers would publish their software with an open source license, allowing anyone to use it and modify it freely. The internet browser Mozilla Firefox and the GNU/Linux operating system (and its offshoot Android) are leading examples of such developments, built and maintained by volunteers.

The principles behind open source software have also been extended to government, creating the idea of open source government, aiming to have citizens participate directly in governing. Such initiatives go beyond making content available. In the US, Open Government started by attempting to empower citizens to participate by making data available and allowing them to comment on matters under discussion in the Federal Government. Similarly, in Australia there are a number of state Open Government sites that make government information freely available (although on a national level Australia has decided against joining the international Open Government Partnership). The movement is growing with global initiatives, such as the one founded by the governments of India and the United States that aims to make use of open online platforms to make data and tools publicly accessible and enable citizens to engage with initiatives on a global scale. Furthermore, in Iceland for instance, the idea of open government has led to citizens to vote in a 2012 referendum in favour of replacing the existing constitution with a constitution that has been crowdsourced.

[4] The policy has been drafted in 2012 and will be in effect starting January 2013. It is available at http://www.arc.gov.au/applicants/open_access.htm

Volunteers also contribute to projects like Wikipedia, attempting to build free encyclopaedias (in every language) by openly adding and reviewing information. As of 2012 the English version has almost four million entries, licensed freely under a Creative Commons license. Project Gutenberg is a volunteer effort to digitize and make available full texts of novels, poetry, short stories, cookbooks, reference works and periodicals where the copyright has ended. The Million Books Project and Gallica are among a number of similar projects.

In the context of so many open initiatives, any initiatives that are seen as attempting to put limits on openness are met with hostility. For instance there was an international public outcry against the 2012 Stop Online Piracy Act and the Protect IP Act (SOPA/PIPA) bills in the U.S. House of Representatives and U.S. Senate and its potential website blocking provision. Wikipedia protested with a 24 hour blackout showing a message of protest ("Imagine a world without free knowledge") instead of its articles. The Research Works Act, another bill in the U.S. House of Representatives, was also dropped after protest by the scientific community regarding its anti-open access stance in sharp contrast to the open access publication movement.

Museums and libraries are also becoming more open. Although not completely open, the British Library has digitized 300 years' worth of newspaper archives – about 65 million articles – and made them available online. The American Museum of Natural History for instance aims to make its entire collection available to the public online.

The spirit of openness also extends to magazines, newspapers and broadcast organisations. *Wired* magazine announced in 2011 that all staff-produced images will be released under a creative commons license to the public. C-SPAN and Al Jazeera, among many others, are contributing to free video libraries.

The 'open' philosophy also applies to hardware. *Arduino* for instance freely releases its design files, allowing people to study its hardware, build it, make changes to it and share it. The *Global Village Construction Set* provides schematics, manuals and tutorials and has prototyped many of its 50 industrial machines that can in turn be built by anyone to create and sustain a small technologically advanced civilisation.

Although all of the initiatives presented above (and many more) provide in themselves the potential for learning and education, my interest lies with the provision of explicitly educational content, at virtually no cost and free of copyright restrictions – open educational resources. It is important however to understand that it is within this larger 'open' context that

open educational resources join the conversations regarding the future of higher education and have the potential to realise the promise of real access to education. The open context has helped them take hold and can help them thrive.

Openness may be considered the "mark of our time" and everywhere we look the world seems to be opening up. It is marked by open access to all manner of opportunity in general – informational, technological, cultural, social etc. – and learning and educational in particular. It is the open access to learning and education that I am interested in. John Willinsky (2006) uses the '*access principle*' to make a case for the researchers' responsibility to advance access to their work. In the context of open educational resources, I am interested in *open access* that is expressed as the learner's ability to claim his or her learning (or educational) opportunity to achieve his or her learning goals. It is, however, useful to place open access within a more comprehensive view of the open world. The open context frames notions of access as a precursor to, and gateway to, realising the promise of open learning/ education in the context of open educational resources (see figure 1.3).

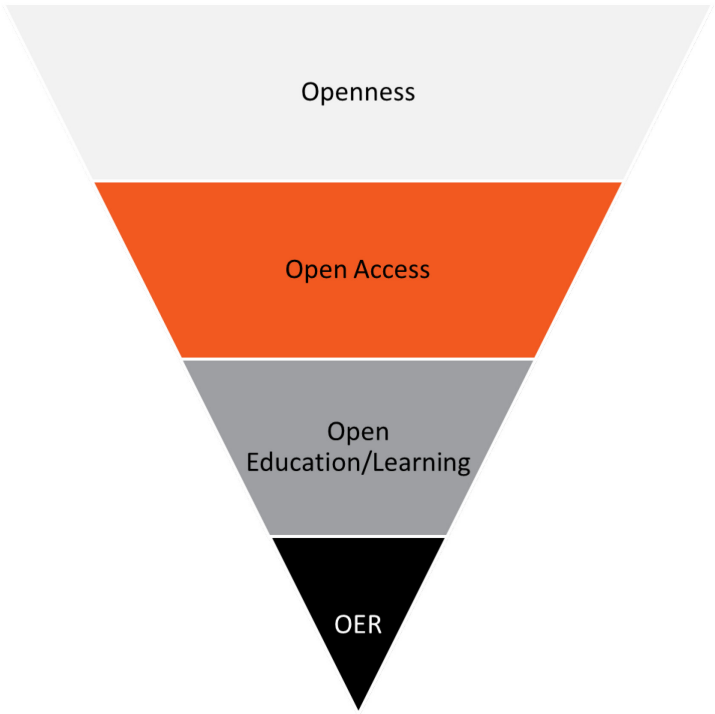


Fig. 1.3 Mapping openness

The seductiveness of the potential of openness in general and open educational resources in particular had sparked numerous discussions regarding the future of education from producers of content as well as provided fodder for the public media regarding the fate of universities.

George Siemens, who together with Stephen Downes introduced the first massive open online course ("Connectivism and Connective Knowledge"), predicts dramatic changes for all but leading universities in the near future:

> "… if I were president of a mid-tier university, I would be looking over my shoulder very nervously right now, because if a leading university offers a free Circuits course, it becomes a real question whether other universities need to develop a Circuits course" (interview in *The New York Times*[5], Lewin, 2012a)

Similarly, Sebastian Thrun, the Stanford professor who taught the *Introduction to Artificial Intelligence* open online course, claims such resources "will disrupt all of higher education" (interview in *The New York Times*[6], Keller, 2011). He goes as far as to say that fifty years from now there will be only ten institutions in the whole world that will deliver higher education (interview in *Wired*[7], Leckart, 2012).

Such predictions have been eagerly taken up by the media, especially in the context of current debates around the rising cost of higher education, diminishing job opportunities for graduates and the 'higher education bubble' (see for instance Schumpeter, 2011 in *The Economist*, April 13, 2011). I will return to look at some of these concerns in detail in the following section.

In 2011 *New York* magazine[8] noted that "The notion that a college degree is essentially worthless has become one of the year's most fashionable ideas" (Smith, 2011). *The Atlantic* announced of the "The Big Idea That Can Revolutionize Higher Education: 'MOOC'", *The New York Times*' Thomas Friedman welcomed the "college education revolution" and in Australia, *The Australian Financial Review*[9] forecasted how "open online resources set to revolutionise tertiary learning" (Bull, 2011).

Such claims are not new. In an article in *Forbes* in 1997 Peter Drucker claimed that "Thirty years from now the big university campuses will be relics. Universities won't survive. It's as large a change as when we first got the printed book." (Lenzner and Johnson, 1997). Yet for all the claims of the end of higher education as we know it and of newfound open access to

[5] A version of this article is available at http://www.nytimes.com/2012/05/03/education/harvard-and-mit-team-up-to-offer-free-online-courses.html?_r=0
[6] A version of this article is available at http://www.nytimes.com/2011/10/03/opinion/the-university-of-wherever.html?pagewanted=all
[7] A version of this article is available at http://www.wired.com/wiredscience/2012/03/ff_aiclass/all/
[8] A version of this article is available at http://nymag.com/news/features/college-education-2011-5/
[9] A version of this article is available at http://afr.com/p/national/education/open_online_resources_set_to_revolutionise_SF7p6kOiCXqocBW0Mn0xzO

learning and education, no one knows exactly what the impact of the still developing open educational resources and associated initiatives will bring. We are in the midst of a phenomenon that is still taking shape, and that has and will continue still to provide fuel both for public conversations and academic ones.

It is claimed today that this is a unique moment in learning and educational practice and should be understood as a fundamental shift in how we conceptualize open access and its promise (Iiyoshi and Kumar, 2008, Wiley and Hilton, 2009). Such claims would put forward open educational resources as a potential answer to a number of pragmatic, economic and social concerns and challenges surrounding access to education. It is to open educational resources' significance as a potential solution to these challenges that I turn to next.

1.2 The need for access today

The importance of investigating open access to learning is highlighted by a number of pragmatic, economic and social reasons I will outline below. Among them are: the current growth in world population, exponentially driving up the demand for education and learning; the demonstrable inability of the current higher education system to meet this demand; the rising cost of education worldwide; the economic concerns that stem from the inability to ensure an adequately skilled workforce; the need to provide opportunities for lifelong learning; the rapid developments and affordances of new information and communication technologies; as well as the recognition of the imperative to provide education to everyone.

The aim of this section – and indeed this study – is not to put forward open educational resources as the definitive answer to such concerns, but rather to emphasize that they have the potential to be one answer to them. Solutions will also come from the field of formal higher education, from the corporate domain, as well the private domain. It is also important to understand that the challenges surrounding access to education are simultaneously local and global in character, and so are the potential answers to these challenges.

The exponential growth in world population is already making it impossible to meet learning demands. Fifteen years ago, Sir John Daniel (1996) observed that more than a third of the world's population was under twenty, with soon to reach 100 million people requiring access to higher education. He suggested that meeting this demand would see the creation of one major university per week. India's minister of human resources and development, Kapil Sibal, estimates his country alone will require another 800 – 900 universities and 40,000 – 45,000

colleges within the next 10 years (Nayar[10], 2011). The cost of doing this would prove astronomical: one attempt to build a world class university in Saudi Arabia to rival the likes of Caltech (California Institute of Technology) in size and profile, the University of Science and Technology (KAUST), ended up costing as much as 20 billion to build and staff (Mervis[11], 2009).

Existing universities are already struggling to accommodate a growing student body as well: New York University for instance is attempting its largest expansion in its history – 40% over the next 20 years. Usher (2007) extrapolated current demographic growth rates to estimate that the number of students in post-secondary education would more than double in less than ten years. In a similar analysis Klemencic and Fried (2007) projected that global student numbers will almost double to reach 150 million by 2025. The unprecedented growth in the number of tertiary students already reached 153 million students in 2007 (UNESCO, 2009). UNESCO (2009) reports that the need to respond to ever increasing numbers of students has led to a decrease in the average qualifications of those who are employed to teach them. In India, the minister for human resources and development, Kapil Sibal, estimates that half the professors employed in the higher education system lack a postgraduate education (Nayar[12], 2011). What is more, many students seem unable to make use of the learning opportunities afforded to them. In a study of twenty-four American higher education institutions, Arum and Roksa (2010) found that, during the first two years of studies, almost half the students made no significant improvement in critical thinking, complex reasoning, and writing.

The increase in the demand for higher education is proving especially critical in the developing world. In 2008, it was estimated that half the world's population of over six billion is under twenty years of age with around two billion teenagers located in the developing world (Kapur and Crowley, 2008). In countries such as Malaysia, Pakistan, Mexico over 30% of the population is under fifteen and approximately 60% of the population is under the age of thirty. Women in countries with very low higher education participation rates remain largely excluded from access to education at this level (UNESCO, 2006, 2009). What is more, such countries have consistent improvements in primary and secondary education, potentially creating further pressure and driving demand. In China, higher education enrolments are at 20% of the relevant cohort, with Chinese government aims to double the rate that by 2020. In India, the higher education system can accommodate only around 12% of the university age cohort. Nevertheless India aims to double its gross enrolment rate by 2030 (Marcucci and

[10] Available at http://www.nature.com/news/2011/110406/pdf/472024a.pdf
[11] Available at http://www.sciencemag.org/content/326/5951/354.summary
[12] Available at http://www.nature.com/news/2011/110406/pdf/472024a.pdf

Usher, 2012). Currently, universities like the Indian Institute of Technology have an acceptance rate of 2%. In 2011 as many as 485,000 students took the examination for a little over 9500 available places. In such environments conventional approaches to increase access to higher education have little chance of success. It is not economically viable to continue to build more universities as "India alone would need nearly 2,400 additional universities in the next 25 years – or roughly two new universities per week" (Daniel, Kanwar, and Uvalic -Trumbic, 2007). According to Larson (2001) in developing countries it would be impossible to fund the required infrastructure, buildings, staff and manuals for the millions of new learners.

Furthermore, it is becoming harder and harder for universities to gauge the right composition of course offerings and degrees for a future that is becoming increasingly difficult to predict. Law schools in the U.S. for instance have raised tuition fees four times as fast as other schools, while also increasing the size of incoming classes, even during the biggest slump in demand that the legal profession has ever seen (Segal, 2011). For the past 20 years, at many Ivy League schools up to half of the graduates go into finance and consulting, at the expense of other sectors of the economy (NPR, 2012b). Banking and finance are recruiting scientists, engineers and mathematicians (NPR, 2012b).

The cost of higher education is also an issue in most countries. In the U.S., tuition and fees have increased 439% from 1982 to 2007 while median family income only rose 147%. Student borrowing has more than doubled in past ten years (NCPPHE, 2008). While the financial burden has increased, income for college graduates actually declined in real dollars from 1971 to 2005 (NCPPHE, 2007). This is a rising concern given that the financial resources required to obtain a degree are acquired primarily through credit. At the same time, financial aid is not keeping up with increases in costs, putting a degree out of reach for many (The College Board, 2009).

In countries that have state supported and even free education, there is an increasing tax burden, and consistent inadequate funding. In Australia for instance, although student numbers grew by 30 precent, public contribution to higher education has remained the same for the decade from 1995 to 2005 (Baty, 2010). In the UK, by 2013-2014, almost half the students will contribute to university funding (through increased tuition fees) – the highest proportion since the 1890s, when higher education was only for the wealthy upper class (Hunt, 2012). In a review of global changes in tuition fee policies and student financial assistance, that included 40 countries that were deemed representative of the situation across the world in 2011 (combined they accounted for over 90% of global enrolments and research), Marcucci

and Usher (2012) found that: “in the face of continued increases in participation, demographic change and – in the west at least – profound fiscal crises, higher education institutions are increasingly being required to raise funds from students as opposed to relying on transfers from government” (p. 1).

Paradoxically, Brown and Lauder (2006) claim that returns for those investing in higher education are likely to continue to decline. As the number of highly skilled, well-educated individuals already available in developing economies continues to grow rapidly, returns will drop for all except those at the cutting edge of knowledge and innovation. As the cost of higher education continues to grow, for the vast majority of people it will nonetheless become a “defensive expenditure” (Brown and Lauder, 2006, p. 41), not a guarantee of a financially rewarding job.

The increasing cost of higher education has even led some to speculate and question whether or not many parts of the world are faced with an ‘education bubble’ akin to the housing bubble (Smith, 2011). Over the past years, a popular recurring argument in the media has been, as *New York* magazine (Smith, 2011) puts it “The cost of college […] has grown far too high, the return far too uncertain, the education far too lax”. This has been echoed in various formulations in TV and print media, the blogosphere and social networking sites (for examples see *The New York Times, Times, The Chronicle of Higher Education, Forbes, The Economist* etc.). There seems to be increasing public critique of a system under stress, driven not only by the media but also by entrepreneurs. For instance, a very visible and representative figure of this raising scepticism, the billionaire venture capitalist Peter Thiel, has been urging students to drop out of universities. Under his “20 Under 20 Fellowship”, the co-founder of PayPal and first investor in Facebook, pays 20 selected students USD 100,000 to walk away from colleges or universities and pursue their passions to change the world.

The inability to adequately meet the demand for higher education further highlights a range of economic concerns. In the global knowledge-based economy, a renewable, skilled workforce is essential. There is an implicit (and, often, explicit) assumption that the more educated and more qualified graduates will be, the more productive they will be, and the better able they will be to take advantage of emerging technologies, job opportunities and the benefits associated with them[13] (see for instance Lauder, Egerton and Brown, 2005, Brown and Lauder,

[13] Brown and Lauder (2006, p. 35) argue that “the expansion of higher education may lead to the creation of a substantial wastage of talent amongst college and university graduates”. I will return to

2006; see also the section 6.3.1 for a more detailed discussion of relationship between higher education and demand for higly skilled individuals). Educational access and opportunity is closely linked to social and economic outcomes. In Asian countries for instance, the growth experienced in the 1990s is attributed to policies that "placed heavy emphasis on education and technology in order to close the knowledge gap with more advanced countries" (WorldBank, 2000, p. 16). Improvements in educational attainment are closely associated with economic well-being, with each additional year corresponding to a 3.7 precent increase in economic growth rate, depending "critically on participation in and the successful completion of higher levels of education" (OECD, 2002). Today, even in the developed world, education is not keeping pace with increasingly complex market demands (Desjardins et al., 2006). Carnavale and Rose (2011) argue for instance that in order for the United States to maintain its economic competitiveness, it would need to increase its share of highly educated workers. This would require an additional 20 million people with post-secondary education by the year 2025, which would mean a two and a half fold increase in the current rate of growth (Carnavale and Rose, 2011).

Such economic concerns driven by the inadequate provision of higher education are further highlighted as we are increasingly becoming a 'learning society'. In Australia, The *Review of Higher Education in Australia* (the "Bradley report", Bradley, Noonan, Nugent and Scales, 2008) recommended, among others, increasing access for those who made earlier life decisions not to enter higher education in their 20s and 30s and are seeking a 'second chance' education. Such increased educational opportunity is perceived as critical to improving workforce participation and requires increasing government commitments to fund (Hare, 2013). Lifelong learning is no longer an increasing choice but a necessity as the multiplication of practical contexts cannot be completely dealt with in the current frame of formal learning. Many people are engaged with different and increasingly distributed forms of learning, training and education. It is well documented that people will change jobs or even entire careers, frequently over their life course. Even formal higher education systems are encountering more demographically diverse student bodies. The traditional cohort of 18-23 year olds is becoming a minority. In 2008, over two thirds of the tertiary education students in Singapore already were over the age of 25 (Kapur and Crowley, 2008); a third of students in Iceland, Sweden and Israel were over the age of 30 (UNESCO, 2009). This change in age groups compounds the problems already raised by the increases in the rate of growth previously described to further

discuss the implications of oversupply in the context of changes to the demand for high skilled versus intermediary skilled work in section 6.3.1.

increase the demand for learning and education. At the age of 54, even Bill Gates decided to study energy and took Physics and 11 other courses through MIT's OpenCourseWare initiative.

Improving education is also a human and moral imperative. Article 26.1 of the Universal Declaration of Human Rights states that everyone has the right to education; also that "technical and professional education shall be made generally available" (UN, 1948). Although the concern has usually been with primary and secondary education (as fundamental for developing countries), the increasing numbers of students being educated and graduating from secondary school has led to an increasing focus on post-secondary education. The recognition of the imperative to provide quality education to all has been consistently reiterated in international conferences and agreements, such as The Millennium Declaration and the 2000 Dakar Framework for Action (which made global commitments "to provide quality basic education for all children, youth and adults") or the 2003 World Summit on the Information Society (committed "to build a people-centred, inclusive and development-oriented Information Society where everyone can create, access, utilize and share information and knowledge").

In the context of open access to research and scholarship, Willinsky (2006) argues for recognising the standing of this work as a public good and the capacity of digital technologies to make it available to the public: "a public good, in economic terms, is something that is regarded as beneficial and can be provided to everyone who seeks it, without their use of it diminishing its value" (p. 9). A similar argument can be made for open educational resources, given the affordances of digital technologies, as it is within the capacity of higher education institutions to make this content widely available to everyone, without diminishing either their quality or their quantity.

The developments in information and communication technologies – that enable access anywhere, at anytime – that have occurred in the last decade, have removed many of the barriers to access that have existed previously. Costs of technology/hardware (including mobile technologies, tablets, e-readers and smart phones) have decreased while Internet bandwidth, broadband access, wireless technologies (increasingly government-supported) have increased. Similarly, low-cost, low-barrier and easy-to-use software systems which promote social interaction, flexible communication and collaboration technologies, ubiquitous content manipulation and sharing among users, Web 2.0 technologies, blogs, wikis, RSS, podcasts, media-sharing services, virtual communities, and online social networks have

become widespread. Such developments allow us to reconsider the potential answers to opening education.

Internet access has not grown uniformly. Usage and availability is still low in Africa, the Middle East and Asia. In certain countries, such as India, there are significant differences between urban and rural access. Furthermore, many forms of access are still out of reach in terms of cost for many. This is the case in many parts of Africa for instance, where although internet infrastructure has been improved and upgraded to fibre optic cables, telecommunications companies price services in a way that makes them unaffordable for most universities (Tabb, 2008, Read, 2006).

Although technology is still prohibitively expensive for many, there is increasing promise that it will provide more avenues to promote educational opportunities. For instance the new tablet replacing the inexpensive and rugged $100 laptop (One Laptop Per Child) is not only affordable but can also be recharged with a hand-crank or a solar panel that also doubles as the tablet's cover. A number of other such initiatives, designed to become educational devices for students in the developing world, where access is scarce, have the potential to transform opportunities for learning and access (see for instance, Worldreader's Kindle initiative, the Aakash $35 tablet, the Motorola Xoom tablets, and a host of competitive commercial laptops and inexpensive e-readers and mobile phones).

It is against this background that open educational resources have become an increasingly significant consideration in academic, organizational and policy conversations regarding the future of higher education (Atkins et al., 2007, Geser, 2007, Lane, 2008) and are currently the focus of considerable attention as seen to be an answer to openness in higher education. The arrival of open educational resources has painted, and is continuing to do so, an incredibly seductive picture. As I further explore the topic of access I want to unpack its complexities and understand the extent to which they can hope to provide an answer to free learning and education. I will now turn to how this is an important question in the research context of open educational resources and why a learner perspective of access is important.

1.3 Access in the context of open educational resources

In order to understand how open access to learning is an important question in the context of researching open educational resources I will look at how such resources are currently understood and investigated.

Open educational resources are widely understood to be “digitized educational materials” that are offered freely and can be used by anyone for learning and teaching (UNESCO, 2002, OECD, 2007). Open educational resources exist in an ecosystem with various content providers on the one hand and users on the other (see figure 1.4). Since open educational resources can be modified and reused (for a more extensive discussion see section 2.2 on openness, access and the question of contemporary education), users can also span the two roles, becoming what the OECD calls ‘user-producer’ (2007, p. 34).

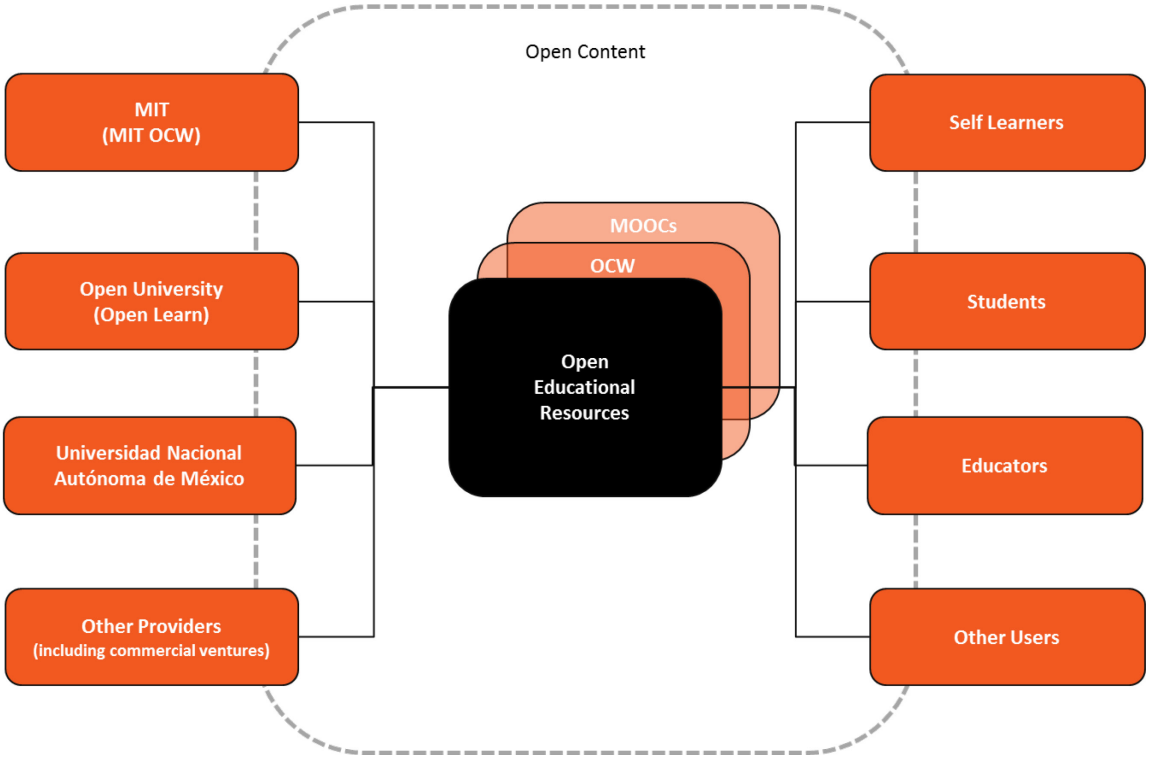


Fig. 1.4 The open educational resource ecosystem[14]

Researchers have followed the development of open initiatives since early forms such as the ‘learning objects’, described by Wiley (2002) as “any digital resource that can be reused to support learning” (first defined by Hodgins in 1994, see Wiley, 2002, p. 6). In 1998, the discussions focused on a more comprehensive category than open educational resources, namely open content. Open content (Wiley, 1998) included any kind of content published under an open license, but was born in the spirit of open educational resources. The starting point was Wiley’s teaching materials and anything else people wished to make available for

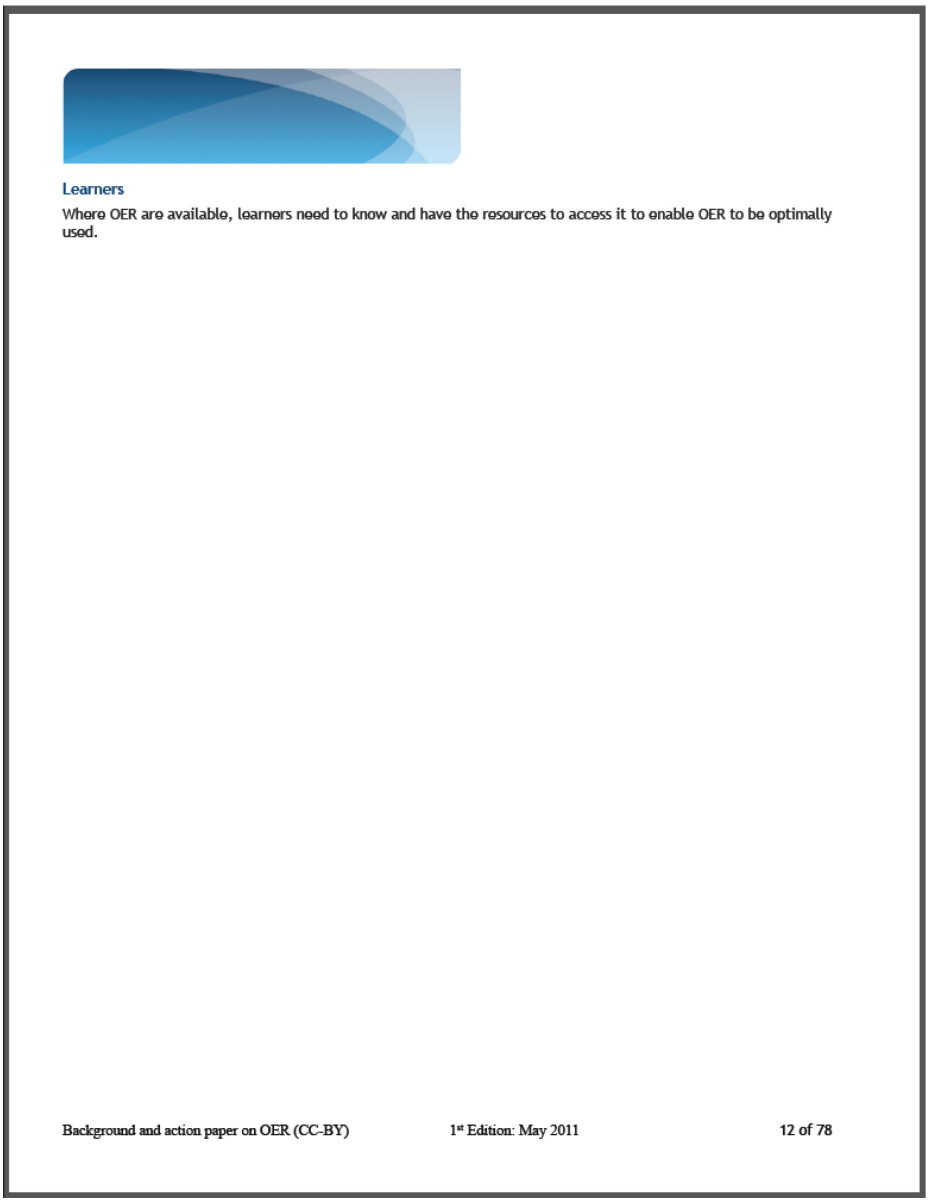
[14] Given their extremely large number, only selected producers have been listed for illustration purposes; the visibility of specific producers has also changed during the period I have undertaken this study.

the purpose of "supporting instruction and helping people learn" (Wiley, 1998). Since 2002 the term 'open educational resources' has been used, and adopted at UNESCO's Forum on the Impact of Open Courseware for Higher Education in Developing Countries (UNESCO, 2002).

Current debates and reports have tended to focus on developing and increasing the number of available resources and learning how they are being used/ adopted – mostly by educators, often in formal settings (for developing/improving curriculum, textbooks, teaching methods etc.). Research around open educational resources has largely tended to follow these practical developments (e.g. Atkins et al., 2007, OECD, 2007, Geser, 2007, Butcher, 2011). It has been concerned with sustainability, technology, design and copyright (e.g. Downes, 2007, Morgan and Carey, 2009, Lane 2009). Bacsich et al. (2011) recognize the large number of studies looking at "the discovery of online resources, the selection and evaluation of resources for teaching and learning, and ways of using resources for academic purposes" (p. 14). Overall, the story of open educational resources has largely tended to be one of institutional development, sustainability and ultimately reforming formal higher education. For exceptions see for instance Peters (2008) who looks at initiatives since the beginning of the century, and Santos (2008) for an analysis of the institutional discourses surrounding open educational resources.

While the analysis of the transformation of higher education is important, the story of open educational resources is also one of open learning. The few studies that look at learning invariably look at learning from the perspective of students already in postsecondary educational institutions (see Bacsich, Phillips and Bristow, 2011 for a review), and very few studies address learner access and use it as their main topic.[15] A recent report to the William and Flora Hewlett Foundation (West and Victor, 2011) compellingly illustrates the point that while everyone recognizes that individual learners are important, very little is being said about them. While it raises the issue of learners in the heading, the space below is left blank (see figure 1.5).

[15] Bacsich et al. (2011) also caution that while "many publications whose titles or abstracts seem to imply a learner use focus do not realise this in the full text", and instead are looking at either the producer side ('open educational resource creators') or other reuse of ('faculty members') (p. 8, 52).



Learners

Where OER are available, learners need to know and have the resources to access it to enable OER to be optimally used.

Background and action paper on OER (CC-BY) 1st Edition: May 2011 12 of 78

Fig. 1.5 Excerpt from 2011 Background and action paper on OER Report prepared for The William and Flora Hewlett Foundation (West and Victor, 2011)

My research aims to start filling this space. My focus is on the learner – what constitutes access for an independent learner, how is it enabled through open educational resources, the role of technologies in enhancing access and the social and institutional constraints which are always in tension with the affordances of technologies.

So far the story of open educational resources has been predominantly one of institutions and products. I believe the story of open educational resources should also be a story of

independent learners[16] who use these resources for their learning and educational purposes. There is statistical and anecdotal data to suggest that this is a very important perspective. Most information about open educational resource usage comes from the individual projects themselves, through web statistics and user surveys. MIT OCW statistics over the past six years have given us a breakdown of use among self learners, students and educators. According to the MIT website (MIT, 2011), of the millions of people accessing its open educational resources (over 90 million visits as of October 2011), almost half are self learners, followed by students and educators. Figure 1.6 illustrates the percentages in 2005, 2009 and 2011, based on MIT OpenCourseWare 2005, 2009 and 2011 respective Program Evaluation Findings Reports.

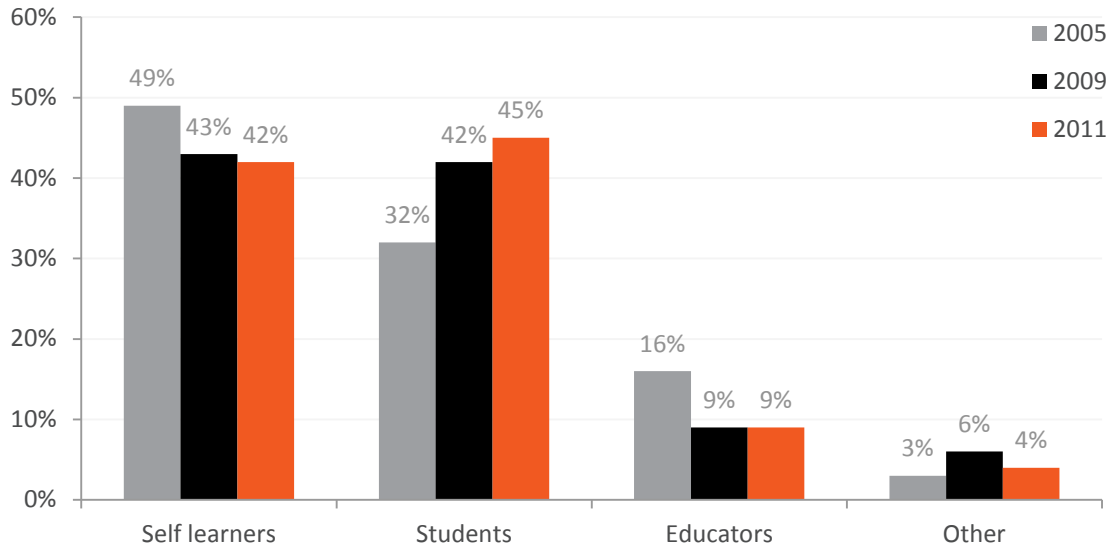


Fig. 1.6 MIT OCW users 2005, 2009, 2011

Similarly, Tufts OpenCourseWare reports that half their users are self learners, while the rest are faculty members and students at various educational institutions around the world (Tufts, 2006). More recently, Udacity reports that 80% of those who participate in their open online courses are not enrolled in higher education institutions (Thrun, 2012a)[17]. Obviously there is a need for more such usage statistics to paint a clearer picture of large independent learner use of open educational resources, but it is clear that such learners matter.

Current developments continue to reinforce this view. MIT recognized in 2011 that "OCW's single largest audience: independent learners" need closer attention and developed OCW

[16] I use the term independent learners to mean learners who are not formally enrolled in higher education institutions. Universities sometimes use the term self learners to distinguish such learners from those who are currently enrolled in formal education institutions.

[17] Available at http://events.mediasite.com/Mediasite/Play/82b693c44d94441ba4b9c08c75df31351d

Scholar (MIT, 2011). Courses that are part of OCW Scholar are specifically geared towards independent learners and are "more complete than typical OCW courses and include new custom-created content as well as materials repurposed from MIT classrooms. The materials are also arranged in logical sequences and include multimedia such as video and simulations" (MIT, 2011). Six courses were offered through the MITx initiative, with plans for another 15, targeting science and mathematics, with technology and economics to follow: Classical Mechanics, Electricity and Magnetism, Introduction to Solid State Chemistry, Linear Algebra, Single Variable Calculus and Multivariable Calculus. In 2012, building on MITx, MIT partnered with Harvard University and launched edX, in order to continue offering a whole range of courses to learners worldwide.

Similarly, Stanford University offered its introductory *Artificial Intelligence* course, taught by Sebastian Thrun and Peter Norvig (two of the world's best-known artificial intelligence experts), as a 'distributed education experiment' at the end of 2011. The course was offered online for free for anyone in the world, and included feedback on the learners' progress and a statement of accomplishment after completion of coursework and assessments. 160,000 people enrolled and 20,000 successfully completed the course.

This suggests that there is a unique and fundamental shift in access to learning and quality education occurring, one that will, once and for all, make the very best education available not just to elites but to everyone. This is obviously still an emerging phenomenon that has yet to take a clear shape, and needs to be investigated, so that the promise of increased real access to education can be realised.

1.4 'A project of exploration'

So far I have looked at a number of revolutionary, 'open' education initiatives that have emerged in the last decade, that have collectively come to be known as open educational resources. I have shown how openness is the mark of our time and creates the context in which this moment in opening education can take hold and thrive. This open context frames notions of access as a precursor to, and a gateway to, realising the promise of open learning/ education within the open educational resources movement. I have defined *open access* as the learner's ability to claim his or her learning (or educational) opportunity to achieve his or her learning goals.

I have then shown how the question of access to education is today a critical one, as highlighted by a number of pragmatic, economic and social reasons. Furthermore, access in the context of open educational resources needs to be investigated from the perspective of the learner. I have shown that while everyone recognizes that individual learners are important, very little is being said about them.

How do they access open educational resources to learn (or, indeed, do they learn?), what, why and how do they come to do as they do? These were the questions that helped frame my problematic and served as the basis for structuring my research. I want to know how open access to learning is enabled through open educational resources, from the learner's perspective. In this section I will outline how my research is conceptualised as a 'project of exploration' (Smith, 2005).

In order to find out if learning can be free, I examine access and study using open educational resources. Specifically, I examine the meaning of openness in learning through an historical reconstruction of the notion, I look at my own experience with *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* offered though MIT's OpenCourseWare initiative, and I explore the notion of a social imaginary as it underpins access. I focus on a problematic that is not conceptualised as a research question at the start of the inquiry:

> "A problematic sets out a project of research and discovery that organises the direction of investigation from the standpoint of those whose experience is its starting point." (Smith, 2005, p. 227)

The problematic is a term mainly used in institutional ethnography and aims to focus investigation in a specific manner, differently from a traditional research question. The notion was adopted by institutional ethnographers from Althusser (1971, p. 32) and it helps situate the inquiry in a context that is broader than that allowed by a specific thesis statement (Campbell and Gregor, 2002, Smith, 2005). Such an approach allows me the flexibility required to look at a complex and emerging phenomenon like open access to education.

Although the notion of a problematic is mainly used in institutional ethnography, analytic autoethnography also benefits from such an approach, given its scope in not only exploring and understanding the self but also speaking back to broader theoretical understandings of underlying phenomena (Anderson, 2006a). I will discuss this in more detail as I address my methodology in Part 2.

I investigate how open access to learning is enabled through open educational resources, from the learner's perspective. I start with the self learner experience in trying to use open educational resources to master a topic and go beyond the individual question to investigate how local actualities are "tied in multiple ways to complexes of relations beyond them", thus allowing for what Dorothy Smith calls a 'project of exploration' (2005, p. 38, 40). I use the self to connect to the social, and analyse how experiences of access to learning are enabled through open educational resources and shaped by existing and emerging relations in global education. My methodology brings analytical autoethnography (AA) into conversation with institutional ethnography (IE).

This allows me to look at the learner and his or her experience with open educational resources but also take a step back and look at the broader context in which access is experienced. I analyse circumstances under which open educational resources can be an answer to the need for open access and can profoundly change how we understand and enter open learning and education. By bringing analytical autoethnography into conversation with institutional ethnography, this study produces findings that are relevant at the personal as well as the institutional level, from the privileged and under-researched learner position.

It should be noted that I chose to look at how access to learning is enabled through open educational resources, rather than investigate the vast question of free education. However, a discussion of how these resources enable open access to learning is of course relevant and speaks to access to education more broadly. I will discuss how such issues help inform the education debate further in the final chapter of this thesis.

In order to understand the complexities that this problematic raises, I start by looking at persistent but elusive claims to 'openness' in learning and education at various times in our history before turning to the current moment when learning and education again seem to be released from institutional constraints to be accessible to 'everyone'.

2 A history of open access

> **"Coffee houses make all sorts of people sociable, the rich and the poor meet together, as also do the learned and unlearned. It improves arts, merchandize, and all other knowledge; for here an inquisitive man, that aims at good learning, may get more in an evening than he shall by Books in a month: he may find such coffee-houses. Where men frequent, who are studious in such matters as his enquiry tends to, and he may in short space gain the pith and marrow of the others reading and studies. I have heard a worthy friend of mine (now departed) who was good at learning (and had a very good esteem for the universities, and they for him) say, that he did think, that coffee-hoses had improved useful knowledge, as much as they have, and spake in no way of slight to them neither."**
>
> **John Houghton, 1728, *A Collection for Improvement of Husbandry and Trade (15, p. 461)*,** talking about learning in coffee houses as one does in universities

My problematic focused on how open access to learning is enabled through open educational resources. It raises a number of questions regarding the nature of 'open' educational resources as well as the meaning of openness in learning and access to knowledge. It has often been claimed that the Internet revolution and its subsequent developments – including the provision of educational content at virtually no cost and free of copyright restrictions – is a unique moment in learning and educational practice and should be understood as a fundamental shift in how we conceptualize open access and its promise (Iiyoshi and Kumar, 2008, Wiley and Hilton, 2009).

For that reason open learning and education has been usually explained in terms of current and new ICT developments, especially the rise of the internet and Web 2.0 technologies. The notion of open access itself, however, is not new. Its history goes back significantly further than the recent debates about the impact of technologies on learning. I will draw on the history of open learning and education to sketch its development, ground the current discussion, and provide a basis for understanding ways in which open educational resources may help meet today's opportunities and challenges. Peter and Farrell (forthcoming) show that such an approach enables us to start a more complex and nuanced discussion regarding the nature of openness, akin to significantly complex debates that questions of equity and access have been treated with in areas of schooling and higher education (see for instance Rizvi and Lingard, 2011).

An historical consciousness is conspicuously missing from most studies of open educational resources. When it is discussed, time generally begins in the 1970s with the inception of the

Open University in the UK. Peters (2008) is an exception 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. By considering the open classroom, open schooling and distance education he provides one account of a more or less cohesive movement whose 21st century features are open educational resources.

In *Constructing the café university: teaching and learning on the digital frontier*, Reinhart (2008) examines "changes occurring in the organization and delivery of learning at the level of higher education, and argues that it is now possible to envision the shape and structures of the future digital university" (p. 13). He considers the set of circumstances that saw the reformation and the printing revolution brought together to generate 'new meaning' in the context of new technology (Erikson, 1962, cited in Reinhart, 2008 p. 13). He asks to what extent digital technology is redefining the 'meaning' of the modern university (Reinhart, 2008). The question he asks of the institution of the university is one that we can equally ask of open learning, from the perspective of the learner.

I argue that it is valuable to look at earlier incarnations of the idea of open access, going back to embryonic forms of open adult education of the twelfth century, well before education became comprehensively institutionalised. This allows me to focus on times when learners may have had somewhat similar dispositions to those of potential users of open educational resources today, in that they were facing population growth and diffusion of technological innovations, accompanied by intellectual and social ferment. They were also less constrained by institutions. There is, of course, a paradox. On the one hand, the institutions have a comprehensive power to create resources and make them available on whatever platforms and in whatever ways they see fit. On the other hand, once those resources are made available, the learners, at least in theory, have far more control than they would have as traditional learners and they may not need to engage in any way with the creators of the resources.

Consistent with my problematic, I aim to approach history and what constitutes access from the learner's perspective and understand what is 'open' and how learning can become free when it develops in the informal public sphere as opposed to formal institutional settings. In this chapter I examine historical forms of open access to learning along with currently emerging ones. Although I recognise that ancient Greek athenaeums and lyceums, early Buddhist monasteries and Islamic Madrasas already displayed and acknowledged openness of ideas and students, an understanding of today's facets of the phenomenon is best served by exploring its forms since medieval times. Furthermore, the forms and changes I describe under

distinct headings in the following sections are not always clearly distinct; they often overlap, coexist or gradually transform and develop.

2.1 An (more nuanced) approach to understanding openness

Understanding how open access to learning is enabled though open educational resources requires a closer look at the conversations the open educational resource movement has sparked around access to learning and openness in higher education. Given my focus on the learner – as discussed in chapter one – the current body of research around open educational resources offers a very one-dimensional picture, focusing on technicist definitions and practical implementations (e.g. sustainability, technology, design and copyright etc.).

This situation delivers two avenues for addressing my problematic. The first would see me accept such limitations as I move on to my own study. I could have disregarded any such literature altogether, as called for in some recent discussions to literature reviews in fields that demand change. Stephen Downes for instance confesses to having "clashes with journal editors over the subject of literature reviews (which, for the most part, I do not provide, and eschew as irrelevant)" (Downes, 2011). In a similar vein, George Siemens sees literature reviews as "a controlling, heritage-preserving system" and notices that "as pace of change increases, the heritage-preserving aspect of literature reviews becomes a liability" (Siemens, 2011). Speaking of areas such as the higher education system he warns that "we don't get very far as the pull of the past and existing mindsets is instantiated in any attempt at a new vision". He muses that "perhaps what we need is periods of writing without literature reviews" (Siemens, 2011).

A second avenue seeks to look for a more nuanced discussion of openness. As open access to learning and education has been one of the most enduring ideas in education, I look at history to provide another understanding of the concept, beyond the one imposed by the current developments in digital technologies. I will explore how questions about open access to learning and education go back further than the recent debates, which have so far failed to adequately place them in an historical context.

The notion of an historical context demands that I first clarify how I approach historical knowledge in a way that is consistent with the overall approach of my research as well as with the specific claims which underpin my world view and methodology (which I will address in detail in Chapter 3).

First, I am not a historian, nor is this an historical study. I am trying however to get an understanding of ideas of openness by looking at their previous incarnations and subsequent evolution. The partial nature of this approach to history however does not imply that the manner in which it is conducted is not thorough. Ferguson (2011) notes that when doing historical research, a consistent body of knowledge and interpretation relies on two different, yet complementary modes of inquiry. The first, akin to sociology, is the discovery of 'covering laws' (see Hempel, 1965), in the sense of 'general statements about the past' (Ferguson, 2011, p. XX). The second significantly different methodology, is what Ferguson (2011) refers to as 'imaginatively reconstructing experiences' (see Collingwood, 1939). This involves more than merely allowing a text to 'speak for itself'; it requires something akin to an ordered imagination: "enactment in the historian's mind of the thought whose history he is studying" (Collingwood, 1939). He understands historical inquiry as co-constructed by the researcher, and points out that "historical knowledge is the re-enactment of a past thought encapsulated in a context of present thoughts which, by contradicting it, confine it to a plane different from theirs" (Collingwood, 1939, cited in Ferguson, 2011). In this sense historical inquiry is grounded not in the past but in the present, and enables understandings and even analytical statements about the present and the future. Collingwood (1939) thus insists that "we study history in order to see more clearly into the situation in which we are called upon to act".[18] It is in this spirit that I approach sections 2.2 – 2.5.

My approach to the rest of this chapter will consequently be a combination of looking at current literature and looking backward at the historical context. The summary review of literature (section 2.2) allows me to clarify the context for my research and to establish a well-defined understanding of a new field filled with unclear, overlapping and often imprecise definitions. I will use the historical context to generate a more refined, novel look at open access to learning using open educational resources.

2.2 Openness, access and the question of contemporary education

Today's discourses around openness revolve around the rise of open educational resources and a potentially new set of opportunities for open learning and education. The growth of the movement in the last decade has been marked by an ongoing debate concerning the definition and particularly the boundaries of what constitutes 'open' – in relation both to open content in

[18] I will return to this understanding as I examine the world view underpinning my methodology in Chapter 3 and reflect on history as requiring two modes of inquiry simultaneously.

general and to open educational resources in particular. Emphasis is placed on various points on the continuum between the practical and philosophical dimensions of the concept (Atkins et al., 2007, Downes, 2007, Hylén, 2006, Geser, 2007, Schaffert and Geser, 2008, Iiyoshi and Kumar, 2008, UNESCO, 2009, Sclater 2011, West and Victor, 2011). Scholars have largely tended to follow practical developments (e.g. forms, formats, authoring, digitisation, accessibility, language) and concerns of various groups and institutions involved in the initiatives' development and finance (e.g. quality, cost, sustainability, business models). I do not seek to rehearse those debates here, or to propose a new definition, but rather to clarify my use of the term 'open educational resources' for the purposes of this study.

Open educational resources were first defined at the 2002 UNESCO Forum on the Impact of Open Courseware for Higher Education in Developing Countries, sponsored by The William and Flora Hewlett Foundation. The term encompassed the "the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes" (UNESCO, 2002, p. 24). They are widely understood to be "digitized educational materials" that are offered freely and can be used by anyone for learning (UNESCO, 2002, OECD, 2007). While these definitions are descriptive, most early definitions tended to be more operational and revolved around technology and licensing issues (for a summary see West and Victor, 2011).

Neither exclusively descriptive, nor exclusively operational accounts capture the actual and potential impact of open educational resources on learning. We need to move beyond descriptive and/or operational definitions to add a philosophical dimension. To do this I will draw on Wiley's (2009a, 2009b, 2010) understanding of open content and Schaffert and Geser's (2008) meanings of openness, as well as UNESCO (2009) understandings of the freedoms associated with the concept.

Wiley (2009a, 2009b) describes openness of content in terms of the rights it affords the user. He sets out four dimensions in his 4R Framework:

- reuse – content in its exact original form
- redistribute – share copies of the content (or part of) with others
- revise – alter, adapt the content
- remix – combine the original or revised content with other content

In his framework, the resources are open if the license allows users to exercise these four rights free of charge. In a similar vein, Lane, (2009) argues for understanding the openness that

stems from open licensed resources, that are free to access and use, copy, re-use and make derivative works.

Schaffert and Geser (2008) have chosen to focus on four dimensions of openness:

- open access to content (free of charge)
- open license to reuse, modify, recombine that content
- produced in an open format
- produced using open source software

While the first two echo Wiley's criteria for open content, the last two draw attention to the digital dimension (no restriction due to proprietary technology) and shift the focus from the user to the producer of the resources. Similarly, Wiley (2010) further refines his definition of openness by complementing 'free' and '4 R permissions' with "technology and media choices that do not interfere with users' exercising those permissions". Figure 2.1 summarises the dimensions of 'open' in the context of open educational resources, following Wiley (2010). For a summary of definitions of open educational resources across the spectrum see Appendix 1.

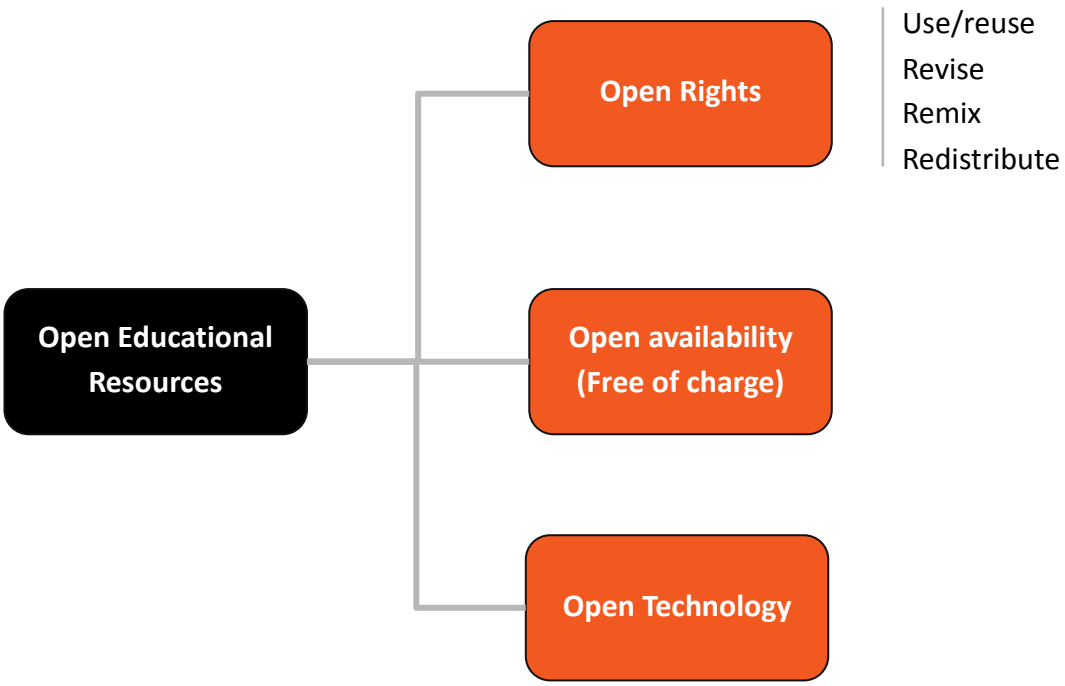


Fig. 2.1 Dimensions of open educational resources

A 2009 UNESCO report further shifts the focus to the conditions under which resources enable use. It articulates three freedoms that identify open educational resources. While the first two – legal and technical freedom – follow previous conceptualisations, the third, cultural or educational freedom also speaks to the extent to which the resources are meaningful for lifelong learning. No clear articulation of this freedom is given, as the report remarks that this

freedom is decidedly “harder to express” (UNESCO, 2009). It emphasises the importance of realising, or at least striving for all three freedoms to be realised (UNESCO, 2009). In a similar argument, Wiley (2011) recently discusses characteristics of ideal open educational resources, that are not only freely available and grant 4R permissions but also “effectively support the educational goals of the user”, equally driving home the importance of understanding the difficulties associated with further clarification without reference to the user.

For the learner, a ‘freedom’ such as the one described by the UNESCO (2009) report is central. The report refers to characteristics of the resource itself (how well the resource travels, how well it encourages engagement). However, despite the availability of open educational resources, users of these resources in general and learners in particular, are still faced with barriers to accessing resources, notably academic literacy in English (Morgan and Carey, 2009) and digital literacy (Lane, 2009). Access to adequate technology (hardware) and reliable and affordable connection (bandwidth) are also often taken for granted (Santos, 2008, UNESCO, 2009). Furthermore, openness from the learner’s point of view implies access to the resource at any time and from any location. Yet the digital character of the resources themselves is no guarantee, although it is often assumed, of access anywhere/anytime. Further barriers can stem from required synchronicity, censorship, physical settings etc..

From the learner’s perspective a focus on accessibility in terms of technology, skills and literacy, is important, but so is a focus on location and time (see figure 2.2 below). ‘Open’ from a learner perspective thus becomes concerned not only with the rights the resource needs to afford the user, but also with the accessibility the resource has to that user: provided at no cost, openly licensed and technically enabled, but also reachable anywhere at any time, in terms of literacies and technology.

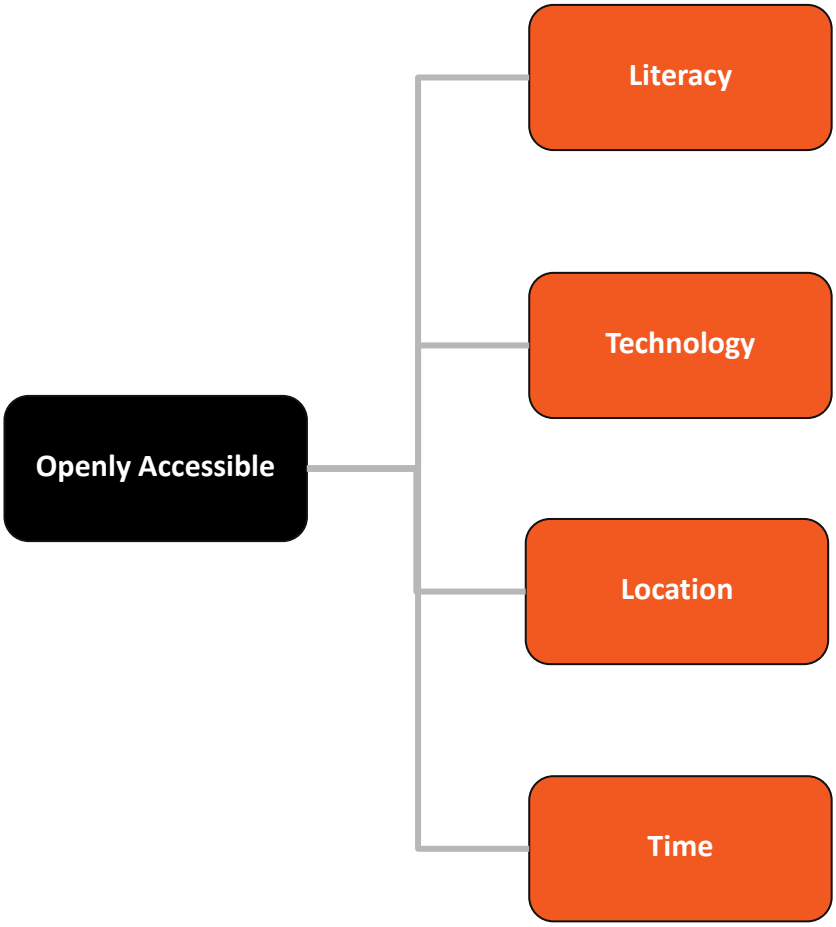


Fig. 2.2 Dimensions of open accessibility

The perspective presented above might seem very demanding. However, Schaffert and Geser (2008) remind us that many open educational resources are developed in the spirit of open access while not confronting the real disparities in access to skill and technology around the world, and therefore not fully conforming to the ideals they propose. To address this problem, when defining 'open', Wiley (2009a) notes that it is a "continuous, not binary, construct". He gives the analogy of a door, ranging from wide open (free) to completely shut with various degrees of openness along the way – the door ajar. This is a useful image to depict all the dimensions of openness, including the notions of accessibility we have discussed.

The concept of open accessibility allows me not only to explore literature beyond that specifically addressing open educational resources, but also provides an avenue to further explore the idea of openness itself, from a learner perspective, as it has developed through history.

2.3 12th to 16th century: the opening and closing of higher education

The 12th century constitutes the first moment in the discussion of open access to learning and education. This period was characterised by a number of changes that helped shape access. A major factor was the growth of medieval towns and increasing urbanisation of the society. At this time 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). At the same time society remained to a large extent decentralised and fragmented.

Until this time, education was mostly restricted to monastery open schools. The gradual restrictions imposed on outsider access lead to the rise of cathedral (and later municipal) schools run by secular clergy as opposed to monks, thus greatly thrusting education into the public sphere (Riddle, 1993).

As student participation rose, they 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. Riddle (1993) does note a few exceptions – deliberate foundings: Palencia in 1208 by King Alfonso VIII of Castile, University of Naples, by Emperor Frederick II in 1224, and University of Toulouse in 1229, by Pope Gregory IX at the request of secular government. Similar movements were present in other parts of the world. In India, for instance, Nalanda University taught students from India, Sri-Lanka, China, Korea and scholars from around the world.

The 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. The wealthy found no real benefit in attending such gatherings.

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 and Conrad, 1894, p. 254, cited in Riddle, 1993).

They taught rhetoric, grammar, dialectic, music arithmetic, geometry and astronomy (Perkin, 2006), and by the 14th century, university study became a prerequisite for engaging in many occupations (Riddle, 1993). The universities of Paris, Bologna, Oxford and Cambridge emerged and were shaped by their students (the latter two by English students returning from France).

Although in the beginning power tended to be largely located with the students, who dominate everything short of the curriculum (Perkin, 2006), by the 15th century power is shared equally between students and professors. Scholars began to collect fees from the students, later supplemented by the community (Perkin, 2006) which further diluted the students' control. By the 13th century, the pope and the king begin confirming privileges to the institutions, slowly followed by changes to the nature of the university that reflect "an institution controlled by public authority" (Riddle, 1993). In the 15th century the University of Paris lost its autonomy and international character altogether and became subordinate to the French Parliament (Le Goff and Goldhammer, 1980, cited in Riddle, 1993). Similarly other universities became increasingly tied to a permanent location and state, and gradually lost their international scholars and students. Trinity College of Dublin is established among others, specifically to stop subjects of the crown travelling to universities in France, Italy, and Spain, where Queen Elizabeth believed they became "infected with Popery and other ill qualities and so become evil subjects" (Fletcher 1981, cited in Riddle, 1993).

Thus by the late 1500s the University access to knowledge and learning had become very different from what it had been early in the 12th century. No longer a place for the free exchange of students, scholars and ideas, higher education had become an increasingly closed institution.

12th century universities however already contained in them the idea of open access to learning. Although by no means comprehensive, many facets of the phenomenon were open to a significant extent. For a time driven by learners, access to knowledge rested on a growing curiosity and increasing awareness of opportunities. Although students were welcome regardless of their nationality (in Europe this however often implied Christian nations alone), women were denied access. 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, an embryonic form of an international, albeit not yet global, institution.

The 15th and 16th century however, also saw another force that started to reshape the landscape of access to knowledge and learning. Affordable printed works (emerging after Gutenberg's invention of the printing press in 1450-55) had started a cultural transformation. Fifty years later, Manutius invents the small format, inexpensive, vellum bound portable books (libri portatiles). Yet 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.

2.4 17th century: the coffee-house education

The seventeenth century offers us a perspective on open access that is both different and familiar. Coffee houses (or Penny Universities as they were also known) constituted a remarkable moment in opening adult (higher) education.[19] In a period not unlike the one we are faced with now, characterised by a growing population and the spreading of technological innovation – notably the printing press – coffee houses played a crucial role in enabling access to knowledge and innovation as well as education (Kelly, 1992). This was a period of intellectual and social ferment, marked by the spread of the ideas of the scientific revolution and the beginnings of a period of globalisation, as arguably the first multinational companies, the British and Dutch East India Companies, expanded their influence from Europe to Asia and Africa.

The first coffee house was established in Oxford in 1650, followed by one in London in 1652. Within 10 years there were almost 100 coffee houses, and within 50 years most historians agree that there were over 2000 in London alone, at the centre of social and cultural life of the period (A. Ellis, 1956, Kelly, 1992, Levere, Turner, Golinski and Stewart, 2002). Some more conservative estimates place the number at around 500, still quite remarkable for the period (M. Ellis, 2004). Coffee houses emerged across Europe (e.g. Amsterdam in 1665, Bremen 1669, Venice 1723) and its colonies in the Americas, albeit somewhat later than in England. Coffee and chocolate houses became widespread in places like Paris, Vienna, Venice and other parts of the continent early in the 18th century, however developed a distinct character with regard to their role in their respective public scenes (A. Ellis, 1956, M. Ellis, 2004). As English coffee

[19] Penny Universities represented a significant moment in the context of a number of social, political, commercial and intellectual phenomena. Willinsky (2006), for instance, examines them in the context of historical movements to publish scientific work and democratise the circulation of knowledge. Pincus (1995) explored their role in the development of the 'public sphere'. I am interested here in how coffee houses constitute an instance in the opening of adult higher education.

houses are well documented in existing historical accounts, I will focus on them for the remainder of this section.

They emerged at a time when students coming from a wealthy background attended Cambridge and Oxford only to receive general guidance and become politically savvy, and often left before completing a degree (Perkin, 2006). By the late 1600s Oxford, and indeed universities everywhere were “very dead for want of students” (Perkin, 2006, p. 172), driven away by the very ideas of the scientific revolution and a newfound distrust of the institutions that seemed to teach the ‘old doctrine’.

During this time, coffee houses provided a counterpoint to social stratification to the extent that men of all social classes with an interest in political and other intellectual issues were welcome. For a penny – earning them the name of Penny Universities – 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. At the time, John Houghton, a Cambridge man and a fellow of the Royal Society remarked that they “make all sorts of people sociable, the rich and the poor meet together, as also do the learned and unlearned” (Houghton, 1728, cited in Kelly, 1992 p. 55) or, as Samuel Butler (1667-1669) put it “admit no distinction of persons, but gentleman, mechanic, lord, and scoundrel mix and are all of a piece” (cited in M. Ellis, 2004, p. 49). As they were open to anyone who had a penny, they created new social spaces, frequented by people of all classes and all levels of education, changing both who gets educated and what knowledge they could acquire.

It should be noted that although coffee houses did not explicitly exclude women (Bakken, 1994, Cowan, 2005) women very rarely attended. Coffee houses were overwhelmingly attended by men. Recent research does suggest some women frequented the coffee houses. ‘City ladies and citizens’ wives’ and other upper-class women welcomed the opportunity to engage in discussions and possibly used their status to overcome the disapproval that middle class women would have incurred (Pincus, 1995, M. Ellis, 2008). Women’s attendance was a matter of custom, hence accounts of French coffee houses for instance refer to women, other than owners or employees, a lot more often than the English do. As is the case in contemporary times, openness was a matter of degree, and was at least in part culturally determined. Some authors (e.g. Goodman, Lovejoy and Sherratt, 1995) claim that the poor were also marginalized.

Another important feature of openness in Penny Universities was that the equality conferred on patrons by the codes of order extended beyond their ability to sit anywhere they wanted. The codes stated that no seats could be claimed (A. Ellis, 1956) and allowed people not only to take any vacant seat in the literal sense but also to engage in any discussion that might be going on (or in turn initiate one). For an illustration see Appendix 2a and 2b for the complete text of the short poem "The Rules and Orders of the Coffee-House" (1674) showing the social norms expected in coffee houses. This no a-priori assignment of condition potentially allowed patrons to inhabit any role in the ensuing interactions, from the most reticent to the most forthright. The coffee houses further encouraged and fostered discussion not only through their indifference to status but also through their institutional character and spatial provisions (M. Ellis, 2008).

The seventeenth century was faced with a rapid increase in the production and circulation of information, scientific knowledge and a variety of other texts, leading to an overabundance of information – the first 'information overload' (Rosenberg, 2003) – and the need to find ways of coping with it in terms of access, reading and learning.

Coffee houses provided unprecedented access to all sorts of content that had been previously inaccessible. They supplied the current newspapers (such as *The Tattler* and later *The Spectator* and *The Guardian*), as well as various other pamphlets and bulletins at a time when newspapers were something of a luxury and none but the very wealthy could afford to buy them. These were not only accessible to customers who could read, but also to those who were illiterate. Several times a day the news would be read out loud either by patrons or 'runners' (who went around announcing the latest developments), in order for all to keep up with the news of the day. The Penny Universities also provided access to books. It is estimated that out of the 2000 coffee-shops, more than a quarter had libraries with as many as 2000 volumes (A. Ellis, 1956, Kelly, 1992). Moreover, they provided access to yet unpublished material, at times preceding actual publication by a few years (Levere et al., 2002).

Furthermore, they also attracted some of the best minds of the day, who used them for formal educational activities, delivering lectures to those present and contributing to the creation of coffee houses as sites for discussion and learning. Scholars and scientists gave talks (some including experiments and lively debates) or courses of lectures on topics ranging from physics, mathematics, and philosophy to literature and religion, catering to public demand. Peter Sthael, for instance, gave private chemistry lectures at Oxford and public ones at Tillyard's Coffee House, while John Harris taught privately at his home and regularly gave public

mathematics and astronomy courses at the Marine Coffee House (Shelley, 1909, Kelly, 1992). They were followed by James Hodgson, who lectured on mechanics, and by Humphry Ditton, both from the Christ's Hospital Mathematical School. William Cowper performed an anatomical dissection after a public execution. Ellis (2004) notes that this kind of science was more open to debate, more practical and less abstract, providing unprecedented access to every kind of knowledge. As Houghton went on to observe "here an inquisitive man, that aims at good learning, may get more in an evening than he shall by Books in a month... and he may in short space gain the pith and marrow of the others reading and studies" (Houghton, 1728, cited in Kelly, 1992 p. 55). In 1701, a French letter from London likens Will's Coffee House to the Parisian Académie Française "although unlike the august academy, the coffee house was a place…. open to all comers" (M. Ellis, 2004, p. 152).

The rise of the coffee houses has been explained to some extent by rising prices for alcohol and the purported benefits of coffee as well as their success as places that disseminated and distributed news and where one went to acquire knowledge (Pincus, 1995). Their demise – and by the mid-1800s they had all but disappeared – was driven not by the rise of tea as has often been asserted, but by their failure to preserve the openness that had made them so successful in the first place.[20] The coffee houses slowly turned to adopt more and more explicit rules, which would specify membership and close them off to non-members, transforming them into private clubs and exclusive societies: "it was found that undesirables could only be barred from entry by turning the open house into an exclusive club. Once this transition began, the days of the coffee house were numbered" (M. Ellis, 2004, p. xvi). Their decline was also attributed in part to the introduction of street letter boxes around London and increasing efficiency of postal services and newspaper distribution (Bakken, 1994), the Industrial Revolution and the time constraints it imposed on the working class.

More than anything, as M. Ellis (2004) puts it, "coffee houses had become a dead metaphor" (p. 212). They lacked the appeal, the vibrancy, the access, the opportunities and the sociability, and "since it had always been as much an idea as a building or a business, it was an idea that had lost its grip on the imagination of the people" (M. Ellis, 2004, p. 208). The 'idea' of the coffee house, promoted fervently by Addison and Steele, among others, in *The Spectator*,

[20] Tea appeared soon after coffee, yet it remained more expensive and scarcer (Ellis, 2004). It also had a different cultural role, its main venue for consumption being the Victorian home, rather than a tea-house, and its target more feminine circles. It could be argued that tea's rise in popularity was a consequence of diminishing coffee consumption.

carried on and reinforced by writers at the time and since, can only be of course an incomplete account: “It is about what society should be like, not what it is like” (M. Ellis, 2004, p. 198).

Seventeenth century coffee houses provide us with a different context in which to understand notions of openness and access. They show us that education is rarely completely open. It is more a matter of degree. Access is not free, but very low cost, and is defined by the ability of any man to access newspapers, books, lectures and people and participate in debates and discussions around them (Peter and Farrell, 2009). Although it was claimed that a coffee house education was available to all, not all social groups were included. Markedly, women were effectively still denied access. However, learning was certainly available to more parts of the society than in formal education, and opportunities for access were greatly enabled by depending less on the forms of the resources. Following the printing revolution, the new technology also raised questions of format, quality, cost and intellectual property, but they were mostly subordinate to questions of perception and spatial and institutional character of the coffee houses.

2.5 18th century to 19th century: Newly open education

Although the 17th and 18th centuries saw the universities continue to decline around Europe, even abolished in France at the time of the revolution, and overlooked by the new ideas of the scientific revolution, natural and social sciences (Perkin, 2006), new understandings of access to learning and education emerged.

The end of 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). This was also a time when “politics, education, literacy, journalism and recreation were still bound inextricably together. Their division into separate institutions was one effect of the ruling bloc's new techniques of power” (Donald, 1983).

Self-education societies however are not the only way access was enabled. 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, and Zvacek, 2000, Tait 2003). This new form of education is said to have had its origins

in England in 1844 with Isaac Pitman's shorthand course delivered by correspondence, provided study materials and returned corrected students' work (Tait, 2003).

Most notable among these new forms was the University of London's External System. When established, in the first Charter granted by King William IV in 1836, 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" (Privy Seal, 1836). It should be noted that at this point women were still denied access. The University further expanded its access with the establishment of the External System in 1858, which delinked access to its examinations from study for any student in any institution. Sir Robert Lowe, the Member of Parliament for London University, expressed this succinctly: "what I mean by a university is an examining board" (Allchin, 1905). Decoupling study from a specific location constituted a radical change to the status quo and had many question whether this was still the same institution. It reminded the Principal of King's College, Reverend Henry Wace, of Voltaire's two objections to the Holy Roman Empire, one that it was not Holy and the other that it was not Roman. He raised two similar objections regarding the University of London: "one that it is not a university and the other that it is not of London" (1889).

The 18th and 19th century challenged understandings of open access by opening up of higher education to groups of the population previously excluded. While learner-lead self-education societies emphasized community, correspondence institutions downplayed it. Self-education societies also reached across classes and after offering external degrees to individuals anywhere in the Empire, London University notably extended its admission to women in 1878. Still access 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).

2.6 20th century education

Even with its exceptional improvement to access during the 19th century, by the early 1900s all around the world only half a million students (about 1% of the relevant cohort) were attending higher education institutions (Banks, 2001, cited in Schofer and Meyer, 2005). Yet people did imagine a future where all students would be able to access education for free:

> "A university education will be free to every man and woman. Several great national universities will have been established. Children will study a simple English grammar adapted to simplified English, and not copied after the Latin. Time will be saved by grouping like studies. Poor students will be given free board, free clothing and free books if ambitious and actually unable to meet their school and college expenses. Medical inspectors regularly visiting the public schools will furnish poor children with free eyeglasses, free dentistry, and free medical attention of every kind. The very poor will, when necessary, get free rides to and from school and free lunches between sessions. In vacation time, poor children will be taken on trips to various parts of the world. Etiquette and housekeeping will be important studies in the public schools." (Watkins, 1900)

as this excerpt – "How Children Will Be Taught" – from an article in the *Ladies' Home Journal* at the turn of the century shows.

By the end of the 20th century student numbers grew 200 fold, and the hundred million people now enrolled represented almost a quarter of the college aged people (Schofer and Meyer, 2005), with countries such as the United Kingdom catering for up to half of the student age group (Perkin, 2006).

Miners' libraries of the late 19th – early 20th century provide an interesting insight into the thirst for knowledge and rise of interest in self-education of the period.[21] They arose in Britain at the turn of the century out of the exponential growth in the coal industry and associated rise in population in mining areas. Hywel (1976, p. 185) cites the introduction of free elementary public school education, and miners' diversion of funds towards the "erection and maintenance of workmen's institutes, thus providing facilities for their own further education" in the absence of the same provisions by the state for secondary education as one of the critical factors that lead, at their peak, to the establishment of over 100 institutes with over 750,000 volumes. Between 1890 and 1910, with few exceptions, every mining town and village had erected its own institute, containing, among others a reading room and a library that would be at the heart of the establishment. Their demise came at the end of the Second World War, with the provision of secondary education in 1944. This greatly diminished the need for self-education. At the same time Hywel (1976) notes another cause in the advent of local

[21] Miners' libraries could also be considered in the context of the 18th century as Hywel (1976, p. 185) notes that "the libraries now being amassed appear at the outset to have had all the features of the philanthropic and craft institutions of the 1850s and 1860s".

libraries that could rival and surpass miners' libraries in terms of resources, also due in part to pit closures in 1959. By 1960 most institutes had disappeared. It should be noted however that this phenomenon was and remained particular to Britain, and especially South Wales:

> "there was no comparable educational institution, generated entirely by a proletarian culture, existing anywhere else in the world during this period" (Hywel, 1976, p. 190).

The main transformation in the 20th century came in the form of mass access replacing elite higher education, with growing influence from the state, that came with increased funding and control (Scott, 1995). Especially the period after the Second World War saw the greatest expansion in higher education since the 12th century growth of medieval towns and cathedral schools, shaped then as it was again now, by a period of growing thirst for access to knowledge and skills. Again at the heart of this growth was the belief in the people's right to access society's knowledge.

In Argentina this trend was shaped by the ideas of the 1918 Cordoba reform (Altbach, 1999), particularly visible in the University of Buenos Aires. The university was open to anyone to enter, with enrolment to any faculty (including medicine and architecture) only restricted by having graduated from high school. Upon completion of a one year general training (the 'ciclo basico comun'), 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 founded in the 1960s, at a time of significant developments in communications technology and mass media. The Open University 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). Students of all ages were now able to again combine full-time work and study.

The rest of the world followed the same trend. 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). By the end of the century, the Indira Gandhi National Open University in India provided education to remote areas around the country (Rao, 2001).

A contrasting movement emerged in Sweden, where openness was more around leaving the institution rather than the pressing concerns with entering it. Most Universities described above focused on students getting a degree at the end of three years of study. Swedish higher

education, by contrast was built around 'professional programs', some of which were cross-disciplinary and not aimed towards getting the three year degree but rather focused on developing skills that qualify the student for a specific occupation (Trow, 2006). They thus offered an 'out' to the many students who would want to leave an institution without gaining the academic degree provided by it – a practice that plagued institutions such as the University of Buenos Aires or the University of South Africa.

2.7 A story of continuities and discontinuities

We are now in the 21st century. The emergence of open educational resources in the last decade has sparked discussions around the notion of openness in learning and education and has often framed them as specific to, and emblematic of, the Internet revolution. Yet the spirit embodied by open educational resources is a recurrent phenomenon through history where contemporary discussions have important precedents. Understanding them requires that we distance ourselves from our current focus and ask how such debates have been experienced and re-experienced in the past.

Making the connection between a history of open access to education and the contemporary state of affairs (summarised in figure 2.3) reveals both continuities and discontinuities and allows us to see how some of the current concerns articulate with insights and lessons learned from the past. It is important to acknowledge that the reality of all previous incarnations of the idea of openness never fully realised the ideals that they represented. Openness was then, as it is now, a matter of degree and it exists within a set of tensions that concern all dimensions of the concept.

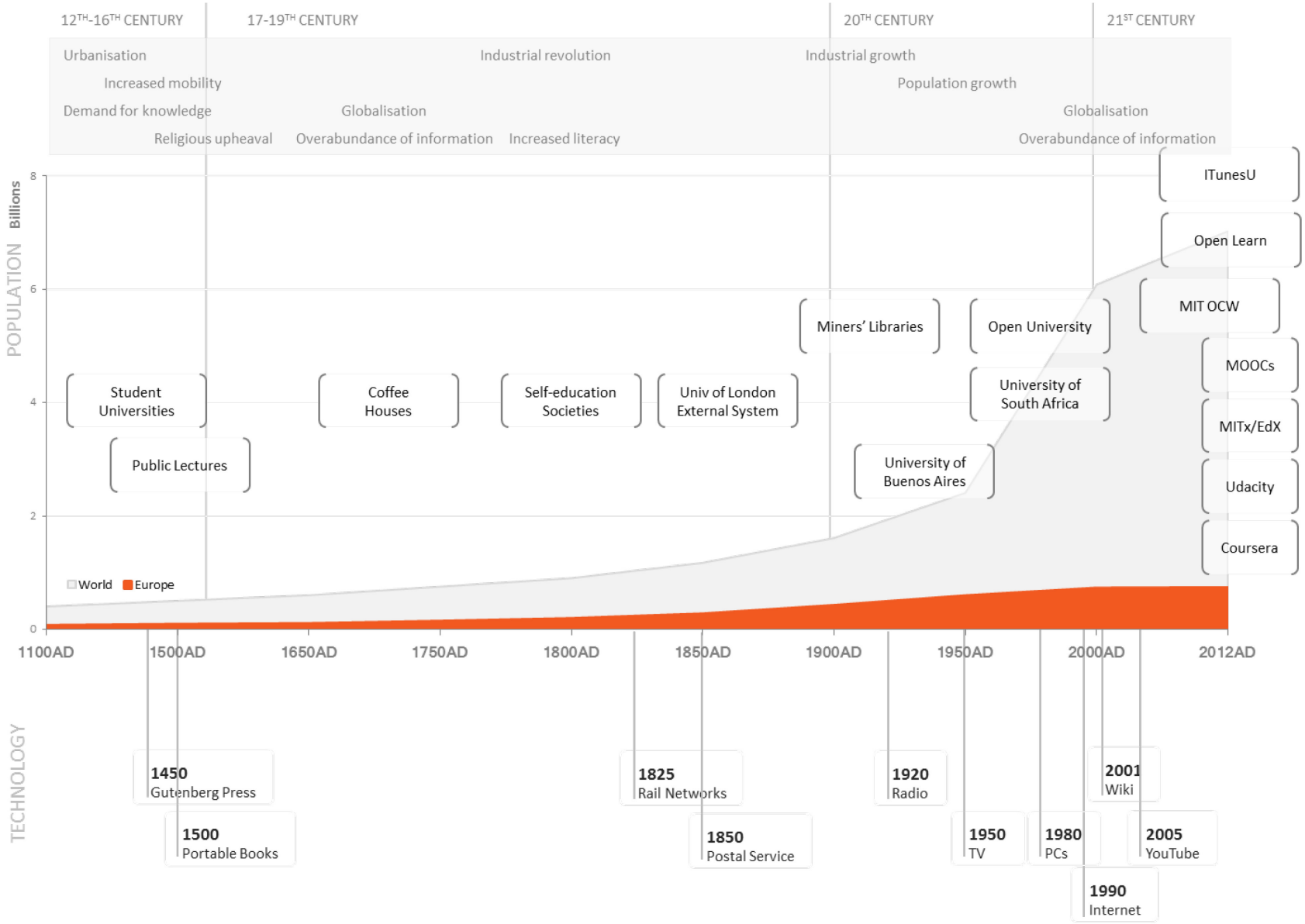


Fig. 2.3 A history of open access

First, an historical account helps us understand the importance of the context in which open access becomes enabled. It highlights the starting point for talking about openness not in relation to the resources themselves, but in relation to the broader political, social and economic movements of which they are an integral part. It thus allows a more complex and nuanced discussion regarding accessibility by first highlighting the array of factors underpinning it.

Openness as it emerged in the late Middle Ages was spurred on by increased population mobility, growth of towns and a rise in intellectual curiosity in a decentralised and rather fragmented society. The coffee houses of the 17th century were marked by a conjuncture of factors that seemed to release education from its constraints to be accessible to 'everyone'. Equally, the 18th and 19th centuries saw increased literacy and growth in mail and rail services fuelling and increasing access to learning and education. Similarly, the advent of open educational resources comes at a moment characterised yet again by a rapidly growing population and the spread of technological innovation and globalisation.

Furthermore, the 17th century provides insight into another facet of the emergence of access. Coffee houses emerged out of coffee-men's concern with running a business, and reaching the greatest number of customers. It was this concern, not the concern for education that drove the creation of an all-inclusive environment, both in terms of social class and views and opinions. In much the same way, the MIT OpenCourseWare initiative had its roots in the university's economic interest, specifically a desire to enter the distance/e-learning market, rather than a means of primarily opening up education. In 2000, with the assistance of consultants from Booz-Allen & Hamilton, the university considered types and forms of distance education and evaluated how much revenue each of these could yield (Lerman, Miyagawa and Margulies, 2008). The committee charged with providing a recommendation ended up putting forward the idea of providing the content for free, in line with the university's mission "to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world" (MIT, 2011). They found no economically viable model for commercial distance/e-learning (Lerman et al., 2008). So neither MIT nor the Penny Universities set out with the fundamental aim of opening education. However they both, in their different ways, developed these spaces when the opportunity arose.

The Penny Universities did not initially emerge out of any deliberate effort to create the kinds of open places for conversation and learning they embodied, but out of the space that developed around a commodity, in the context of the intellectual and social tumult that accompanied the era's technological revolution and growing population. The development of the coffee houses was fostered through the continued business interests of its owners and complemented by a growing and deliberate construction of the coffee houses as spaces for open access to knowledge. For MIT, the openness of the resources is contributing to their profitability in that it is making the University's resources visible and attractive for prospective students. It enhances MITs reputation beyond academia and it attracts students to its elite face to face programs.

Similar tensions between the commercial concerns and humanistic missions aimed at providing access to education are currently emerging in the context of new business ventures like Coursera and Udacity. I will revisit these dynamics in the final chapter of this thesis.

It is important to recognise, now as then, that technologies do not emerge in a social, political or economic void, nor are they taken up and used in isolation from the social, political and economic forces that are in play at the time. They are the products of historical and intellectual movements as much as they contribute to them. Our enthusiasm to identify and employ the innovative potential of new communications technologies should be tempered by a recognition of the risk of foregrounding technology and ignoring other aspects of the phenomenon, including the role such technologies can have in embedding existing power relations. As Pettegree (2010) points out, the printing revolution of the 17th century was practically and financially supported by royal decrees and proclamations, not by revolutionary pamphlets.

Besides a contextualised understanding of notions of openness and access, the coffee house comparison also speaks to our understanding of the concept of 'openly accessible'. I previously described it from the learner's perspective in terms of technology, literacy, location and time. An analysis of the socio-political and cultural context enhances a technologically driven account by showing us multifaceted phenomena. It also shows that such broader political, social and economic conditions underpin all aspects of accessibility. However it is not only accessibility that they influence. Besides a richer understanding of open accessibility, an historical perspective adds and highlights notions of *association* and *awareness*, that in their turn, are to be understood within the broader context in which they emerge.

So what does an historical perspective tell us about accessibility and our current conceptualisation in terms of literacy, technology, time and location? First, all historical periods have faced barriers to access to learning stemming from the various levels of literacy of the learners. Such concerns were alleviated in cathedral schools, coffee-houses and self-education societies, where people still managed to access (at least in part) knowledge and information: they were tutored by more advanced peers, read out to, or presented to, in an oral manner to begin with. Similarly, today access to open educational resources would benefit from experts or knowledgeable peers inducting novice learners.

Of course, then, as now, some level of prior knowledge would enable the learner to make the most out of the opportunity. With regard to the coffee houses, John Houghton (1728, cited in M. Ellis, 2004, p. 165) said that "he who has been well educated in schools, is the fittest man to make good use of the coffee houses". However, then as now, no former qualifications were required. This was as true in the 12th century as it was in the 20th, although removal of the barrier of having formal qualifications is only highlighted as part of access to formal education.

Although technology is always present in some shape or form (printed material, blackboards, television etc.), its manifestation in previous incarnations of open access are not as defining as it is today. Previous technologies required little of the user other than basic literacy. Today, however, technology is a lot more prominent and demands significant financial and literacy investments not only on the part of the learner but also on the part of the producer of the resources.

The rhetoric around technology has always been one of improved access to knowledge and removal of barriers. Equally today, while the rhetoric of openness suggests that OERs provide universal access, Santos (2008) cautioned against the misleading perception that the Internet is free for everybody. Generally speaking, it is free only for those who have a computer, are reliably connected to the Internet, and have the knowledge to use it to reach their objectives. Open educational content has so far failed to fulfil predictions of improving education for all (Lane, 2009, Morgan and Carey, 2009, Santos, 2008). Moreover, we are warned that open educational resources might in reality "widen rather than bridge the digital and educational divides" (Lane, 2009, p. 1). It is also the case that some nations resort to various methods to censor content.

It would seem that technology today is a much more important dimension to consider when understanding accessibility from a learner perspective. Yet it should not dominate the discussion. Historically, access to technology has been often socially mediated. Access has also been increased as the costs of technology have declined. Again today we are faced with steadily decreasing prices for computers, mobile technology and Internet connectivity. What's more, the speed of these changes is unprecedented. In the US for instance, it took the telephone 45 years to reach 50% of the consumers (DeGusta, 2012). It took smartphones only 4 years (see figure 2.4). Since tablets were introduced in 2010, with apple's iPad and Amazon's Kindle, they have already reached over 25% market penetration, making them even faster growing than smartphones (Rainie, 2012, Online Publishers Association, 2012). Similar rates are observed in the rest of the developed world (Ipsos-MediaCT and Google, 2011). The personal computer is being replaced by mobile technologies.

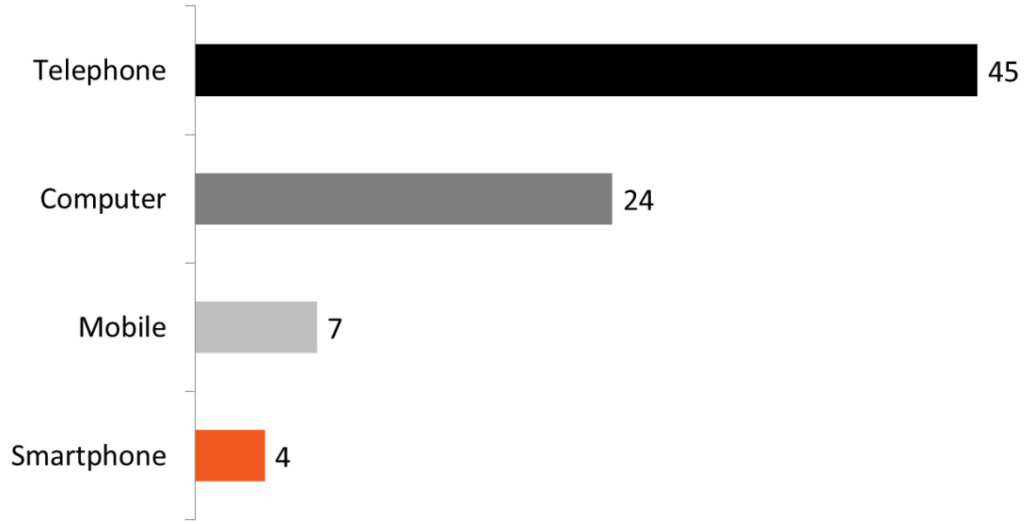


Fig. 2.4 Years to reach 50% market penetration for telephone, computer, mobile phone and smartphone (U.S. data from the MIT Technology Review, Pew Research Center, The New York Times and The Wall Street Journal)

The close relationship between access and mobility is not confined to the current technological era. Historically, learners sought out knowledge in various locations, most often fixed in nature: monasteries, coffee houses, miner's libraries. Sometimes however, learning was not linked to a specific place, and scholars were invited to deliver lectures in private houses. Seen on a continuum, accessibility seems to increase with the decoupling of learning from a specific location (e.g. a lack of permanent sites with learners choosing places and inviting scholars in, or resorting to correspondence). It appears to decrease with growing ties to a certain location,

segregation and concentration on certain content and exclusivity to specific groups. Today, open educational resources promise to do more to allow learners access anywhere, by in theory, delinking learning from a certain location and potentially enabling learning anywhere. At least in theory, it is the learners who choose where and with whom they study.

Time (and in particular the constraints it can impose on learners) has proven increasingly important for enabling access. The demise of the coffee houses for instance was hastened by the Industrial Revolution's claim on the working class's time. Unable to access the coffee house during the day meant the closing of the coffee houses for workers. Today this has been reversed with the asynchronicity that open educational resources offer, enabling access to follow, to a large extent, the personal schedule and timezone of learners.

Swedish universities highlight another temporal dimension we need to consider - the one regarding entry/exit and time for completion. Open educational resources not only enable entry at any time but also exit at any time. Learners can access content in their own time and at their own speed. With newer incarnations however, such as massive open online courses, students are faced with a different approach, taken initially by Sebastian Thrun in the Stanford *Artificial Intelligence* course: enrolment dates and due dates. Coursera content cannot be accessed except during the session time (usually 4 to 15 weeks), with varying start dates for different offerings.

In addition to notions of accessibility, historical accounts of self-organising groups of students, coffee houses, and later on self-education societies and worker's libraries, highlight the importance of *association*. The social networking they relied upon helped not only advanced the promise of participation and equality for their patrons but also supported individual access to knowledge. In much the same way that earlier forms of open access tried to ensure universal accessibility and participation, the new social spaces enabled by Web 2.0 technologies, allow, at least in principle, for people to occupy any role in a discussion, regardless of class, race or generation. Since 2006, we have witnessed the rise of Web 2.0 and social media, which has been seen by many to represent a shift (revolution) akin to the invention of the printing press. We live in a world with Internet and web-based technologies that enable social dialogue (many to many), including those used for communication (e.g. Facebook, Twitter, WordPress, Google+), collaboration (Wikipedia, Delicious) and multimedia (YouTube, Flickr). Through the interactions they promote, in principle, they also democratise existing social arrangements and have enormous potential to influence the rest of society.

Penny Universities also provided the context in which to examine another facet of association. The equality they conferred on patrons allowed people not only to take any vacant seat in the literal sense but also to engage in any conversation they wished, allowing patrons to potentially inhabit any role in the ensuing interactions. Similarly the new social spaces enabled by Web 2.0 technologies, allow, at least in principle, for people to occupy any seat in a discussion, regardless of gender, class, race or generation. Through the theoretically unbounded association they promote, in principle they also democratise existing social arrangements and have enormous potential to influence the rest of society, as their impact is not contained in the cafe, or alternatively the cafe embraces the whole world.

Yet association should not be considered indispensable, or even necessary. The 18th and 19th century challenged such understandings of open access by having learner lead self-education societies that emphasized community and correspondence institutions that downplayed it. Current open educational resources also seem to favour a variety of forms, with some including or relying on social connectivity whereas others not.

Even more than association, an historical account of open access to learning stresses the significant role that *awareness* plays in both the success, and also the failure, of open access. It speaks both to awareness of the existence of opportunities as well as awareness of their promise of access to knowledge and learning.

Emerging forms of access in the Middle Ages had their roots in the growing intellectual curiosity that a spread in literacy and the rise of towns planted in people's minds. Renewed ideas of equity and open access emerged at the end of the printing press revolution not as a direct consequence of a solely technological advance, but because of ideas of tempered religious fervour and boundaries on ruling powers. By the same token, Samuel Johnson suggested that "a coffee house is also an idea, a way of life, a mode of socialising, a philosophy" (cited in M. Ellis, 2004, p. xi). The coffee houses were as much about what patrons thought they were being part of and how this changed their sense of themselves as it was about the caffeinated drink. Later on, ideas of access to knowledge and independent learning were powerful enough to propel miner's libraries of the nineteenth and twentieth century well prior to an institutional response in the form of public libraries or continued public schooling.

This is not to say that these ideas were consistently and uniformly shared by all people at any given time. Coffee house learning for instance was also scoffed at by some: science writer

Henry Stubbe's 'Universal Intellect' failed to be taken seriously by some as it had been deduced not from observation and experimentation but from what he had "pick'd up by Reading and Meditation, and the Coffee houses" (letter by John Evelyn, July 1670 cited in M. Ellis 2004, p. 165).

The social imagination surrounding access was also at times quite actively constructed and reinforced. During the seventeenth and eighteenth centuries, Joseph Addison and Richard Steele (who went on to found *The Spectator* in 1711) and others, had a deliberate aim "to bring philosophy out of the closets and libraries, schools and colleges, to dwell in clubs and assemblies, at tea-tables and coffeehouses" (Addison and Steele, 1711).

Powerful ideas not only worked to amplify the public's perception of access but have also often come before their time, and imagined futures to aspire to, as Watkins's (1900) article envisions "a university education will be free to every man and woman". It is an ideal to aspire to, to shape our imagination of the future.

Imagination can make or break institutions: just as during the hundred years following the 1530s masses of upper and well-off middle classes went to Oxford and Cambridge in order to learn and improve their intellect (see Perkin, 2006), once universities lost their grip on the people's imagination they emptied of students. If Oxford was "very dead for want of students" by the 1680s, by the 18th century universities everywhere could not compete with the ideas instilled by the enlightenment and renewed notions of the search for knowledge (see Perkin, 2006, pp. 172-173).

In summary, history tells us that from a learner's point of view, the lack of awareness of the existence and promise of access and open educational resources makes realisation of its benefits virtually impossible.

Taken as a whole, an historical perspective enhances not only our account of accessibility by giving us multiple dimensions of literacy, technology, time and location and anchoring them in a larger social, economic and cultural context, but also adds critical notions of association and awareness. The account of the open learner makes way for the story of open learning.

I now return to the context of open educational resources today. Open educational resources have been previously discussed in relation to the support they provide for open learning/open education. From an institutional perspective it is useful to see open education and open

educational resources as intimately connected, often overlapping constructs. Peters (2008) for instance uses the term open education instead of open educational resources as it "embraces the notion of practices as well as the notion of sharing educational resources" (p. 15). Schmidt, Geith, Haklev and Thierstein (2009) view open education as "the combination of open licensing and web-based social media" (p. 2). Butcher (2011) understands open learning to be "an approach to education that seeks to remove all unnecessary barriers to learning, while aiming to provide students with a reasonable chance of success in an education and training system centred on their specific needs and located in multiple arenas of learning" (p. 6).

From the learner's perspective, seeing the two phenomena as interrelated but distinct allows a better understanding of what constitutes access. If we understand the learner who imagines him or herself empowered to use and access open content, in a broader context of access to Internet and social technologies that enable opportunities to network and share, anywhere, at any time, we can broadly conceptualise open learning as open resources plus surrounding open context that requires, in addition to accessibility, users to be aware of its existence and potential, and have the opportunity to engage in meaningful communities (whether they are real or virtual) (see figure 2.5 below).

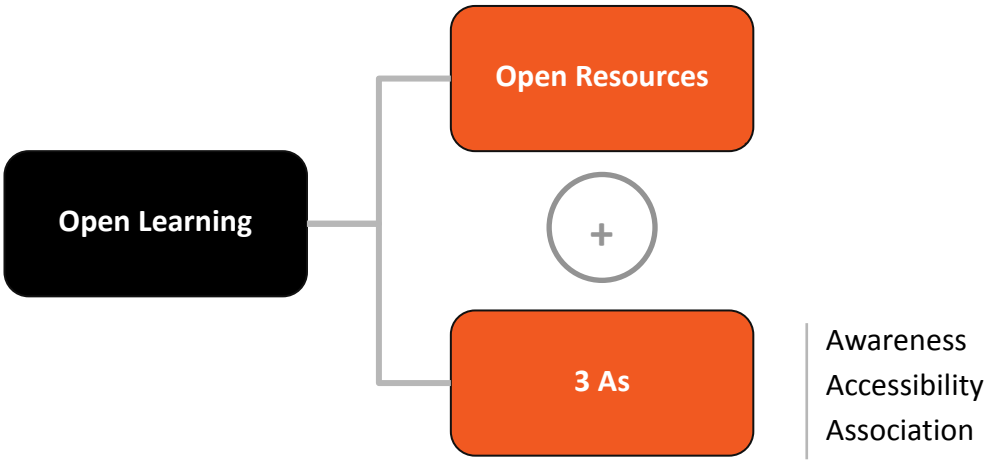


Fig. 2.5 Dimensions of open learning/education[22]

It is important to note that although acknowledging their importance, I do not address issues of assessment and recognition at this point; see Schmidt et al. (2009) for an exploration of one set of possibilities in the context of open educational resources. What is more, institutional

[22] At this point I use the notion of open resources as a broader understanding of learning and educational resources, currently in the form of open educational resources, including newer educational initiatives that are emerging or might emerge.

developments promise that in the near future official certification could be granted for those learning with open educational resources. MIT and Harvard have recently announced their intentions to offer certificates for work completed using their open courseware. A number of other new ventures also offer various solutions, including certificates and badges (see table 1.1 for a review of selected initiatives).

2.8 Conclusions: a story of open learning

Open educational resources are often characterised as something specific to, and emblematic of, the 21st century, yet if usual conceptions of openness and access are set aside and how this phenomenon has been periodically experienced as 'new' throughout history is questioned, I can write a broader account from a learner perspective. This allows us to look at their promise but also their inherent challenges and to refocus current debates away from producers of content and technology concerns.

Shifting from a fundamentally technologic research perspective and perception of the phenomenon allows me to perceive an emerging form of open access to education, akin to a 'global education'. What emerges is not only a technologic, but also economic and social phenomenon that is not constrained by traditional educational institutional boundaries. This complex of interrelated developments comes together and manifests locally, but is created at the intersection of global movements, trends and initiatives. Today, more than ever, its boundaries are ambiguous and still emerging. Understanding the institution of education challenges us to move from a micro perspective to a macro one, that seeks to understand how it is shaped, how it is currently being formed and how its boundaries are being challenged and perhaps, redrawn.

So far, discussions about open educational resources have emphasized the resources, the producers of those resources and the conditions under which those resources are made available. What is learnt by taking an historical perspective is that in order to understand openness it is at least as important to look at users of open educational resources, the social political contexts in which they are made and become aware of those resources, the social and cultural practices that they engage in to use the resources, and the nature of the associations that they develop in order to make those resources available 'openly' to a broader range of society than might otherwise have access to them. In other words to look at history and to

understand what was going on helps to understand much better what open access might mean and what is demanded of the learner if educational opportunities really are to be 'open' to them.

The demise of student-shaped universities, or later on, coffee houses, reminds us of the extent to which free and untrammelled education can quickly become institutionalised. Their decline was a direct result of the failure to preserve the openness that had made them so successful in the first place. Today, new forms and meanings of openness are playing out before our eyes. After finishing writing about the history of access, I observed new, emerging, educational initiatives. They once again promise to redefine the opening of learning and, in turn, the potential closing of learning. After the success of the *Artificial Intelligence* course, Sebastian Thrun left Stanford to form a new open online learning venture "as a means to offer free education". He stated he "can't teach at Stanford again"; instead he would be soon offering open online courses for free (or potentially charging students a $1 fee) (Thrun, 2012b). MIT also provides access to courses specifically geared towards independent learners now, and considers offering a form of certificates for work completed using its open courseware. These are fundamentally important initiatives but it is not yet clear how far they are redefining what counts as 'open education' for the 21st century. I will explore their development and re-examine their potential to change open access in the final chapter of this thesis.

We can understand these developments from the perspective of the learner. What Penny Universities and other previous incarnations of openness show us is that access is not a property of the resource, nor is it offered by the provider. Access (and in turn learning) is only partly about the technical process of disabling barriers; access is also significantly about the practices that people engage in in order to achieve access for themselves. Access is not provided. Access is *achieved* by the individual learners themselves (see also Peter and Farrell, forthcoming).

The arguments presented above provide the foundation for the development of my methodological approach, which I outline in my next section. They drive the necessity of addressing my problematic focused on how open access to learning is enabled through open educational resources from two perspectives. I do this by looking first at the learner and his or her experience with open educational resources while at the same time pointing at the crucial need to then take a step back and look at the broader context in which access is experienced. I will now look at how this agenda can be realised in practice.

Part 2: Investigating open access to learning

3 A methodological approach

> **"Speaking in this vein sounds as if we create a methodology for ourselves – as if the focus of our research leads us to devise our own ways of proceeding that allow us to achieve our purposes. That, as it happens, is precisely the case. In a very real sense, every piece of research is unique and calls for a unique methodology. We as the researcher, have to develop it."**
>
> **Michael Crotty**, 1998, pp. 13-14, in *The Foundations of Social Research: Meaning and Perspective in the Research Process*

This is not to say that methodologies are created anew each time a researcher encounters a new research project. It does however call for us to take stock of the methodologies and methods available to us, and see which ones and to what extent they can best serve our inquiry. It also means that we have to recognise the uniqueness of each perspective and build on the possibilities afforded by existing methodologies in order to meet our own purposes – in my case of investigating access through open educational resources.

The empirical investigation of how open access to learning is enabled by open educational resources raises a number of issues with regard to methodology, both conceptual and practical. The challenge is to understand the problematic from the learner's perspective but also move from here to a macro level to understand this experience in the context of an ambiguously bounded, emerging, global education. Access is achieved by the individual, but it is shaped by the larger context. This has prompted me to look at approaches that enable me to understand not only how access happens but also why it is constituted as it is. My methodology allows me to overcome both theoretical and pragmatic limitations by using an analytic stance to examine the everyday and a systematic way to examine how we should understand the emerging representations of global education. It also allows me to develop my methodological approach (in particular analytic autoethnography) to provide a systematic way of exploring the status of data, what is a legitimate form of interrogation and how it is meant to inform theory. It also allows me to consider institutional ethnography outside traditional work settings and explore a more refined understanding of texts.

This chapter addresses my research methodology, from an interpretative, symbolic interactionism informed theoretical perspective, located in a constructionist epistemology. A constructionist lens allows me to focus on how people engage with reality and attempt to

make sense of it, within a social context. I will discuss emphasizing my own experience, while at the same time being committed to developing theoretical understandings of broader social phenomena. I am using analytic autoethnography in conversation with institutional ethnography as my methodological framework. I will also outline the methods I intend to use, my criteria for a rigorous approach to undertaking the study as well as the ethical implications of my research.

This position aligns with my problematic in focusing how open access to free learning is enabled with open educational resources as well as allows me to open the discussion between my two methodological approaches. Questions of methodology, namely analytic autoethnography and institutional ethnography, as well as methods, will be dealt with in sections 3.2 – 3.4. This format is best suited to highlight the challenges faced in conducting a study like this.

Although presented systematically and in this order, the issues raised by this chapter with regard to the methodological challenges I encountered have emerged organically through the research process and have been revisited in later stages of data analysis and interpretation.

3.1 World view

It is said that "different ways of viewing the world shape different ways of researching the world" (Crotty 1998, p. 66). All of the choices we make in our research are guided and informed by our assumptions of what is and how we come to know it: what we choose to look at and how, how we make sense of what we have observed, and what claims we make about our discoveries. An unclear position creates uncertainty in regard to every aspect of the ensuing research: how to address the problematic in a coherent, consistent manner that would produce a good piece of research, how to generate and analyse data, and how to judge the quality of the research.

There are a number of ways to organise what can be called the researcher's 'world view': Crotty (1998) chooses to focus on epistemology and theoretical perspective that then inform the methodological approach and the methods the researcher uses; Denzin and Lincoln (2005) use the concept of a research paradigm to encompass all "epistemological, ontological and methodological premises" (p. 22). My 'world view' focuses on questions of ontology,

epistemology and aligning theoretical orientation. I will address methodology in the next sections.

I approached my research from a constructionist epistemological stance, situated within a realist ontology. In a constructionist epistemology, people construct meaning as they engage with and make sense of the world around them: “it is the view that all knowledge, and therefore all meaningful reality is contingent upon human practices being constructed in and out of the interaction between human beings and their world, and developed and transmitted within an essentially human context” (Crotty, 1998, p. 43). Constructionist assumptions understand meaning as developing in particular social contexts as people participate in the creation of a changing social reality. Constructionism should be seen as spanning the gamut of positions between the objective and subjective stances at the ends of the epistemological continuum. It manages to be subjective and objective at the same time (Crotty, 1998). I believe it is important not only to understand where research stands on this continuum but also how it relates (or indeed does not) to other positions. In the context of articulating her perspective (to which I shall return later in this chapter), in contrast to subjective stances (postmodernism/poststructuralism), Smith (1999) observes:

> "This does not mean that there is no world that the organism, as Mead would say, encounters and finds “ordered” in a bodily mode prior to its social and human organisation. Indeed, the objects that thus come into presence for participants in a social act must somehow be built into this substratum, including the neuro-muscular organization of the world as separate from self" (Smith, 1999, p. 118).

It is also in this spirit that the first part of this thesis has approached an historical consideration of open access. When examining Collingwood’s (1939) assumptions for historical reconstruction, Harris (1957) notes: “History is objectivity, that which really exists independent of being known, without which there is no consciousness and no theory…Theory is not separable from fact. It is the fact thoroughly understood, made intelligible, as what it really is.” (Harris, 1956, pp. 45-46).

A constructionist lens allows me to focus on how people engage with reality and attempt to make sense of it, within a social context. This position aligns with my problematic in focusing how open access to free learning is enabled with open educational resources. I will refer back to this position in section 3.4 when I discuss analytic autoethnography and institutional

ethnography as my methodological approaches. It also allows me to productively bring into dialogue my two methodological approaches by providing a point of conversation for both theoretical considerations and findings and allowing me to align within a coherent framework at all levels of enquiry (see figure 3.1).

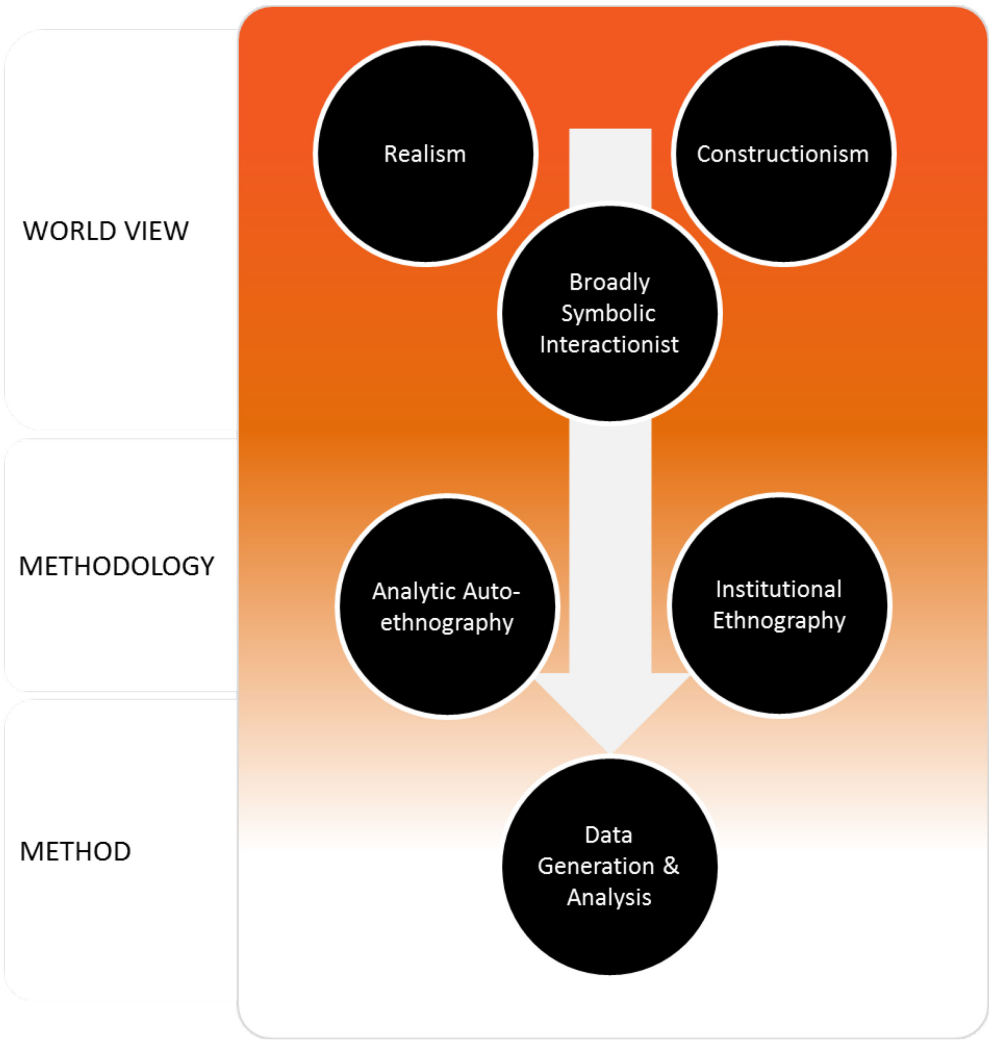


Fig. 3.1 Overview of research framework

A constructionist lens provides an avenue of inquiry following the tradition of symbolic interactionism, with its roots in pragmatist philosophy, understood as a "world of intersubjectivity, interaction, community and communication" (Crotty, 1998, p. 63). Symbolic interactionism has been one of the most enduring theoretical perspectives of the past century. It rests on three premises: that human beings act toward things on the basis of the meanings they have for them, that the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows and third that these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he

encounters (Blumer, 1969 p. 2). Symbolic interactionism provides a methodological starting point in that it directs the researcher "to take, to the best of his ability, the standpoint of those studied" (Denzin, 1978, p. 99).

Underpinning institutional ethnography is Dorothy Smith's (2005) emphasis on 'research as discovery' (p. 2). She draws on Mead's traditional work on symbolic interactionism complemented by understandings of language afforded by Bakhtin and other Russian traditions of thought on language (Smith, 2005). It is important to note that, as Walby (2007) cautions, institutional ethnography is more than just a methodology: it comes with its implicit theoretical framework. This permeates all levels of inquiry, and, when in conversation with other methodologies, makes it imperative to reassess and address questions of ontology, epistemology and theoretical conceptualisation.

While this is a challenge, it is also an opportunity to reconsider the analytic dimension of autoethnography. Analytic autoethnography is also considered to be rooted in, and consistent with, traditional symbolic interactionism (Anderson, 2006a, Anderson, 2006b, Atkinson, 2006), although many studies using the framework do not openly identify their epistemological and theoretical stance. The issues of the positions taken by analytic autoethnographic writing will be further discussed in the next section.

As a result, bringing analytic autoethnography into conversation with institutional ethnography within a realist ontology and broadly constructionist epistemology requires a closer look at the assumptions implicit in their methodologies/ frameworks. In order to do this I first need to more closely consider what institutional ethnography and analytic autoethnography entail as methodologies.

3.2 Analytic Autoethnography

I came to autoethnography after considering a number of other approaches which had both theoretical and pragmatic limitations in relation to my problematic.[23] Autoethnography

[23]I have examined a number of different approaches, looking at the specific methods that would provide the data and enable their analysis, as well as their underlying assumptions with respect to the world view they implied, in terms of ontology, epistemology and the theoretical perspective they informed. Some approaches, such as case study, I have discarded altogether for either pragmatic or theoretical reasons, others, such as grounded theory, still provide some useful guidance and have been subscribed to the methodology I outline in the following sections.

allowed me access to data not obtainable by other methods. Notoriously, studying unintended and informal users of website content is exceptionally difficult (Harley and Henke, 2004). This is also the case with open access to learning using open educational resources, where learners do not have to login, identify themselves in any way, and to an outsider, leave no traces that they have engaged with the resources in any way. Autoethnography is well suited to an environment where identifying participants and securing their involvement is particularly difficult. But more importantly it allows me to explore my problematic by answering the question of 'how does this happen to me?'. Moreover, acting as learner-researcher provides a unique vantage point, enabling a view that 'complexifies how (we) look at the phenomenon' (C. Ellis, 2000).

An autoethnography is an account of the researcher's own experiences as a means of understanding a culture/community/environment. Specifically I will be looking at and using *analytic* autoethnography, in which the researcher is not only a full participant in the setting or community he or she is investigating, but also committed to using insights gained to elaborate and extend theory around broader social phenomena (Anderson, 2006a, p. 373, 375). This is done in the tradition of analytic ethnography, as discussed by Lofland (1995, 2002) and Snow, Morrill and Anderson (2003). The 'analytic' aims, as it does in analytic ethnography to discover, extend and refine theory (see Snow et al., 2003).

Autoethnography has been around for over three decades, going back to Hayano (1979). Its history reveals that researchers have used over 30 similarly situated terms to describe their studies, along with similar terms and have given it a variety of meanings (see Ellis and Bochner, 2000, p. 739). The term has been used in a variety of disciplines including anthropology, psychology, sociology, and education (Anderson, 2006a, C. Ellis and Bochner, 2000, McIlveen, 2008, Reed-Danahay, 1997) and has evolved into a variety of forms, such as indigenous/native ethnographies, narrative and personal narrative ethnographies, personal narratives reflexive ethnographies, community autoethnographies and co-constructed narratives (C. Ellis, Adams and Bochner, 2011).

Since its emergence, and in its evolution to gain legitimacy in the research literature, autoethnography has been positioned along a number of dimensions. Autoethnographers have varied in their emphasis on their research process (graphy), on culture (ethnos), and on self (auto) (C. Ellis and Bochner, 2000, see also Reed-Danahay, 1997, p. 2). Different studies have fallen at different places along the continuum of each of these dimensions. Furthermore,

research studies varied on a continuum between what has been called art versus science (C. Ellis and Bochner, 2000). Given the diverse goals of autoethnography, overall there seems to be a loose application of the term and an increasing tolerance for a diversity of definitions and goals (Anderson, 2006a, 2006b, C. Ellis, 2000, C. Ellis and Bochner, 2000). It should be noted that over the past two decades autoethnography has become almost exclusively identified with its evocative version, a "narrative text that refuses to abstract and explain" (C. Ellis, 2004, p. 44).

A very productive debate has been between what Anderson (2006a, 2006b) distinguishes as *analytic* and *evocative* forms of autoethnography. The former corresponds to a more traditional (scientific) approach and the latter to a more free-form style (C. Ellis, 2000; C. Ellis and Bochner, 2000). The distinction however is not only skin deep. In evocative forms – as advocated by Ellis and Bochner (2006) and Denzin (2006) – the research text "is the story, complete (but open) in itself, largely free of academic jargon and abstracted theory" (p. 219). The authors privilege stories over analysis, allowing and encountering alternative readings and multiple interpretations' (C. Ellis and Bochner, 2000, p. 745).

The form embraced by this study is akin to Anderson's (2006a) analytic autoethnography. He defines analytic autoethnography as one in which "the researcher is a full member in the research group or setting, visible as such a member in published texts, and committed to developing theoretical understandings of broader social phenomena" (Anderson, 2006a, p. 373). The focus becomes (sociological) analysis rather than evocative, emotional narrative. It aims to analyse and communicate not only the personal experience, but also a representation of the (social) world investigated. In contrast to evocative forms, analytic autoethnography aligns with a constructionist epistemology and it traces its theoretical perspective symbolic interactionism (Anderson, 2006a, Anderson, 2006b, Atkinson, 2006). Consistent with this articulation, I will use analytic autoethnography to explore and refine theoretical analysis of my problematic.

Having looked at the promise of analytic autoethnography to provide a productive way forward in addressing my problematic, its simultaneous challenges and limitations in doing so should also be acknowledged. Most of these speak to the analytical dimension of autoethnography and leave many questions unanswered. An ongoing and significant challenge for my research has been how to address these questions.

First, although an established form of research, there is still a lack of clarity as to how to actually go about doing analytic autoethnography (see also Charmaz, 2006 and C. Ellis and Bochner, 2006).

Over the past few years, the debate between the evocative and analytic forms has been generative in stimulating researchers to write 'hands-on' instruction manuals (see for instance Chang, 2008) as well as examples of analytic ethnography (see for instance Anderson's (2011) account analysing his experience with skydiving). However, while they make specific contributions to the practice of autoethnography as well as their respective fields, they also raise a number of questions regarding a consistent and coherent approach to the research process as a whole. *What is the status of the data in analytic autoethnography and what is a legitimate form of interrogation? How is it meant to inform theory and what is its relationship to theory? How should the 'analytical' emerge?*

The answers seem to lie in the continuum between art and science that the three dimensions of autoethnography (auto-ethnos-graphy) span (see figure 3.2). Although researchers in the analytical vein acknowledge them, there is limited clarity regarding their respective epistemological and theoretical positions. This in turn makes it hard to claim a rigorous methodology, data generation and analysis.

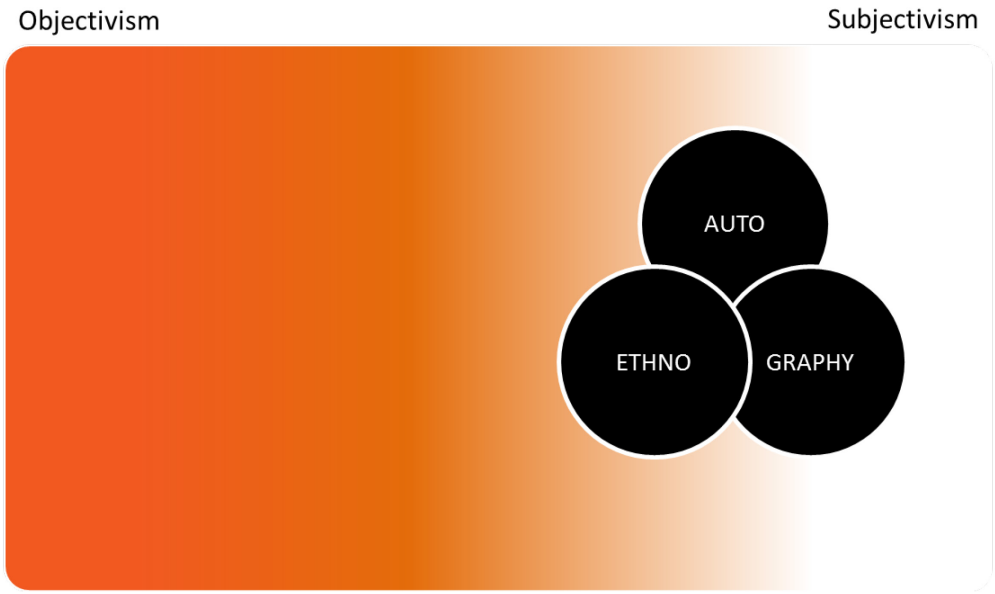


Fig. 3.2 The dimensions of autoethnography, adapted from Ellis and Bochner (2000)

Anderson (2006a, 2006b) for instance explicitly asserts a (traditional) symbolic interactionist theoretical perspective, and while he clearly rejects positivism, seems to be committed to a

place closer to the 'science'. In contrast to a range of scopes he acknowledges in symbolic interactionism, Anderson's (2006a) goal is one of transcending data. He claims the "defining characteristic of analytic social sciences is to use empirical data to gain insight into some broader set of social phenomena than those provided by the data themselves" (Anderson, 2006a, p. 387). His autoethnography is a primarily inductively oriented one, (presumably) emphasizing its research and methodological orientation. Yet Anderson (2006b) talks about a symbolic interactionism that embraces "its humble awareness of the limits of certainty, its compassion, commitment to social justice and resistance to fundamentalism" (p. 462).

When it comes to 'doing' autoethnography, however, Anderson (2011) finds that the project of analytic autoethnography is particularly suited as a method of 'self-clarification'. The relationship between the personal, the experience and the analysis becomes at times unclear. The analysis seems to become subordinate to the goal of self-understanding.

A more ambiguous epistemological and theoretical position does not make it any easier to move from philosophical underpinnings to autoethnographic practices. Chang's (2008) autoethnography focuses on work that is "ethnographic in their intent" (p. 49) and "ethnographic in its methodological orientation" (p. 48). She does not explicitly go further in identifying with a particular epistemological or theoretical stance, yet her "commitment to cultural analysis and interpretation are key" (Chang 2008, p. 51) and so seems to favour Anderson's (2006a, 2006b, 2011) conceptualisation. Although it might seem that she also places her understanding more towards the objective end of the continuum, she relies strongly on the concept of self as the basic unit and the starting point for culture. She draws on Gergen (1991) to highlight the invitation to look at "self as 'fragile' and interdependent being" (p. 24). Yet Gergen clearly diverges from traditional symbolic interactionists. Although he maintains a fairly objective perspective of interaction, he brings a certain postmodern recognition of relativism, with a fragmented self with multiple, even contradictory perspectives.

Chang's (2008) self is also a relational self, not an entirely fixed or stable representation, making description a less straightforward representation of reality. Although such constructionist assumptions move Chang's (2008) autoethnography towards the subjective approach, once she returns to managing, analysing and interpreting data, she seems to be more comfortable with her initial more realist, objective approach that "follows the anthropological and social scientific inquiry" (p. 46).

It thus becomes important to recognize that ambiguity in one's epistemological and theoretical assumptions (objective vs. subjective) lead to an inability to align the self-culture-process (auto-ethnos-graphos) which leads to inconsistencies in all subsequent stages of research. I will refer to the specific articulation that this study uses in the following sections.

Another challenge autoethnography shares with most other qualitative methodologies, is that by and large it has no claim to traditional generalisability. My findings however aim to inform a larger community, beyond my individual case, as will be further discussed in section 3.4.

Finally, Chang (2008) also points out a number of other oversights usually associated with autoethnography, among which is "excessive focus on self in isolation from others" and "overemphasis on narration rather than analysis and cultural interpretation" (p. 54). Autoethonography, in all its forms, is also criticised for being in danger of oversimplification through understanding by "becoming the phenomenon" (Mehan and Wood, 1975, p. 227 cited in Anderson, 2006a). Excessive self-absorption is a challenge for autoethnographers across the board and as such it is a constant consideration for me throughout my study.

3.3 Institutional Ethnography

While autoethnography will address the learner experience part of my problematic, I turn to institutional ethnography to widen my understanding of open access to learning enabled by open educational resources. The question of open access can be understood in the experience, but also explored beyond it, thus enabling a project 'for' the learners rather than merely 'of or about' them Smith (1999, p. 96).

Institutional ethnography highlights how experiences come to happen the way they do. Initially applied in a feminist context, institutional ethnography was meant to develop a 'sociology for women', however since then it has been applied to a variety of contexts and Dorothy Smith now recognizes it as a 'sociology for the people' (see for instance Smith, 2005). Institutional ethnography offers a way to investigate the 'linkages among local settings of everyday life, organizations, and translocal processes of administration' (Devault and McCoy, 2006, p. 15). It assumes that people are expert authorities in how they live their lives, and while they act in local settings, powerful translocal forces shape their everyday experiences (Campbell, 1998, p. 96).

Institutional ethnography focuses on a problematic that is not conceptualised as a research question:

> "A problematic sets out a project of research and discovery that organises the direction of investigation from the standpoint of those whose experience is its starting point.' (Smith, 2005, p. 227)

The notion of a problematic was adopted by institutional ethnographers from Althusser (1971, p. 32) and helps position inquiry in a context that is wider than that allowed by a specific research question (Smith, 2005). Such an approach allows me the flexibility to look at a complex phenomenon like open access to education as it evolves over the course of my research project. This is especially important for this project because of the critical changes that are occurring.

One of the ideas Dorothy Smith (2005) carries on from Marx's theory is the centrality of people's experiences. Institutional ethnography situates people's activities as central and thus makes the notion of standpoint fundamental to analysis. It directs the researcher to use it as the place to begin his/her inquiry and reveal the social organisation of the local. Such an approach thus allows me to connect my experience (as presented in an autoethnography) to a wider social setting and explore how that setting is being negotiated. Institutional ethnography deals directly with the methodological issue of how individual everyday experience can illuminate social relations beyond the everyday.

When turning to the everyday, Smith's (1999) way of linking into social relations beyond the local act is to build on the work of Mead by bringing it into conversation with the work on language by Vološinov and Bakhtin, adding "a theory of how words can bring an already determined meaning into a setting" (Smith, 1999, p. 112). This allows Smith to move beyond the everyday and understand how such local practices are shaped. She does this by building on Marxist inquiry of class oppression (Smith, 1987) in addition to the idea of the centrality of experience. Institutional ethnography uses people's everyday life as an entry point to highlight how institutions intersect and shape everyday practice. Dorothy Smith (1987, 1999, 2005) calls these 'ruling relations' and describes them as the:

> "extraordinary yet ordinary complex of relations that are textually mediated, that connect us across space and time and organize our everyday lives – the corporations,

> government bureaucracies, academic and professional discourses, mass media, and the complex of relations that interconnect them" (Smith, 2005, p. 11).

Grounded in the insight that methods of social control are largely and increasingly textual, Smith (1987, 1999, 2005) sees texts as central to the way power is socially organised today, hence the need to examine texts if we wish to understand ruling relations. Texts are understood as having "fixed and replicable character… [and] can be any kind of document, on paper, on computer screens, or in computer files; it can also be a drawing, a photograph, a printed instrument reading, a video, or a sound recording" (DeVault and McCoy, 2006, p. 34). Dorothy Smith points to them as 'speakers in a conversation' that people activate when they engage with them and that in turn shape their everyday realities (Smith, 2005). Texts organise activities, make some but not other things possible, and affect choices and options.

An institutional ethnography approach to my study allows me to go beyond the insights that autoethnographies can provide, and 'tell the truth' of "an original state of affairs, extraneous to the accounts that they have given" (Smith, 1999, p. 97). Exploring ruling relations is at the heart of understanding open access to free education. It allows an understanding and a more subtle description of the open, global education, as a new and emerging institution, at a time when traditional institutional boundaries may be dissolved or challenged, and new boundaries and new ruling relations are being formed (Peter and Farrell, 2010).

As a novice institutional ethnographer, I have at times struggled with some of the things institutional ethnography demands, especially with regard to its use in a non-traditional setting. I will highlight a number of aspects that can add to the way I conceptualize my research as well as to an understanding of institutional ethnography in general throughout my analysis and interpretation of my data.

3.4 Analytic Autoethnography and Institutional Ethnography: a conversation

I want to explore how open access to learning is enabled and analyse circumstances under which open educational resources can profoundly change how we understand and access learning and education. Analytic autoethnography in conversation with institutional ethnography is a productive approach that can unravel its complexities. Although a similar

configuration of methodology has been used before (see Taber, 2010), the critical issues that this raises have not been taken up. I will focus on a number of aspects that the previous sections have raised for the way I conceptualise my research as well as my methodology.

First, analytic autoethnography and institutional ethnography provide a complete framework to look at my problematic. While analytic autoethnography is very apt at answering questions of 'how does this happen to me?', institutional ethnography elucidates 'how does this happen as it does?' (Campbell and Gregor, 2002, p. 7). This is especially important given that when asking questions about access to learning using open educational resources one is usually tempted to address them at the individual level, and in doing so make debatable assumptions about the possibility to separate the individual from the 'big picture'.

The two approaches come together to address complementary sides of my problematic. The institutional ethnography provides the concept of a problematic as an open avenue for research and discovery that allows wider perspective throughout the investigation. My analytic autoethnography benefits from using the same conceptualisation – rather than using a traditional research question – due to its inductive nature and aim of going beyond simple description it must be amenable to revision. This also provides unity and coherence to the research project as a whole.

Analytic autoethnography and institutional ethnography have different answers to why one writes as well as how one writes. Institutional ethnography writes for 'the people', rather than about the people (Smith, 2005). It begins in the everyday and moves to higher levels of coordination through ruling relations. With analytic autoethnography I found it difficult to clearly articulate such answers. While theoretical debates surrounding forms of autoethnography have informed my methodology, it was not my intention from the onset to expand on the theoretical discussions around the possibilities afforded by analytic autoethnography. However, requiring the same sort of rigour from analytic autoethnography as from institutional ethnography makes it necessary to revisit its assumptions and the three dimensions of autoethnography (auto-ethno-graphy).

The epistemological stance behind the research sets up the graphy which aligns the auto/ethno as well as informs their relationship to provide consistency throughout the study. For instance in evocative autoethnography, the research process (graphy) is located at the subjective end of the continuum demanding that the focus be on the self (auto) with the

culture (ethno) (see figure 3.3). It demands that the researcher write, evoke and engage readers in the lived experience within a social context. It foregrounds the personal experience to familiarise the audience with the characteristics of a culture.

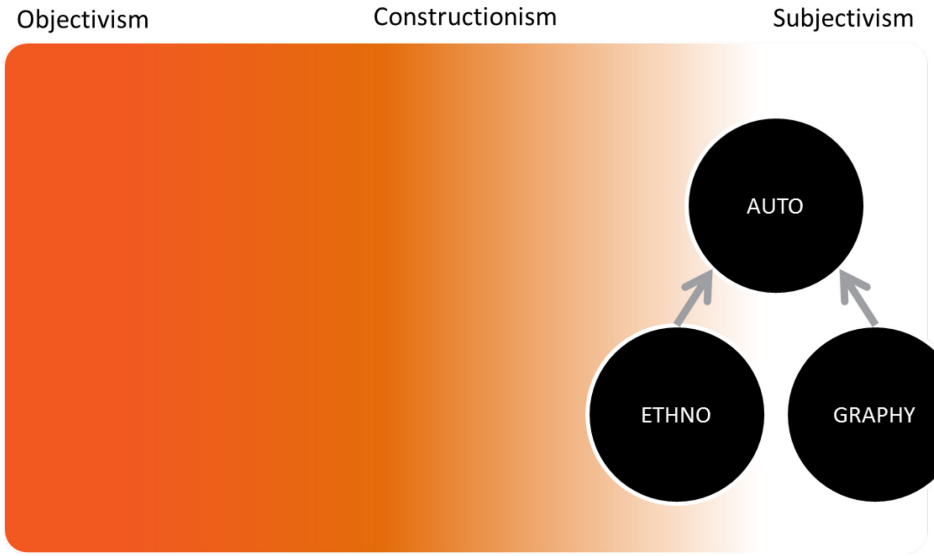


Fig. 3.3 The dimensions of autoethnography (adapted from C. Ellis and Bochner, 2000) reconsidered

The analytical form in my study emerges from a symbolic interactionist perspective. This positioning within the middle ground of constructionism, sets the stage for a *graphy* that focuses on explicit analysis, starting with the self to end up with what Anderson (2006a) calls "insight into some broader set of social phenomena" (p. 387).

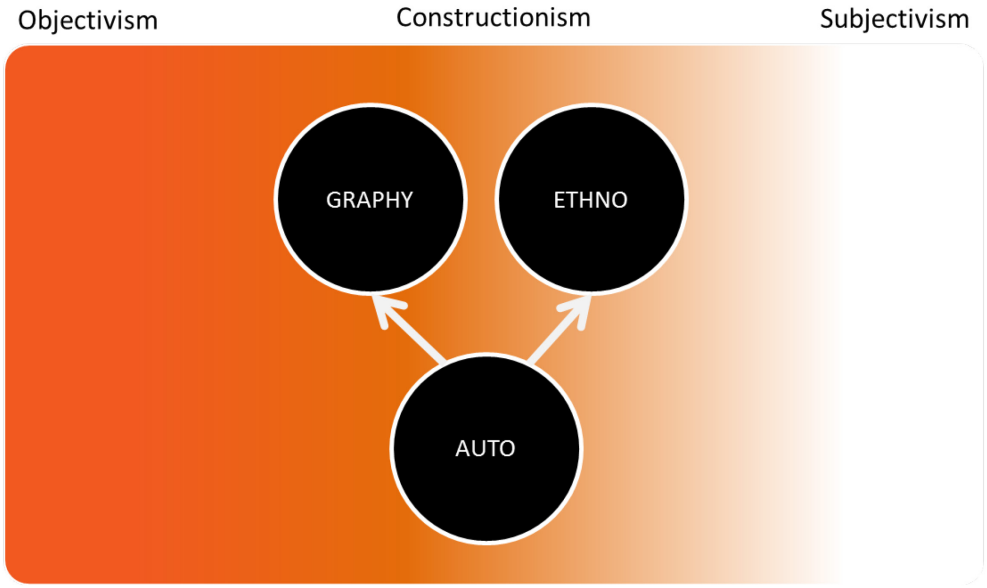


Fig. 3.4 The interplay of dimensions in analytic autoethnography

Analytic autoethnography needs to 'tell the story', but not at the expense of analysis. Here one can recognize the strengths of the evocative form and draw on them, but must resist practices that would gravitate towards the solely subjective, thus changing the status of the narrative and the possibility of the researcher to interrogate it consistently with the assumptions of analytic autoethnography. Standing in the middle ground also produces data that institutional ethnography has the ability to look at to produce further insights.

Second, although institutional ethnography as a systematic way of understanding how "the everyday world of experience is put together by relations that extend vastly beyond the everyday" (Smith, 2005, p. 1) enlarges the study's framework, this does not imply that everyone shares the same experience. I also do not assume that my encounter with open educational resources is typical, but it provides, nonetheless, a point of entry for considering the relations that shape it.

However, I am aware that I am following a vein of institutional ethnography research that looks at experiences in life outside the formal organization (rather than the more formal settings traditional institutional ethnography research is concerned with), which poses its own challenges: "life and work and work outside formal sites ... is typically more diffusely and unevenly coordinated through texts" (DeVault, 2008, p. 8). What is more, with the rising penetration of information, communication and digital technologies, life experiences in general (as well as work experiences in particular) are increasingly textually coordinated. This also implies changes in what constitutes text, an issue I address in detail in the next chapter.

Both methodologies used in this study are well suited to be combined in a number of ways as well as to be paired with other approaches. Autoethnography has proven malleable in that it allowed a number of different traditions to draw on its resources and shape it to fit their world view. Institutional ethnography starts from the everyday, then relies "on whatever theoretical or analytical strategies are (or can be made) ontologically compatible and that help the researcher to trace out and map the social relations that are producing what is happening" (McCoy, 2008, p. 711).

In my case the most productive nature of their relationship is to bring them in conversation and to tell different sides of the story of becoming the open educational learner and analyse the larger context of how it came to be this way. Although analytic autoethnography could be conceived as an instance of the Dorothy Smith's 'everyday' and could be seen as part of

institutional ethnography, in my study this would reduce the amount of insight the data would yield as the scope of the institutional ethnography is to reveal the social organisation of the local.

The dialogue between the two methodologies proposed by this study also draws on both frameworks to use the results of the studies to better understand and even transform access to learning with open educational resources. The output of institutional ethnography can be used to challenge and change social forces and institutions (Campbell and Gregor, 2002, Smith 1987). Autoethnography brings its own dimension of practicality, offering lessons for further conversation through accessibility and readability of the text that can reposition the reader and inspire changes for the better (C. Ellis and Bochner, 2000, C. Ellis and Bochner, 2011), not only in its evocative, but also in its analytic form. Anderson (2006b) confesses: “people in their lives are where my loyalties lie” (p. 459). Research should aim to make itself heard by those it can and should impact most. I will return to further develop institutional ethnography and analytic autoethnography’s commitment to social justice commitment not only by revealing ruling relations but also pointing to possible interventions in Part 3.

3.5 Criteria for quality

A challenge that is common to all research studies is how to assure the quality of the study undertaken. This is particularly important in qualitative research, where a number of criteria have been put forward by different research traditions. Explicitly stating them is necessary in order to justify any insights or claims a study makes. Furthermore, Holt (2003), recounting his experience with an autoethnography about being a new teacher in a university physical education course, warns that studies that fail to account for how traditional criteria have been addressed are often met with hostility and rejection.

What constitutes good qualitative research has been discussed and addressed in a variety of ways (Adler and Adler, 2008, Denzin and Lincoln, 2005, Lincoln and Guba, 1985, Miles and Huberman, 1994). Most formulations have been essentially linked to those that initially prompted them from a positivist stance (Lincoln and Guba, 1985) and there has been an ongoing need to develop corresponding criteria in other research traditions.

Quality of research should fundamentally evolve from the researcher's world view. As such my criteria for quality are grounded in my epistemological and ontological orientation but also strongly rely on my particular approach to methodology combining analytic autoethnography and institutional ethnography to develop its understandings. It is also grounded in the context of my research, i.e. learning with open educational resources. As such I will discuss and explain what each term means to me and describe how I address them in my study.

I will first address what objectivist, positivist research has defined as internal and external validity. Regardless of the extent to which validity has been historically couched in quantitative research theory and practice, it has rested on how we define and accept reality.

Internal validity is concerned with the truth value of the research, and Lincoln and Guba (1985) argue that for qualitative work, credibility means that the results reflect the experience. Merriam (1998, 2002) also asserts that it is not a function of replication but whether the findings are true to the data and congruent with reality. Although there are a number of strategies to ensure credibility – traditionally, triangulation – I will focus here on two that are particularly relevant to my study: reflexivity and saturation (Merriam 1998, 2002). Reflexivity, as the "process of reflecting critically on the self as researcher" (Lincoln and Guba, 2000, p. 183, cited in Merriam 2002, p. 26) will also be addressed in more detail. I also ensure that I engage with my data over a long enough period of time to achieve saturation (Merriam, 2002). Triangulation is ensured through data collection from multiple sources and through multiple methods (e.g. observation, document analysis, online tracking, interviews etc.) (Creswell, 1998, Merriam, 2002, Merriam, 1998). Although I am the main producer of data, I am not the only source of data for the study.

External validity or generalisability requires that the knowledge generated be transferable beyond the case it has originated from. I do not focus on statistical generalisability but on transferability or applicability (Lincoln and Guba, 1985, Merriam 1998, 2002), not only at the level of abstractions, but also of other aspects such as skills or images (Eisner, 1991). This is also demanded by the analytical dimension of my autoethnography, as I agree with Anderson (2006b) and Vryan (2006) who demand that we judge quality in terms of the utility/usefulness of the understandings developed to other contexts, individuals or practices. I aim for my study to inform a larger community of the opportunities and circumstances in which one can access free, open education.

It is useful to consider here the distinctions made by case study research (Yin, 1989) between 'statistical generalization' to larger populations than the initial sample and 'analytic generalization' in the sense of a better, more in-depth understanding of the phenomenon that is being studied. This further highlights the need for rich, thick descriptions as well as a case for reader or user generalisability (Eisner, 1991, Merriam, 2002).

Reliability is usually concerned with replication. Lincoln and Guba (1985) however are first to look at the concept in qualitative research and highlight consistency and dependability as the criterion (p. 288, also cited in Merriam 2002, p. 22). Although Ellis and Bochner (2000) caution that there is no such thing as orthodox reliability in autoethnographic research (p. 751), reliability checks are still suggested and in my case, the analytic and institutional dimensions of my autoethnography allow for' and demand that, my findings be consistent with the data collected. Similarly McIlveen (2008) has suggested the use of interviews with individuals who can substantiate data or conclusions as a possible solution. Again I rely on triangulation through other sources of data and reflexivity.

Given autoethnography's long tradition in an evocative vein, it is useful to consider Ellis's (1995) argument for the research being a scholarly account. A story can be considered scholarly if it makes the reader believe the experience is authentic, believable, and possible (C. Ellis, 1995). The reader needs to 'feel and think with the story', be engaged and provoked (C. Ellis, 2000, Frank 1995). It is important here not to forget that working in an analytic vein demands that this not be at the expense of 'credibility', of staying true to the data. I aim to ensure that my research describes how learning can be free in a clear, elegant and compelling way, while avoiding being too self-indulgent.

In this study I have used criteria put forward in interpretive research and when necessary adapted and reinterpreted them to consistently align them with my methodology, resulting in a set that is appropriate and consistent with my research process. At all stages of my research I also tried to include a discussion of the assumptions the study makes and be explicit about the choices I have made philosophically, theoretically and practically.

3.6 Open access learning experience data

I first had to choose my learning/educational experience. The criteria I used would mirror others entering open access education: something I would have a strong personal interest in, whether related to my profession or for the development of my own understanding of a certain domain. I took into account the biases given my relative fluency in IT and previous degrees in management and business related subjects. I wanted to study journalism and ended up choosing a course on *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* offered though MIT's OpenCourseWare initiative. I went through the course content for the following three months (see Appendix 3a, 3b and 3c for the course's homepage, outline and required readings).

I kept an online private journal as well as took notes on paper throughout my learning experience. My blog was private (password protected) at afreeeducation.wordpress.com (see Appendix 4 for a sample blog post). The notes and assignment drafts that were handwritten were ultimately kept at my home office and were subsequently digitised (either transcribed or scanned).

During the preliminary data analysis, I have added additional notes to complement some of the daily entries, as well as to note other relevant information. I have also made some entries that reflected on multiple days. With these, I found that I could clarify some of my thoughts, albeit removed from the daily experience. Such entries however have posed some challenges to the status of my data, and these challenges are taken up in detail in the next chapter (chapter 4).

I have considered tracking my online activities with software such as Cam Studio[24] but ultimately decided against it as this would have required me to install the software on machines I expected to use and would have (potentially) altered my experience by prompting me to use the access points where the software had been previously installed.

In the end my data consisted of a detailed journal of my experience, recordings/logs of online activities (through the time stamps offered by the blogging service as well as screen captures and site histories that were taken at the time) and a collection of other relevant texts, images

[24] CamStudio is a free screen recording software that records all screen as well as all audio activity on the computer. This is one of the few similar software options that were explored for the purposes of this study.

or other documents or files related to the study (such as emails, forum archives, newsletters and media clips). Consistent with Chang (2008), my journal comprised systematic and contextual self observation as well as self reflective data (the nature of this data will be further discussed in the next section). This was complemented by the collection of additional documents and artefacts, not only to give a fuller account of the environment, but to be used as an "entry point into webs of sociality" (Campbell, 1998, p. 54).

3.7 Ethical considerations

Although in part an autoethnography, my research – as all internet based research – raises a number of ethical issues, especially pertaining to privacy and informed consent. Online spaces provide individuals access to a community through services like forums, social networks, discussion boards, chat rooms, or newsgroups.

Autoethnography does not mean ethical issues are secondary or non-existent in a study. As the researcher's identity is disclosed, potentially so is that of others connected to him or her. Autoethnography, like all methodologies, requires an ongoing process of ethical practice and reflection. Moreover the potential interactive/collaborative nature of my research means that some of the data is potentially influenced or even co-produced by other participants.

This study raised a number of considerations regarding the content of the research. The most relevant, and with overarching implications, was the distinction between private and public spaces on the internet. This distinction is important in order to decide whether informed consent is required. Such considerations have always been part of the debate regarding ethical conduct in internet based research:

> "Although publication on the internet may have parallels to publishing a letter in a newspaper or saying something in a public meeting, there are important psychological differences, and people participating in an online discussion group cannot always be assumed to be "seeking public visibility." On the internet the dichotomy of private and public sometimes may not be appropriate, and communities may lie in between." (Eysenbach and Till, 2001).

Today such considerations are further complicated by the multiplication of online contexts and the ambiguous nature and distinction of public versus private spaces. I have used a number of

indicators to assess the perceived level of privacy of particular settings. Following Eysenbach and Till (2001), I looked at whether or not registration was required in order to gain access, the site's norms, codes, intended audience, and purpose (Eysenbach and Till, 2001).

If informed consent was potentially required, to the extent that I could, I would use unobtrusive means, including a signature at the end of each posting. This could be done by automatically adding text, sound and/or images to messages containing the appropriate information. I have decided to only use text as more intrusive forms may influence communication patterns (Eysenbach and Till, 2001).

Ethics review for this study has been secured through the University of Technology Sydney's Human Research Ethics Committee, who has advised that research does not require further review on the basis of the Low Risk/Negligible Risk Impact Research Declaration Form submitted (see Appendix 5 for the Low Risk-Negligible Risk Approval Letter). In order to address the issues described above and any potential new issues that would arise during my study, I critically reflected on my practices at every step of the way and reassessed and adjusted my practices as needed.

4 An open learning journey

> **"Jonathan Salovitz's course load sounds as grueling as any college undergraduate's: computer science, poetry, history, math and mythology, taught by professors at big-name schools such as Princeton and the University of Pennsylvania.**
>
> **Except Salovitz, 23, is not an undergraduate. His effort won't count toward a bachelor's degree, and he hasn't paid a dime in tuition. Nor have his classmates, who number in the tens and even hundreds of thousands.**
>
> **Instead, Salovitz calls himself a 'guinea pig'. He's participating in a grand experiment in higher education known as Massive Open Online Courses – MOOCs, for short. Learners of all ages around the world are flocking to them. Top universities are clamoring to participate. And MOOCs already have attracted the interest of some employers, paving the way for a potential revenue source. All in less than a year."**
>
> ***USA Today,*** *September 12, 2012*[25]

I have participated in the grand learning experiment much like Jonathan has, albeit making use of different open educational resources. This chapter examines how I became the open educational learner and analyses the larger context of how this experience of access came to be this way.

Drawing on the methodological framework introduced in the previous chapter, I start with addressing the status of the data in analytic autoethnography, what is a legitimate form of interrogation and discuss how the 'analytical' will emerge. I will draw on the "experiencing self" and the "remembering self" (Kahneman and Riis , 2005, Kahneman, 2011) to ask question regarding the nature of the data and what can be claimed in relation to it and expand on the theoretical discussions around the possibilities afforded by data in the context of my two methodologies.

I then recount my open learning journey and analyse the process of developing as an open educational learner. I develop theoretical understandings of access through my own experience with *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* offered though MIT's OpenCourseWare initiative. I then turn to the making of open learning and look at the conditions that enabled or constrained open access to learning. I use institutional ethnography to analyse the experience in the context of an

[25] http://www.usatoday.com/news/nation/story/2012/09/12/college-may-never-be-the-same/57752972/1

ambiguously bounded, emerging, global education as manifest through both conventional and new texts that organise the lived experience and unmask more profound instances of power, as embodied by search engines. Consistent with my overall approach to methodology, my data analysis and interpretation integrate the two approaches – autoethnography and institutional ethnography – and traverse the conventional divide between the 'macro' and the 'micro' levels of analysis (Smith, 2005).

The final section of this chapter discusses how the two accounts I give come together to extend our framework for understanding accessibility (in terms of literacy, time, location and technology), association and awareness.

4.1 Recovering and uncovering meaning

> **"Memory is a complicated thing, a relative to truth, but not its twin."**
> **Barbara Kingsolver,** (1990, p. 48) in *Animal Dreams*

My methodology section raised a number of challenges regarding how I should proceed with the analysis and interpretation part of my research. In order to clarify the path that this research needs to follow, I return to the questions raised in the previous chapter regarding a consistent and coherent approach to the research process, and further clarify them within the context of analysis and interpretation of my data. I will start by looking at these questions in the context of analytic autoethnography, and then reassess them within the framework of institutional ethnography.

4.1.1 Data in analytic autoethnography

As mentioned in the previous section, autoethnographic methods in general, and analytic autoethnographic methods in particular, are usually relatively abstract and do not go into details as to the actual practices researchers should adopt, with some failing to address the topic altogether - a practice that seems to be consistent with those of classical ethnography writing (Adler and Adler, 2008). Traditionally, autoethnography urges the creation of meaningful accounts and usually involves a form of personal narrative/ storytelling that is the method as well as the product of the research. Analytic autoethnography builds on such narratives to produce theoretically informed understandings of the phenomena and the contexts in which they occur to, in the end, return to people in their daily lives (Chang 2008, Anderson, 2006b). Most studies go through a process of categorizing, looking for themes and patterns, then constructing meaning which forms the basis for broad conceptualizations and engagement with theory (see for instance Chang, 2008, Duncan, 2004, Wall, 2006). In order to do this in a manner consistent with my methodological framework, I return to the concerns the methodology discussion raised. They involved the *status of the data in analytic autoethnography and what is a legitimate form of interrogation, as well as how it is meant to inform, and what is its relationship to theory, and how the 'analytical' should emerge*.

First is the question of the status of the data in analytic autoethnography. Broadly speaking, autoethnography treats data very similarly to ethnography in general. Traditional ethnography immerses the scholar in the culture he/she intends to research. The 'thick descriptions' (Geertz, 1973) provide an inside perspective and allow analysis and interpretation (Anderson, 2006a, Atkinson, 2006; Duncan, 2004, Taber, 2010). Autoethnography takes this a step further

and uses experience, (self) observation and reflection as data. The 'insider', a full member of the culture, affords, at least in theory, a privileged place from which one can observe, write, interpret and analyse. It is assumed, that, unlike other forms of ethnography, in which the 'outsider' fails to fully account for the phenomenon under observation, autoethnography more fully and thoroughly understands, can interpret and write the experience (Anderson, 2006a, 2006b; Vryan, 2006). It was with this frame of mind that I started to get to grips with my data. In the initial phases of my analysis I re-read through my journal and follow-up comments I had made.

At a closer look at my data, however, I found out very soon that this idea is not as straightforward as it would seem. Where this idea becomes somewhat problematic, however, is in the differences between a more or less daily account of an experience and a retrospective consideration of our everyday lives. The data I collected in my journal at times would seem to conflict with the self reflective data I added when detached from the immediacy of the daily experience. For instance, my journal describes my experience as oscillating between delight and enthusiasm and states of anxiousness and acute uncertainty as I create knowledge and meaning in the context of assignments. Yet my subsequent notes give an overwhelmingly positive, optimistic recount of my experience, of figuring things out and mastering them bit by bit. Although I subsequently note some difficulties they are nothing like the notes on anxiousness and uncertainty that my journal reveals.

One way to deal with these apparent inconsistencies would have been to try to reconcile the two accounts. I could have tried to continue to think through the experience and give a unified account of it, or privilege one account over the other, potentially discarding inconsistencies. Another way to deal with these apparent inconsistencies is to try to make sense of how memory makes a difference to the data in the first place.

Kahneman and Riis (2005) observed that it is commonly assumed that people can accurately respond to questions both about their past experiences and their immediate ones. Yet such questions differ widely. They distinguish between an "experiencing self" and the "remembering self" (Kahneman and Riis, 2005, Kahneman, 2011). On the one hand, the experiencing self lives in the moment and can answer questions regarding its immediate experiences – for instance "what were you thinking about just now?" (Kahneman, 2011). The remembering self makes retrospective evaluations and answers questions about the overall assessment of intervals in one's life (Kahneman, 2011) – for instance "how was the course?". It

is important to understand that accurate evaluations of past periods would require not only that we rightly retrieve feelings we experienced in the past but also that we correctly integrate a number of past events, spread over time. Yet both of these processes are extremely error prone (Kahneman and Riis, 2005, Kahneman, 2011).

We often tend to confuse an experience with the memory of it. Kahneman (2011) observes how we distort the memory of the remembering self. We tend to exaggerate the peak and the end of experience, and neglect duration, whether it is our lives or just brief episodes in it (Kahneman and Riis, 2005, Kahneman, 2011). And although it is error prone, he notes that the remembering self is important for it is the remembering self that ultimately makes decisions for the future. We make choices and develop our tastes and preferences based on our memories whether or not our memories are accurate.

It seems there is more than one side to the insider perspective. Our own accounts are inconsistent, in a consistent way to some extent. It is useful to distinguish between our experiences in our lives as we are living them, and the memories, inaccurate as they may be, of those experiences. On the one hand we have the insider's experienced account, on the other the account we tell ourselves about it. The first is our experience, the second is what we think about it. It is important to note that it is this second perspective that drives our future choices.

Memory makes a difference to autoethnographic data[26]. Understanding my data becomes then not a matter of reconciling my accounts, but of accounting for the dichotomy that might exist in them. This allows me to retell my open learning journey as I experienced it, as well as allow me to see my memory (not to be confused with my experience) of access to learning with open educational resources (see figure 4.1). For analytic autoethnography this means that it is the experiencing self gives insight into the insider's experienced account. The remembering self then becomes particularly important for understanding how the self comes to the experience and its future choices, tastes and actions are shaped.

[26] This is not to say that the only way to get access to experience is to record it as it happens. The difficulties associated with direct access to everyday experience often lead to memory being used (as we have seen before, often inaccurately) to account for the experiencing self. Kahneman and Riis (2005) discuss the day reconstruction method as a possibility for reconstructing specific data that corresponds to the previous day's immediate experience.

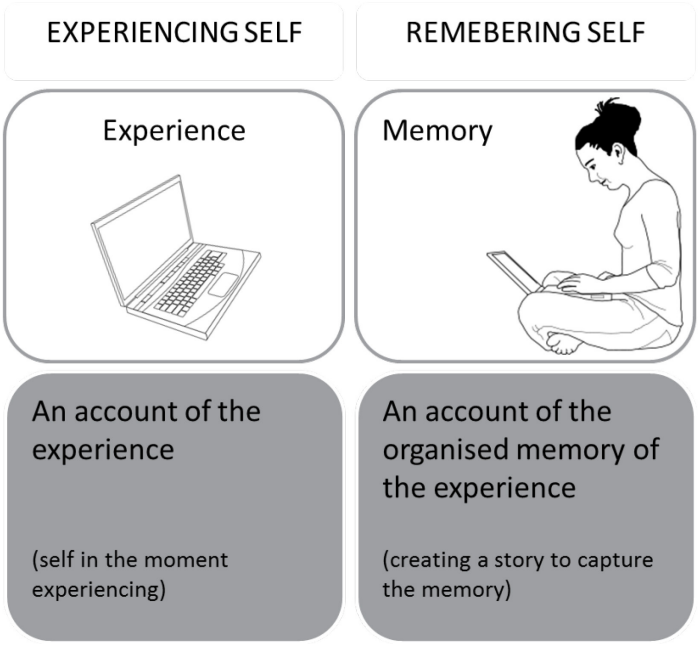


Fig. 4.1 Experience, memory and the accounts they produce

I could now turn to analysis and interpretation and consider how the analytical should emerge and how it is meant to inform theory. Analysis in autoethnography is an iterative process that involves what Maxwell (2005, p. 96) (quoted in Chang, 2008, p. 128) refers to as fracturing the data: coding it into categories and organising it "into broader themes and issues". My initial coding process focused on identifying critical moments in my learning experience. All of the various codes were sorted for patterns. Several broad themes emerged pertaining to the various dimensions of the experience. They essentially mapped my journey of access to learning using open educational resources, both as I had experienced it and as I thought of it. The analysis and interpretation of my data, and the accounts that emerged evolved during a period of a couple of months and were an iterative process.

This allowed me to focus on further readings that helped clarify implications for understanding and develop theoretical insights into broader social phenomena (Anderson, 2006a). I wanted to produce an account of the development of access to learning using open educational resources and significant experiences related to my trajectory as a learner, with literature and narrative threaded into the analysis. I presented and analysed themes in a relatively chronological order, grouping similar dimensions to avoid repetition.

4.1.2 Data in institutional ethnography

The story of free learning is however larger than the self. The insider story can not only shed light on the open learning journey, but, in its account of the everyday, provide opportunities for gaining insights into how "the everyday world of experience is put together by relations that extend vastly beyond the everyday" (Smith, 2005, p. 1). Exploring these ruling relations is at the heart of understanding free education. It allows for a more subtle description of the open, global education, as a new and emerging institution, at a time when traditional institutional boundaries may be dissolved or challenged, and new boundaries and new ruling relations are being formed (Peter and Farrell, 2010).

The questions I asked of analytic autoethnography, regarding the status of the data, legitimate forms of interrogation and how it is meant to inform and what its relationship to theory is, are equally pertinent to institutional ethnography. I will look at how institutional ethnography treats experience and texts and how they help me reveal the social organisation of the local.

In the case of institutional ethnography, experience provides the entry that allows the researcher to understand how things come to happen the way they do, by providing access to the social relations that organise that experience (Campbell, 1998, Campbell, 2001). According to Smith (1999), experience should not be understood or treated as knowledge, but "as a place to begin inquiry" (p. 96). I use the observations I collected in my journal not to explain behaviour but as entry to understanding the manner in which ruling relations shape my access to learning.

Distinguishing, as before, between the "experiencing self" and the "remembering self" (Kahneman and Riis, 2005, Kahneman, 2011) is important to understanding how I can access the everyday. The experiencing self seems most fit to answer institutional ethnography's questions about lived experience. The remembering self threatens to lose the subtleties that speaking from, in the experience can provide.

While starting in the everyday, I looked for texts beyond the immediate experience, to constitute what institutional ethnography refers to as second level data. I was looking for how my actions were conditioned and coordinated and a way to write another account, of the 'making of open learning', by addressing the social organisation behind access to open learning.

This stage of an institutional ethnography can pose particular challenges (Campbell and Gregor, 2002). There are many ways to make sense of the data and look for the traces of organisation. Yet they need to be consistent with one's methodological approach and the assumptions underpinning one's world view. Consistent with the tradition of symbolic interactionism, yet transcending it, institutional ethnography's ultimate goal is not theorising; rather it is creating an account of the social relations that organise experience (Campbell and Gregor, 2002 p. 90).

Following Campbell and Gregor (2002), I used a guiding question as I approached and interrogated my data. I looked at what it was telling me about how access to learning with open educational resources happens as it does. DeVault and McCoy (2006, p. 40), prompt us to look at data 'as raising questions'. I found it particularly useful to focus on *why I had described my learning experience as I had* and *what enabled or constrained my open access to learning*.

These questions allowed me to recover and uncover meaning, and build my argument regarding the relations that shape the experience of open access to learning. I produce an account of how access and the learning experience is systemically organised by ruling relations and reveal contextual conditions that constrain (or enable) access to open learning. My subsequent analysis thus identified relevant texts and the moments at which they are activated. I looked at how activities were shaped and whether any other texts were activated as a result.

As I looked at what was being achieved by the texts that I used, the notion of text itself emerged as one requiring further attention. As noted before, institutional ethnography emphasises the replicability of texts (Smith, 2005), and in turn their capacity to coordinate people's actions, in different places at different moments. They are manifest social relations, and in today's increasingly knowledge based economy, they play a fundamental role in shaping people's daily experiences (Smith 1990, Campbell and Gregor, 2002, DeVault and McCoy, 2002). Attention to how text organises what gets known and how it gets known in the course of my learning allows me to observe, besides traditional texts (such as the course syllabus) a relatively new form of text – search engines – as text, and in turn, ruling practice.

Examining Google as an institutional text requires a closer look at what constitutes text and how we understand it in an analytical way. In institutional ethnography, texts mediate sequences of action over multiple sites and at different or concurrent times. In many ways, a

search engine resembles traditional texts in institutional ethnography, in that it shapes my activities and represents the visible trace of certain ruling relations in my particular local setting. Yet, there are differences. Software is immutable in a different way to traditional text: although responses to individual searches are different, a similar 'master text' is deployed to create them. Also, the "visible traces" of new text are much less visible. In a sense, it is their constancy that offers the traditional coordination and standardisation. I will come back to these issues in the institutional ethnography analysis in section 4.3 to explore them in more detail.

I chose to focus on two types of texts that are significant to this study, and trace how each join me into the relations of ruling. I look at how they are activated, and how they organise my activities/ what I engage in as a result, as well as other texts that are potentially drawn into my activities as a result. I critically examine how they are used and reflect back on what is being achieved through their use.

Although well established, institutional ethnography does not provide set, consistent guidance with regard to how data and analysis should be brought together. DeVault and McCoy (2006, pp. 40-41) for instance, suggest a number of ways in which the researcher can create an account of how an institution 'works': by combining multiple sources of data and writing in the researcher's voice, using direct quotes, artefacts and analysis, or combining strategies to best account for the relations he/she is studying. Given the challenging nature of some of the texts I look at, I have chosen to use composite narratives, whilst focusing on "the goal of keeping the institution in view" (DeVault and McCoy, 2006, p. 42).

As discussed in the previous chapter, the most productive nature of the relationship between analytic autoethnography and institutional ethnography in the case of this study is to bring them in conversation to tell different sides of the story of access and becoming of the open educational learner and the larger context in which this takes place. In will start with the analytic autoethnography in the next section, *My open learning journey*, followed by the institutional ethnography in *The making of open learning*. I will conclude with how I understand my journey through these two on the one hand competing, on the other hand complementary accounts.

4.2 My open learning journey

> **"The library connects us with the insight and knowledge, painfully extracted from Nature, of the greatest minds that ever were, with the best teachers, drawn from the entire planet and from all our history, to instruct us without tiring, and to inspire us to make our own contribution to the collective knowledge of the human species." Carl Sagan,** in *Cosmos*, 1983, p. 233

I grew up with a copy of Carl Sagan's Cosmos on my parents' night stand. Sagan seemed to me a great communicator not only of his interests and passions, but also of a love of inquiry, learning and discovery. This quotation has stayed with me and I have grown to treasure opportunities for learning. When open educational resources came along, through MIT's OpenCourseWare initiative I looked to them as having a great potential to be empowering and transformative. Great minds and great teachers to instruct us and inspire us. The media continued to paint a seductive picture of free educational resources.

My aim in this study was to explore how open access to learning is enabled through open educational resources. In this section I explore my experience with *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* offered though MIT's OpenCourseWare initiative – a current form of open educational resources – but with an eye towards its implications for understanding and developing theoretical insights into broader social phenomena (Anderson, 2006a).

Allure, imaginary and the remembering self

My experience is lived in the everyday, yet it does not start in the everyday. I have been fascinated by open educational resources since they were first made available through MIT's OpenCourseWare initiative in 2002. I imagined unprecedented, unhindered possibilities for access and learning. I saw potential for what one could become and this was reinforced through stories in the media of what could be, of learning, collaboration and change.

When starting out, I could certainly imagine an adventure, a journey that held promise for everyone who took up the challenge of learning. I came to this experience mostly energised and determined, and imagined that the course could be an 'unfettered education experience'. It was a sense I had of my own identity and how it could relate to these opportunities, and it indirectly shaped both my aspirations and my expectations. This is what drew me to access

learning this way. And it is this self that I will return to as I recount and analyse my experiences.

I came to 'Food for Thought' ready to uncover a world of opportunity. And I came to it aware of what I could find. It was this self that drove me to engage with the resources in the belief that learning was 'open' to me. My awareness, insight and imagination sustained and bolstered my involvement in the course and drove my access to learning. I started envisioning 'enjoying the process' and the 'journalist (I) will become'. This became even more apparent as I progressed through the course. Although at the back of the experiencing self's mind, the imagination of possibilities speaks through the remembering self. I will return to this aspect in the last section of this chapter to further analyse the interplay between the two selves and what they reveal.

Choosing what to learn

As described in the previous section, when choosing what to learn, I looked for something I would have a strong personal interest in, whether for my profession or for the development of my own understanding of a certain domain. I had decided to study journalism. It was something I had always been curious about and had an interest in, yet I hadn't taken any courses in writing during my university studies. I felt this was the perfect time to pursue my interest. However, as I got started, although I knew what I was searching for, the task was not straightforward:

> "so far searching for free journalism courses has yielded only paid courses, mostly at Australian universities. I eventually reached a link that promised 100 free opencourseware classes on journalism."

Although my search was cut short, after only two links followed I started feeling anxious about the choices I was facing.

> "i went on to check the first suggestion – a Utah State course that turned out to be on blogs, wikis and new media for learning. Not exactly what i was looking for. The second link was to a course – no longer provided?) by MIT – Page not found – but on the left hand side the option for the School of Writing and Humanistic Studies gave me a whole range of free courses. This is not going to be easy. 98 to go."

The result of my second attempt at searching had promised ten universities. I found myself back at MIT. “MIT Page not found again.” I looked back at the list of options and felt I was back where I started.

> “Utah State course that turned out to be on blogs, wikis and new media for learning. Not exactly what i was looking for. The second link was to a course – no longer provided?”

I could always go through the hundred courses the other page had promised. I decided to go back to what was familiar. MIT’s School of Writing and Humanistic Studies gave me a whole range of free courses. Again I could see no outright journalism course, but a couple of other ones caught my eye: one on ‘Writing on Contemporary Issues: Social and Ethical Issues’ and another on *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food*. I had always had a love of food, so I happily chose the second option. I knew I ‘should be alright’ with an MIT course. At least I didn’t have to look anymore.

My experience with ‘100 free courses on journalism’ suggests that a vast array of open resources available to the learner might not necessarily be an unequivocally positive notion. What is more, finding (the right) open educational resources is a recognised problem, for which solutions are continually sought (see Tovar, Piedra, López, Chicaiza, and Martínez, 2012).

Schwartz (2004a, 2004b) highlights the widespread belief that more options are good for us. He goes on to argue that an increasing number of possibilities does not bring with it increased enjoyment. On the contrary, he claims that an expanding number of options pose increasing burdens on us, and in turn can lead to regret and paralysis (Schwartz, 2004a, 2004b). He reports on studies that challenge current assumptions that more choice is better, and looks at how limited choice leads to more satisfaction and increased motivation (Iyengar and Lepper, 1999, 2000 but see also Shafir, Simonson and Tversky, 1993, Shafir and Tversky, 1992). For instance, Iyengar and Lepper (2000) gave participants in a research study a choice between either 6 or 30 pieces of Godiva chocolate. They found that there is such a thing as too much chocolate, at least as far as choice is concerned: students faced with more options enjoyed the chocolate less and were less likely to choose a box of chocolates.

Like me, Schwartz sees too much choice as being a burden and source of confusion. Especially when one is not exactly clear on what one wants. Journalism is indeed a very broad topic. In

recent studies of the idea of choice, sociologist and philosopher Renata Salecl (2009, 2010) considers the current stress on endless choice and possibility. She also observes that choice and an increased emphasis on the availability of a myriad of choices provokes anxiety and insecurity, a 'tyranny of choice'. It also leaves people deferring to experts. I did not turn to experts per se but to the institution that I felt gave weight and credibility to its offerings – the Massachusetts Institute of Technology. The importance of considering the concept of choice became apparent again and again and I will reprise it as I move through my learning experience, in the following section of this chapter.

I had thus settled on *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* and I couldn't wait to get started. The next day I began my open learning adventure.

My story of open access to learning using open educational resources is one of accessibility – enablers and constraints, of demands, expectations, engagement and learning. In the weeks I spent with the MIT open course, several dimensions of the experience emerged.

Time and location

The first concerned where and when I access the open educational resources. I perceived any time and space as potentially available for me to access resources and continue my learning. I found I was using my laptop on the go almost as much as I was using my home desktop computer:

> "I have to run for the train, I have a meeting and a conf call at 11:30 ☺….. Back now, 45 minutes to go. Can keep going"

Although my home computer can be seen as the main access point, I completed lessons, readings and assignments in various locations (on the train, in coffee shops, in various locations in my house and garden, at times even my iPhone, through its internet connection). The physical and financial challenges of potentially accessing learning this way did not arise for me, however I will consider them as I look at technology next.

Technology

Of course time and location are (partially) subordinated to technology. My ubiquitous access to technologies enables the spatially and temporally distributed experience I have.

> "I checked the internet on my iPhone […] I see a link to videos […] (I cannot however remember off the top of my head what would be relevant here). I checked the link on my phone."

> "I have about an hour until the meeting so I set down to have a cup of coffee and look over the next session. Café university? ☺"

We can view technology as constituting both the place and time for access. My laptop, mobile phone and 24/7 internet connection mediate access anywhere anytime. Since they enable access anywhere anytime and I use them to connect to work, family and friends as well, I think nothing of using it for accessing open educational resources. I take notice of this aspect only when it threatens my independence from working in specific locations:

> "My laptop needs a new battery – won't work unless plugged in. Terrified at the prospect of having to do without for a few days"

Nonetheless, it should not be assumed that such technologies are always readily available for everyone, or available at an affordable cost. Not having access to a computer (or an internet connection for that matter) would of course change the nature of access. Rye (2007) investigates the effects of technology on flexibility and shows how technologies influence distance learning students' daily life practices and their movements in space, as they try to accomplish study related tasks. In order to use a technology one needs access to a place that provides technology, and this depends as much on the users themselves as on their situations. Although Rye (2007) investigates a relatively isolated region in a developing country, outside the conventional, mainstream digital affordances it highlights nonetheless the importance of not taking such aspects for granted.

Literacy

Discussing technology demands that we also turn to literacy. For the past twenty years, changes and advances in information and communication technologies have led to debates around literacy and (new) understandings of its conceptualisation. Various studies looked at information, computer, digital, cyber, hyper, internet literacies at different points in the development of ICT over this period (see for instance Kubey, 1997, Snyder, 1998, Gurak, 2001, Bawden, 2001, Prensky 2001).

Since 2002, literacy has also been the concern of open educational resource studies. It has been discussed in the context of barriers to accessing open educational resources, notably in terms of academic literacy in English (Morgan and Carey, 2009), digital literacy (Lane, 2009) and relatedly, in the context of open resources, in terms of the 'digital natives/digital immigrants' debate (Prensky 2001, Bennett et al. 2008, Bacsich et al., 2011). However, Margaryan, Littlejohn and Vojt (2011) find no evidence to support claims that the current generations display new forms of literacies. Hence a discussion of access to learning with open educational resources is better served by, and indeed demands, a holistic approach to literacy. Access to learning using open educational resources is not only technology laden, but also culturally infused. These resources are created across diverse national and academic cultures (albeit in largely western traditions), and demand an understanding of different forms of interactivity, hypertextuality, multimedia and communication. To focus solely on one aspect of literacy or the other would not allow us to capture the facets of the concept across this range of domains. Thus if we consider the dimensions of open educational resources beyond the technological, we find we need a more robust conceptual framework to address literacy.

I will thus consider literacy beyond a purely operational approach, and use Green's (1988, 1999, 2012) flexible conceptualisation of literacy in terms of three interconnected dimensions: operational, cultural, and critical – integrating language, meaning and context (Green, 1988, Green, 1999, p. 43). There are of course other approaches to literacy that provide similarly complete conceptualisations and that can prove useful (see for instance Freebody and Luke, 1990 and Luke and Freebody, 1999), but reviewing all such literature is beyond the scope of this study. It should also be noted that there are many explorations of literacy in a technology enhanced context (see for instance the review by Bawden, 2001); mostly however literacy tends to be treated as a linear concept, with learners achieving increasing levels of sophistication. Green's framework (see figure 4.2) provides a more sophisticated framework in which to consider the three facets simultaneously and interdependently. Although developed in order to inform learning in formal settings, the three dimensions are well suited to analysis in non-traditional settings, as discussed below.

Again, it should be noted that this is not to understate the importance of technology in the context of access with open educational resources; rather to emphasize that understanding literacy is better started in a larger context. Indeed, given this study's approach to privileging the textual nature of technological encounters, Green's framework is well suited to opening

the discussion around literacy in the context of open access through open educational resources. Furthermore, Durrant and Green (2000) suggest the use of the term 'l(IT)eracy' when conceptualising the term in the media age. They acknowledge the general relevance of the model in the context of literacy-technology, and underline how its three dimensions – operational, cultural and critical – apply across written language and technology systems. For the purposes of this study the strength of the model lies in how it helps highlight these three dimensions underlying the range of abilities/capabilities we need to consider in a changing environment surrounding open educational resources. I use the term 'literacy' rather than 'l(IT)eracy' but understand the framework as it considers literacy *and* ICT.

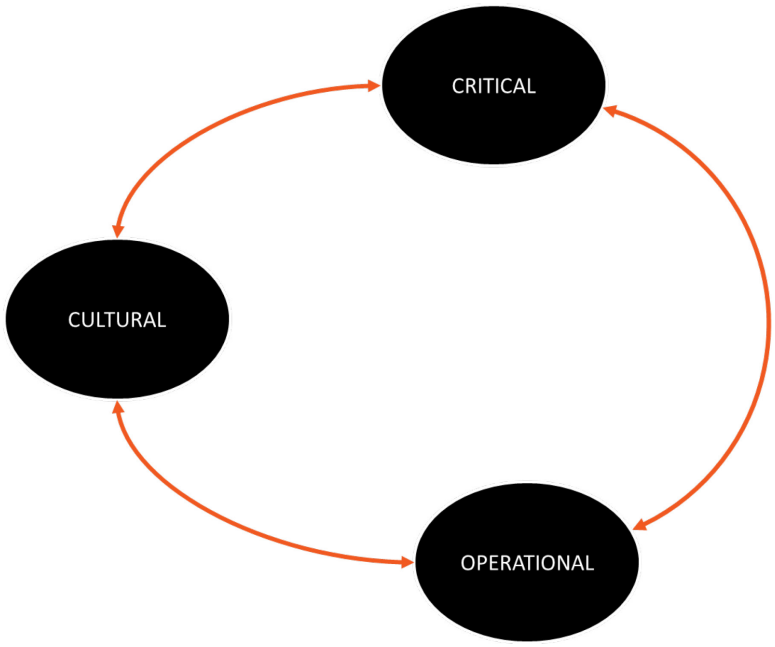


Fig. 4.2 The three dimensions of literacy according to Green (1999)

My experience as a learner encountering open educational resources of course drew on such literacies simultaneously, integrating them (to various extents), but in order to facilitate the analysis below I chose to illustrate and discuss them separately. Also, my comments in relation to the literacy demands of open educational resources are based on my experience with MIT's 'Writing on Contemporary Issues' open courseware. However, although I am talking from a subject specific space, my intention is not to highlight the specific repertoire of capabilities associated with this course. It is rather to highlight the range of such capabilities and the ability of Green's three dimensions to provide a frame in which to understand literacy in the context of open access.

The operational dimension of literacy refers to "knowing how to make 'it' work" (Green, 1999, p. 43). It involves using language, being able to read and write in a number of contexts. Green (1999) argued that literacy had to be also considered in the context and in relation to specific technologies. In the context of open educational resources, literacy emphasizes technology, competency using it, and an understanding of its codes and conventions.

While completing readings and assignments, I search, identify, organise, and interpret digital (and analogue) text as well as images, sound and movies. I look for information, content and references, read texts, view videos. Engaging with open educational resources requires I be able to decode this information and thus competence not only with the English language, but also several other operational dimensions as I 'read' videos, engage with hypertext and other forms of text (including software, websites, and presentations), 'preview' books and move seamlessly between the online environment and traditional print media. For instance, one of my topics leads me to a video source (figure 4.3):

> "I found a number of interesting resources, including a lecture that is part of a Yale course on the Psychology, Biology and Politics of Food, an open educational resource complete with video lectures."

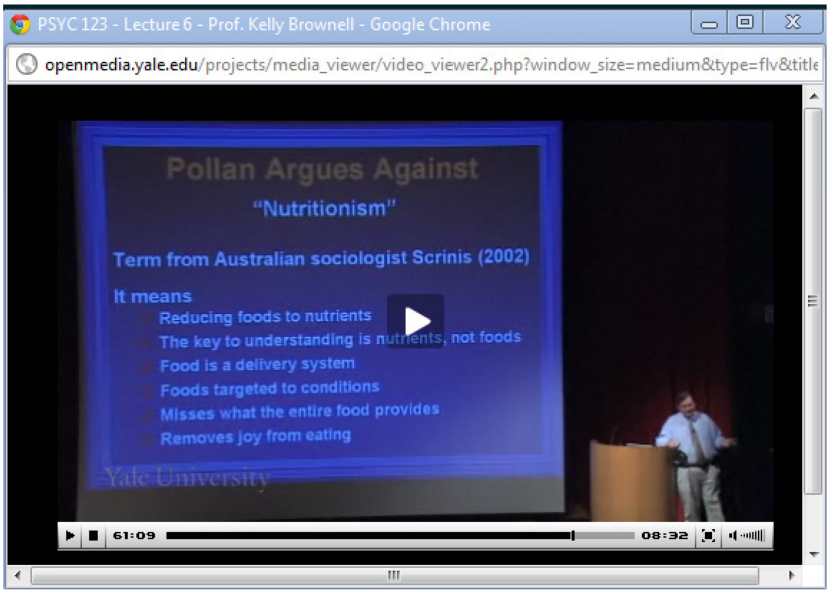


Fig. 4.3 Video lecture part of a Yale open course in the *Psychology, Biology and Politics of Food*

The cultural dimension of literacy involves competency with "'it' to do something meaningful and effective, in particular situations and circumstances" (Green, 1999, p. 43). Understanding text (in relation to context) implies understanding the conventions and practices associated

with that context. In my case this concerns the suitability of certain forms of reading and writing and not of others, including forms of searching for content and resources.

I participate in the cultural practice of a university course in general and a writing course in particular. I come to this practice with a fair understanding of what is required of me as a higher education student. Having previously successfully completed university degrees, albeit in different subject areas, the cultural meanings are, at least in part, familiar to me.

> "Speaking of the annotated bibliography (and this whole assignment for that matter), I feel quite at ease doing it as it is a research piece. More in my element. The rules of the game are more familiar ☺"

This enables me to participate in a wide range of cultural practices associated with *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food*. Being able to participate in the range of practices associated with the topics, homework and assessments allows me to gauge the suitability of different ways of reading, writing or researching. It also allows me to build on and develop those literacies further, in the specific area I am studying. Learners without an understanding of convention of what is or is not appropriate, would find it hard to experience, discover and create meaning in the context of open educational resources.

The critical dimension of literacy "entails recognising and acknowledging that all social practices and their meaning systems are partial and selective, and shaped by power relations" (Green, 1999, p. 43). This dimension of literacy ensures that learners are not merely accessing the open educational resources – participating in the course in this case – and making meaning within it, but can also interpret the practices within to act and transform it.

Learning with open courseware highlights the importance of considering the critical dimension of technology literacy. *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* is offered as part of MIT's Program in Writing and Humanistic Studies. It sits in an undergraduate program at a prestigious North American university and aims to explore issues related to writing within a specific cultural context. Engaging with it also leads the learner to use outside resources. It thus stresses the need to assess the likes of Amazon and Google in terms of bias/objectivity and impartiality/commercial interests. Green (1999; see also Durrant and Green, 2000) argues that learning how to use technology must be accompanied by a 'critical attitude' that encompasses its social and cultural dimensions and

evaluates software and online technologies. In a similar vein, discussing literacy in the context of search engines, Van Dijck (2010) proposes to extend the meaning of information literacy to encompass 'the economic, political and socio-cultural dimensions' (p. 587). She argues that Google Scholar, through its ranking and profiling, is a co-producer of academic knowledge and highlights the importance of the user's cultural and critical literacies in this space (Van Dijck, 2010).

Accessing open educational resources implicates all three dimensions of literacy. Learners need not only be able to orient themselves in the online environment, but also seamlessly move from one digital environment to another, and from one medium to another. Operational literacy is crucial for open learners, in order for them to have access to the resources in the first place; but it is not and should not be seen as sufficient. The cultural and critical dimensions of literacy are often in the background of literacy considerations in the context of open educational resources; and yet they are crucial to learners. And it is these literacies that might prove a significant challenge in the context of access. The three dimensions of literacy should be seen as a set of capabilities, a repertoire of knowledges and skills that learners need to have, develop and employ. They map onto language (communication), meaning and context/ power (Green, 1988, 1999, 2012) and entail learner capabilities around understanding practice related to communication, understanding specific conventions and acknowledging a need for analysis, critical evaluation and change practice.

Literacy	Meaning	Practice
Operational	Language/ technology	Understanding practice
Cultural	Meaning	Understanding convention
Critical	Constructed	Analysis, evaluation

Table 4.4 Literacy dimensions based on Green (1988, 1999)

I will return to a discussion of the further implications of literacy to other facets of access and how a broader approach to literacy can help reframe other debates around open educational resources in the final discussion of this chapter (section 4.4).

A matrix of demands

The temporal spatial, technological and literacy dimensions of access discussed above did not play out in a vacuum. They exist with a matrix of demands placed on the self by family, work and other commitments. In my case, the open learner is created and enacted in a particular context of demands that stem from my research, teaching, family, travel, health, renovations and other commitments. And in my experience the demands of each carved out the time, space, technology and even skill with which, and in which, I approached and accessed the course. My family and friends provided a supportive environment in which I felt "pushed", "boosted" and supported in my endeavour. My activities were seen as adding value rather than taking away time from family or leisure activities.

> "I returned home and think I might read another one and make some notes. Hubby thinks it's cool ☺, wants a summary. And jokes about Oprah…."

At times however, access to learning does conflict with the demands of work:

> "I really should stop now and prepare the preso for tomorrow – I'm going to be up all night again…"

The intricacies of local demands have been researched previously, yet not, to the best of my knowledge, in the context of open educational resources. Such issues are however also characteristic of more traditional online higher education, and although not widely researched in that area they are being increasingly highlighted and discussed. For instance, Rye and Støkken (2012) look at the social dimension in general, and negotiation with family in particular, and highlight how such duties and obligations can constrain the participation in an online course. They observe that how "to be a student was a family project" (Rye and Støkken 2012, p. 198).

Access should then be understood as negotiated in a matrix of demands imposed on the learner. On the one hand, it can pull the learner towards access and progressing with learning, potentially constituting a resource for the learner, on the other it can place high demands on her/him and make access more difficult.

Expectations and associations

I find myself confronted with the demands and expectations of the course itself. My identity as an open learner is realised within the context of the MIT course that provides the circumstances/conditions of what can be.

My blog also recorded my discomfort with the uncertainty generated by ambiguity regarding expectations:

> **"**I'm having a bit of a hard time deciding on the topic for the first essay….I wish I knew if it was better to follow my instincts or stay away and do something else."
>
> "Not sure though whether or not I'm missing the required part (it just says 'this part')."

They appear to undermine my sense of control over how my learning proceeds. What complicates things is my lack of previous experience with such a course. I have little to fall back on, so I turn to my previous learning experiences. I follow my instincts but feel unsure throughout, and suffer from the lack of immediate feedback. It should be noted that such issues are often alleviated in the case of educational resources that provide access to a community (sometimes even a moderator/guide/tutor). At the time I was engaged with "Food for Thought" MIT was in the process of implementing such a model, with the goal of making the "study experience less lonely and more productive":

> ''OpenStudy is a social learning network where students ask questions, give help, and connect with other students studying the same things. Our mission is to make the world one large study group, regardless of school, location, or background.
>
> OpenStudy uses AI recommendation engines to match students, and really real-time technologies to facilitate online interaction. It's like walking into a library or coffee shop and finding just the right group of students who can help you with what you're studying right now or someone struggling with a problem who could really use your help…halfway across the globe." (OpenStudy, 2010)

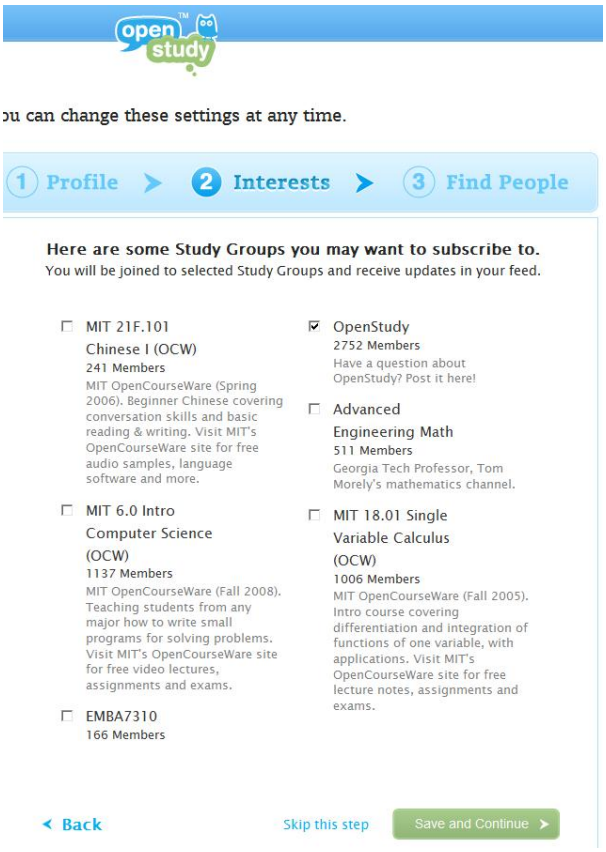


Fig. 4.5 OpenStudy in 2010

Although the OpenStudy 'community' was at its very beginning and essentially not available to me at the time, it should be noted that at the time of writing over 100,000 people from 170 countries took part in the initiative in one way or another, over a thousand questions per day are asked and on average it takes less than 5 minutes for a learner to get an answer (OpenStudy, 2011). Theoretically at least, learners are provided help at the point of need.

The exact form that learners would chose (or not) to get support for their individual learning is hard to infer. Currently there are a variety of options for learners (social networks, online support communities, local communities, family and friends etc.). They all would allow, at least in principle greater accessibility, engagement and participation. There is however the 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 networking is sought-after by all learners, nor that we should promote it as such.

The demands of my course also call attention to the fact that open educational resources are thought of as (fully contained) digital online resources, operating in the context of digital

demands. We seldom consider their call to use additional offline (or even hardcopy resources). For instance, reading Molly O'Neill's *American Food Writing* demanded that I purchase a hardcopy of the book.

> "Still frustrated about my book not getting here (I'm sorry Amazon for ever going to Bordersonline)…. Managed to get through to Borders. It seems a mistake was made and they did not actually have it in stock. So it will be here in 15 working days."

While such expectations of the learning resource are in a sense liberating from the constraints of technology, in another they are merely replacing them with other constraints. In a study of distance education, Rye (2007) shows that "it is not necessarily the technology itself that is most important for erasing distance as an obstacle in technology supported distance education, but rather the overall instructional design of the study programme" (p. 1037). In the context of access to learning through open educational resources such constraints can erase the advantages that digitisation enables in the first place.

Engagement and flow

The following dimension I would like to address is that of engagement in learning with open educational resources. Looking at engagement reveals a lot about the state of the learner, and can in turn enable an investigation of learning with open educational resources. It also sheds further insight on dimensions of accessibility as well as gives context to the themes discussed previously. I will rely on the experiencing self to reveal facets of engagement, and to the extent to which engagement leads to learning and achieving one's goals, uncover implications for understanding learning with open educational resources.

Astin (1984) defined involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 297) and used the notion to look at impact on student outcomes. Engagement extended this notion by focusing on activities that lead to learning and results (Kuh, Kinzie, Schuh, and Whitt, 2005, Chen, Gonyea and Kuh, 2008) and is contrasted to "inertia, apathy, disillusionment" (Krause, 2005, p. 4).

The concept of engagement has been discussed extensively in the context of scholarly achievement, and since the 1990s, mostly in institutional education contexts (Kuh, 2009). Although my experiences fall outside formal education, this exploration of engagement reveals how the concept can be understood and examined. Studies have looked at and found a

positive link between engagement and achievement, persistence, motivation and learning (see for instance Astin, 1984, Kuh, 1995; Kuh et al., 2005; Fredricks, Blumenfeld and Paris, 2004, Pascarella and Terenzini, 2005, Harper and Quaye, 2009, Tinto, 2000, 2005, Krause and Coates, 2008, Chen, Gonyea and Kuh, 2008, Kuh, 2009). My goal is not to review the literature on engagement as this would be beyond the scope of this study; rather it is to help shed light on how the notion can contribute to our understanding of open access.

Of course, the notion of engagement is related to a variety of others that can be used to look at involvement, motivation and learning (for instance, self-regulated learning, interest etc.) which would all potentially reveal insights into open learning access. However, for the purposes of this study I find that engagement best captures the experience, and adding other concepts to the discussion would do little to improve or clarify the analysis.

Fredricks et al. (2004) examine the research literature on engagement and show that it captures a multifaceted phenomenon, a "meta" construct (p. 60). First, behavioural engagement looks at participation, doing the work. It refers to, among others, a positive manner, following guidelines, adhering to norms and other self-directed academic behaviours (see Fredricks et al., 2004, p. 62). Emotional engagement influences willingness to do the work and includes interest-boredom, happiness-sadness and mirrors to some extent motivational studies (for a discussion see Fredricks et al., 2004, p. 63). Lastly, cognitive engagement refers to motivation, willingness to exert the effort needed to understand complex ideas and master knowledge and skills. Fredricks et al. (2004) suggest that it is useful to consider both the self regulating and self investment aspects (p. 65). They also caution that these are not independent processes; rather they are interdependent overlapping facets of the same construct.

My experience with *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* reveals engagement across the three dimensions (see table 4.6).

Engagement	
Behavioural	- Completing the readings, homework and assignments - Attempting to do the work within the parameters specified by the course 'Finished' 'Not bad at all. Quite proud of myself.' 'another one bites the dust' 'My third attempt involved'
Emotional	- Positive and negative feelings - (interest, excitement, happiness, but also frustration, uncertainty, anxiety, sadness) - Motivation to develop as a learner 'focused and energised' 'not want to give up' 'It's harder than I thought it would be but also a lot more fun' 'I still feel I am not doing enough' 'I love this book. I love this course' 'I am really thinking about the course'
Cognitive	- Cope with disappointment - Attempts to master concepts - Persistence and commitment - Making plans, strategies and organising work 'It doesn't list any specific material however, but I decided to try to search' 'went back to make sure I was getting it' 'I was going to skip it but then I figured out how to' 'drafting it out' 'Persistence pays off' 'I decided not to give up easily'

Table 4.6 Traces of engagement based on Fredricks, Blumenfeld and Paris (2004)

I recorded in my journal my experiences with progressing through course content, working my way through readings and assignments. I describe various ways of engaging with the course, in cognitive, emotional and behavioural ways. I strive for discovery and mastery, weaving in and out of the bouts of delight and enthusiasm to states of anxiousness and uncertainty as I create knowledge and meaning. My experiencing self also reveals periods of great enjoyment, being

completely absorbed in my studies, lost in the experience of reading and writing at times. Such peaks resonate with a particular type of emotional engagement, flow.

When discussing emotional engagement Fredricks et al. (2004) suggest that the concept of flow (Csikszentmihalyi, 1988) can provide a more refined understanding of high emotional engagement. Flow describes a subjective state of where people seem to lose track of time and space and are fully involved and absorbed in an activity (Shernoff and Csikszentmihalyi, 2009).

Fig. 4.7 Flow based on Csikszentmihalyi (1988)

The area of flow is characterised by an experience that closely matches high challenge and skill, resulting, in the case of a learner, in deep concentration, being fully involved in the task at hand. Engagement is then conceptualised as intense concentration, satisfaction and interest in learning that occur at the same time (Shernoff, Csikszentmihalyi, Schneider and Shernoff, 2003, Shernoff and Csikszentmihalyi, 2009).

Moments of flow allowed me not only to have the experience of mastery and satisfaction, engage actively and as fully as possible with the course, but also allowed me to construct an imaginary that further drove my engagement with the course and subordinated moments of anxiety, uncertainty or boredom to a positive, albeit subjective perspective of access to learning using open educational resources.

As discussed in the previous section, my remembering self told a different story. It lost the subtleties of the experience to form a different account, an overwhelmingly positive, optimistic recount of my experience when detached from the immediacy of that experience. I recalled enjoying the process, which I was 'really getting into it' and 'figuring it out, and getting better and better at it' (the peaks). I recorded some difficulties but nothing like the notes on anxiousness and uncertainty that my experiencing self revealed. My experience and my memory of it are different.

It is important to remember that it is the story of this self, the remembering self, that matters to what sense I make of my experience and how I integrate it into my world view. And it is this self that ultimately makes the decisions. Thus the narratives/ the imaginary I create affect and guide my access and relationship with open educational resources in the future. Not only do they affect how I relate to them, but also implicitly shape my hopes and expectations of what access and open educational resources can provide.

Engagement is of course related to the matrix of demands surrounding the learner, the course expectations and requirements and in a context various social interaction (whether they be on- or off-line). I will discuss the implications of such considerations in the final section of this chapter.

Engagement increases the odds learners will follow through assignments and courses and attain the knowledge and skills they are after (see for instance Kuh, 2009). Viewing engagement as a multifaceted concept allows to further take a more complex approach to learning and map engagement to another multifaceted concept. Illeris's (2002, 2003, 2007) model of learning for instance, could be useful in capturing learning with open educational resources. Merriam et al. (2007) note that this theory's strength lies in its simplicity and range (p. 99), making it useful for analysing a variety of learning situations.

Illeris's (2002, 2003, 2007) three dimensions of learning model is concerned with understanding and attending to all facets of learning when analysing a learning experience. It looks at cognitive, emotional and social processes that occur concurrently and describe the content, incentive and interaction dimensions of learning (Illeris, 2007). He also acknowledges that these dimensions do not occur in a vacuum; rather they exist in a societal context (see Fig. 4.8).

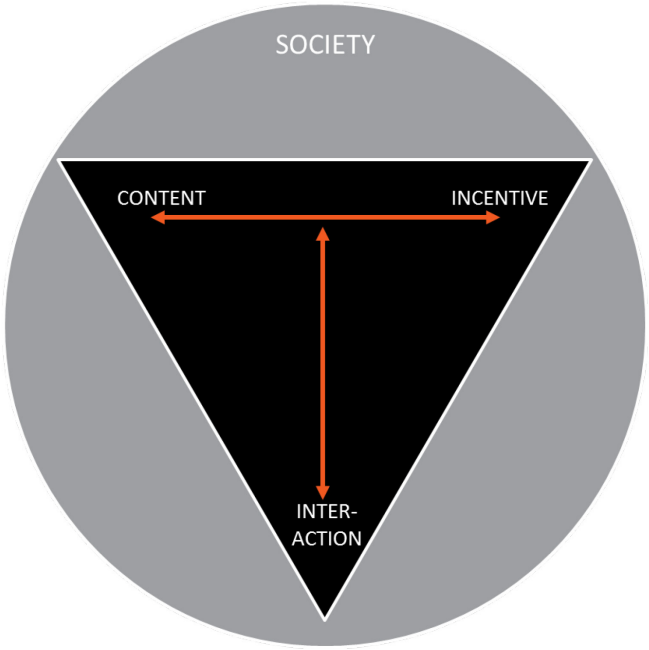


Fig. 4.8 Illeris's (2007) dimensions of learning

The content dimension refers to "what we learn"(p. 25), going beyond a traditionally more narrow interpretation of knowledge and skills to encompass meaning, ability and functionality (see Chapter 5, Illeris, 2007). The incentive dimension involves motivation, emotion and volition and is strongly connected and integrated with the content dimension (for more, see Chapter 6, Illeris, 2007). The third dimension is concerned with sociability. The interaction looks at action, communication and cooperation (see Chapter 7, Illeris, 2007). These dimensions allude to the cognitive, emotional and behavioural dimensions of engagement as discussed before. Specifically, cognitive and emotional engagement relate to the content and incentive dimension while behavioural engagement speaks to the interaction dimension.

In this section I explored my experience with *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* offered though MIT's OpenCourseWare initiative through the lens of analytic autoethnography. This meant considering implications for understanding and developing theoretical insights into broader social aspects (Anderson, 2006a). I have looked at how my experience, although lived in the everyday, does not start in the everyday. I explored the allure of open educational resources, the burden of choice in the context of access, issues of time and location and their (partial) subordination to technology. I analysed the different dimensions of literacy beyond a purely operational approach and what they entail in the context of open access to learning. I looked at how these are negotiated in a matrix of demands placed on the learner by family, work and

other commitments. I revealed insights into different facets of engagement, and to the extent to which engagement leads to learning and achieving one's goals, pointed to implications for understanding learning with open educational resources.

4.3 The making of open learning

I will now turn to institutional ethnography to look at how my story of open access to learning came to happen as it did, by providing access to the social relations that organised how I experienced access to learning through open educational resources. Institutional ethnography allows me reveal textual connections and how experience is being shaped by institutions.

I will start with an institutional text created by MIT lecturers (in this case Dr. Karen Boiko), the *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* Syllabus (see Appendix 3b) and other texts subordinated to it (again created presumably by the course lecturer and in the format / according to the guidelines required by MIT). In section 4.3.2 I will turn to new texts that emerge in the increasingly technologically mediated everyday.

4.3.1 Mandating texts

In this section I address how my activation of texts systematically directed my actions in accessing learning through *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food*. Specifically I look at the syllabus, reading list, homework and essay assignments of 'Writing on Contemporary Issues' as they appeared on the MIT OpenCourseWare website in 2010 (see figure 4.9). However, my focus on these texts should not imply my experience would be common to all open access situations. Rather, it points to the fact that activation of texts when independent learners engage in access to learning with open educational resources contributes to the formation of ruling relations.

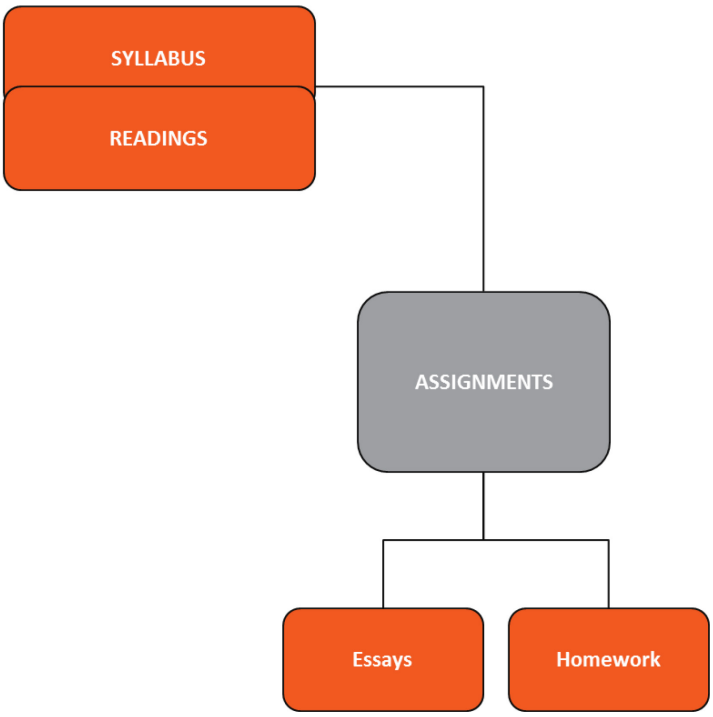


Fig. 4.9 Key course texts

My interest here lies in how the syllabus (and subsequent readings, assignments and homework) have the power to direct my thinking and action. They dictate my access and learning process and constitute ruling relations.

It should be noted that although I accessed these texts electronically, they were fixed in nature, and in a sense, in their printed form, would have been recognised as identical to their traditional counterparts.

The syllabus and required readings redefine what I am looking for in my learning experience. I set out looking for a journalism course that would help me with mastering the technicalities of writing, frameworks and style.

> "Getting a bit worried about whether this is more a writing course rather than a journalism one. I feel somewhat reassured I am on the right track given the required readings later on… but still …"

> "I am attempting to make notes on introductions (and endings) I liked."

At this point I even turn to MIT's Writing and Communication Center and the 'Resources' it offered http://writing.mit.edu/wcc/resources/writers/introduction and feel relieved to find the type of resources I hoped for.

However, the readings and assignments shape my understanding of what a journalism course offers already in the first couple of weeks. I start redefining it and my goals as 'writing'. I end up embracing and understanding 'writing' to mean something different with regard to what I would take away from the experience:

> "[Joan Didion's essay] raised some wonderful questions for me about writing and what it means to be a writer, but even more about finding oneself….Much of what she writes resonates with me. She talks about writing as "the act of saying *I*, of imposing oneself upon other people, of saying *listen to me, see it my way, change your mind".*

I even start seeking out information that reinforces my changing definition of what I want to access:

> "'a good piece of food writing is never just about the food; it is among other things about place and time, desire and satiety, the longing for home and the lure of the wider world. In a good piece of food writing, dozens of other tensions skittle just beneath the surface of these basic conflicts: the civilised competes with the wild, the idiosyncratic tugs at convention, self-control campaigns to squelch self-indulgence. A meal, like the written account of it, is a declaration of the self." (from Molly O'Neill's Introduction to American Food Writing, quoted in my study notes)

We can think of the tension between my focus and the way text mediates what I perceive as important as an embedded negotiation and concession as my interests are being shaped by the texts.

The access afforded to me by open educational resources is also culturally laden. The course materials are developed in and for an American university. The course description does not explicitly emphasize a focus on American food writing. What is more, the course homepage prominently features a painting by a French post-impressionist artist and an Italian food writer (see figure 4.10).

"Still Life with Plate of Cherries" (1885-87) by Paul Cézanne. (Image courtesy of the WebMuseum.)

Instructors:
Dr. Karen Boiko

MIT Course Number:
21W.730-4

Level:
Undergraduate

Like 30
Tweet 11
+1 0

Course Features

› Assignments (no solutions)

Course Description

"What people do with food is an act that reveals how they construe the world."
- Marcella Hazan, *The Classic Italian Cookbook*

If you are what you eat, what are you? Food is at once the stuff of life and a potent symbol; it binds us to the earth, to our families, and to our cultures. In this class, we explore many of the fascinating issues that surround food as both material fact and personal and cultural symbol. We read essays by Toni Morrison, Michael Pollan, Wendell Berry, and others on such topics as family meals, eating as an "agricultural act" (Berry), slow food, and food's ability to awaken us to "our own powers of enjoyment" (M. F. K. Fisher). We will also read Pollan's most recent book, *In Defense of Food*, and discuss the issues it raises as well as its rhetorical strategies. Assigned essays will grow out of memories and the texts we read, and may include personal narrative as well as essays that depend on research. Revision of essays and workshop review of writing in progress are an important part of the class. Each student will make one oral presentation in this class.

Fig. 4.10 Course description on the MIT course homepage

The course content however prominently features locally authored food writing and makes no explicit provision to include other writing. This in turn provides a rather one-dimensional view of food journalism and drives my understanding of what constitutes good or valuable writing. The *Writing on Contemporary Issues: Food for Thought*' course embodies and puts forward a particular learning trajectory, that relies on culturally located texts, supposes active student involvement, linear progress over the course of a semester, punctuated by minor and major assignments and so on. As a learner I have no access to how such open educational resources are developed, negotiated, and provided by the institution. The organisation of the course crosses real and virtual borders. Such issues highlight the potential manifestation of 'neo-colonial' movement authoring material, creating producing guidelines and standards in this new educational space. This can potentially result in a number of difficulties that will be discussed in section 4.4.

The syllabus and the reading list direct and organise what texts I prioritise. The following is an excerpt from my weblog:

> "Finally! My book has arrived: American food writing: an anthology with classic recipes, edited by Molly O'Neill. ...I couldn't wait to have a look at it so I am sitting down with it in the middle of the day. I have to check which essays I'm supposed to

read – all seem very interesting; Disappointed a little that the first essay I am required to read is on page 300+ (p318 to be exact). So much looks so interesting before that!"

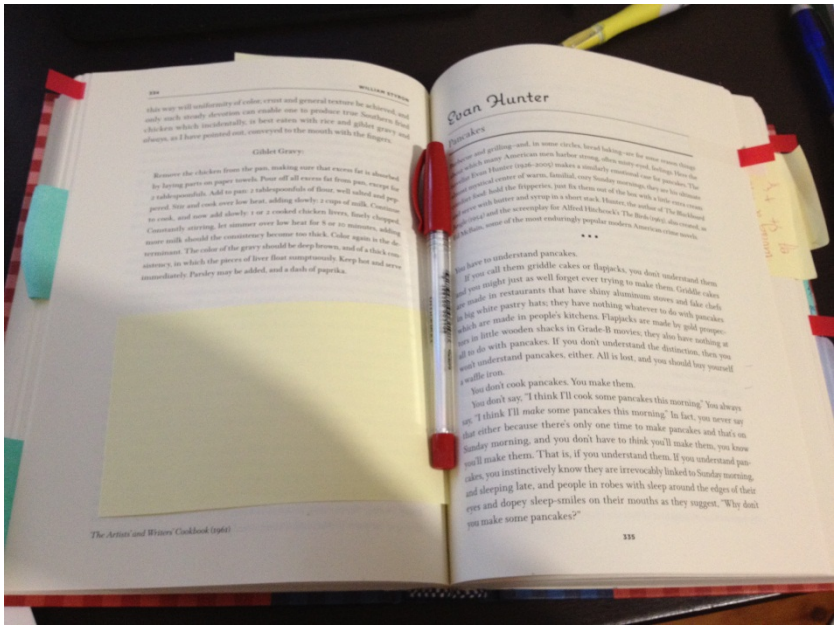


Fig. 4.11 My copy of Molly O'Neill's *American Food Writing*

As I read the requirements I was directed to consider specific texts at the expense of others. As I engaged with the book, I activated the text in my mind in a way that prioritizes certain texts for me over others, and ascribes them with attributes that themselves become important and drive my response to the text. My approach to this book and other readings would have been different otherwise. Subsequently, although I approach the book on a conscious level, on an unconscious level the mandated readings (for which I have placed stickers in the book – see figure 4.11) drive my understanding of it. I reactivate the text every time I turn to the book; it always gives me starting points, it selects and filters, at least to some extent, the pattern of my activities.

Homework assignment texts mandate a course of action in the document's goals.

> "WRITE: Select one sentence from this piece and write a response. Pick a passage that echoes your own thoughts, or challenges them, or puzzles you, or delights you—your choice. (Before doing so, make sure you have read the entire piece and understand what the sentence means in context.)" (*Homework #4*)

We can see clearly how the text dictates the flow of my attention and activities: "Select…pick…make sure you have read…". There is a voice of authority deriving from the text

to define what I should do. Although it is not in the room with me, it lays down expectations that I follow.

Another example of me activating a homework assignment allows us to see how *Homework #8* structures my choices about how to proceed.

> "The rest of the class seems to match the homework, so I also need to write: "a 150-200-word summary (précis) of Berry's essay. Your précis should include Berry's key points and his purpose in writing the essay. If possible, it should indicate the flavor of the essay—the tone, style, and/or way he argues. It should NOT include any commentary or critique by you"… I'd much rather comment on it, but…"

Homework assignments are structured around such tasks. My actions are mediated by the task of summarising the reading and the restriction on commenting and critiques which I found more natural and I am inclined to do.

By their nature, homework assignments also reorganise my activities in time to some extent. The above example for instance contains a due by date ("Due in class Th 10/2"). Since I am accessing this course asynchronously, although the date is not relevant to me, I still felt compelled to finish assignments before moving on to the next session/readings. Although the text formalises deadlines, it does not offer me strict guidelines and the time I take to complete a homework assignment varies.

I also activate texts by anchoring them in my local conditions. Initially I chose to use Borders Australia (www.borders.com.au) to order books online instead of Amazon. However, because of the limited availability of course material, I soon reverted to Amazon as suggested in the course documents.

It is also the course syllabus and reading list that join up and create, albeit inadvertently, a pseudo-community in which my access to learning takes place. Repeatedly I find myself a spectator in discussions about class material, in environments that have not been designed in any way to contribute to my learning, and yet I am being lead to them:

> "Interestingly, the comments on the NYT [*The New York Times*] page where the article was published provide an interesting 'discussion' of the essay. I skimmed through them and it felt good to read my thoughts reflected in some of them."

I read forum discussions and join others discussing the same readings, albeit from (sometimes very) different perspectives. There is however no guidance as to how to enter, engage, or whether or not indeed to enter or engage with these discussion spaces. Learners have to fall back on their interest, initiative and ability to consider, evaluate, participate and negotiate meaning.

Having considered these texts, institutional ethnography has allowed me to throw light on a number of ways they systematically directed my actions in accessing learning through *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food*. The syllabus, reading list, homework and essay assignments mediate what I perceive as important, mandate inclusions, exclusions, and define courses of action in space and time. They also create a culturally laden access experience and join up a virtual pseudo-community. In a sense they create a recognizably traditional course experience; in another they provide new ways of organising and coordinating experience.

These texts however are not the only ones with the power to subordinate my access and navigate my actions. In the following section I will examine new texts that have emerged in the increasingly technologically mediated everyday.

5.3.2 New texts

> **"The technology will be so good, it will be very hard for people to watch or consume something that has not in some sense been tailored for them"**
> **Eric Schmidt**, *Google CEO*
> **"Think about it for a second: there is no standard Google anymore. And you know, the funny thing about this is that it's hard to see. You can't see how different your search results are from anyone else's."**
> **Eli Pariser**, at *TED2011*

Besides traditional texts such as subject outlines and homework assignments, a look at how access to learning with open educational resources happens as it does highlights the prominence of 'new texts' in organising experience. Learning with open educational resources, my experience is littered with incursions into cyberspace, in my quest to access resources, do research and procure readings.

Today, it is not only traditionally mediated practices, but also increasingly technologically complex ones that order the everyday – such as the highly personalised search engine described in the quotations above. These practices were evident in the way search engines (e.g. Google/ Google Scholar) and electronic commerce/online retailers (e.g. Amazon, Borders) participated at different times in the learning process. I will look at the way I enacted such texts and their unseen (and at times unintended) impact on my actions. New texts such as internet search engines and online retailers, rule by authorising and directing action as well as shaping social spaces.

The first new text I wish to highlight is the search engine – in particular Google's Search. The following excerpt is typical of the searches I performed while studying *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food*:

> "I've just remembered the first session also mentioned something about Madhur Jaffrey [it actually mentions Food and sense memory (Madhur Jaffrey)]. It doesn't list any specific material however. I decided to do a quick search – I believe she is a chef – Indian food, but I might be wrong.
>
> Google search listed on the first page her Wikipedia entry as well as a couple of 'one on one' videos. A quick look at Wikipedia and I decided to go for the videos."

Fig. 4.12 Sample Google search results

As I search for Madhur Jaffrey, I essentially defer the particulars to the search engine. I look at the first page of results, and follow the links. The characteristics of the decision appear to undermine my sense of control over how my learning proceeds. This suggests that caution should be taken in assuming that I am participating completely authentically in these decisions. This becomes apparent in the repeated number of searches I perform and in the possibilities they extend to me. They all follow the same framework as determined by the query and results format.

Notice that I do not say I will look for her (Madhur Jaffrey's) writing on food and sense memory until I find it. I "decided to do a quick search [on Google]". What I got back - "Wikipedia entry as well as a couple of 'one on one' videos" - suggests that I may not really be aware of exactly what I am looking for, or of all relevant options. "A quick look…and I decided to go for the videos". I concede the decision to the search engine and there is nothing at this point to prevent further action from being dropped. I also take for granted that the top links are the best suited to my learning purposes. The search engine suppressed interest in other potential courses of action and alternative ideas and potential actions are dropped.

Without adequate access to information I cannot make other choices. At this point there is a lot of other information/ sources potentially available, none of which I am aware of. Actual choice requires more than this. The choice being offered is not the same as me having all information to make my decision. Any claim that I retain full control about the choices I make with regard to learning is not supported by such interactions, even though the system does not appear to supress interest in other potential courses of action.

What is more, Google not only positions me, influencing my learning strategy, but can even create new 'tasks' altogether. For instance, prompted by a search result, I end up watching a video lecture that is part of a Yale course on the Psychology, Biology and Politics of Food, that is not part of the course I am completing or a requirement of the course.

But it is not enough to observe that my actions are shaped by Google. *How* Google comes to shape them is equally important. We first need to understand how it is decided what I get exposed to next whenever I choose to perform a search ('google' something). Google[27] lists results according to PageRank, its proprietary (and undisclosed) algorithm that weighs links on the web to determine the relative importance of websites. It is known that such results tend to favour certain large, commercial sites, certain countries and languages (in particular the U.S. and English) (see Van Couvering, 2009).

What is more, since the end of 2009, Google has been customising results for each individual user. As Eric Schmit, the CEO of Google put it in an interview for the Wall Street Journal, Google knows "roughly who you are, roughly what you care about, roughly who your friends are" (Jenkins, 2010). It thus uses fifty seven cues (such as your browser, your location, your previous queries) to personalize your results, even if you are not logged in on one of their services (Pariser, 2011). None of us can turn to a standard version of Google (or any other search engine for that matter) anymore. As Schmidt puts it, "the technology will be so good it will be very hard for people to watch or consume something that has not in some sense been tailored for them" (Jenkins, 2010). Each of us then is presented with different links, even different numbers of results. Consequently no one knows or can predict how they will turn out.

For someone like the individual learner, such hidden algorithms and customisations are very hard, if not impossible, to see. And yet they direct our choices and enable, in the case of the self learner a very specific, personalised learning path. Research suggests that most people seldom choose links past the first page of search engine results (Ozmutlu, Spink, and Ozmutlu, 2004, Jansen and Spink, 2005, Jansen and Spink, 2006). So what we end up seeing (and acting upon) is different for everyone.

[27] This study looks at Google as the search engine of choice, given the fact I have relied on it as my default search engine while learning with open educational resources. Google is widely used in Western Europe, the U.S. and Australia. However, similar arguments could be made for Yahoo (widely used in Japan), or Baidu (the search engine of choice in China).

In the case of the self learner this has implications not only for the way the educational experience is shaped along the way, but also in how access to that experience is determined in the first place. If I hadn't been interested in open educational resources in general (and had accessed MIT OpenCourseWare in particular), would I still have been lead to the course I ended up choosing? On a different computer, the same search performed by someone else, with a similar age and background, in a similar geographic location, yielded very different results (e.g. catholic journalism courses).[28]

Pariser (2011) suggests that what we end up in is a "filter bubble", our own unique information environment in which we exist while online "which fundamentally alters the way we encounter ideas and information" (p. 9). And it is in this filter bubble that we have very little control over what gets presented to us, and what gets left out. Instead, it is commercial entities that choose what options we are made aware of (Benker, 2001, Pariser, 2011).

These considerations are especially important at a time when we tend to regard the likes of Google as "trustworthy" (see Keane, O'Briend and Smyth, 2008 for how we are influenced by search engine brand) and regard them as neutral tools for gathering information, central to knowledge production (van Dijck, 2010). This effect is even more prominent the more inexperienced users are and the less time they have (Beauvisage, 2004, cited in Van Couvering, 2009).

Of course such algorithms, filters and tailoring are not all detrimental. While I was trying to learn with open educational resources, such algorithms helped me access relevant resources with a speed and ease that I could not have achieved even a few years ago. At least in theory, personalised search engines can empower us, help us find the information we want, when we want it. But looking at them as texts from an institutional ethnography perspective allows us to uncover the hidden ways in which they come to create a set of options and nudge us into a course of action that is not entirely of our own making.

Another new text apparent in the making of open learning is the online retailer – in particular Amazon. The following excerpt is typical of my encounter with the service while studying

[28] What is more, Google's autocomplete function could potentially alter a query altogether by predicting the term or phrase that the individual learner wants to look for before him or her has actually typed it in in its entirety. Word completion is a feature provided by most search engines as well as a number of other websites (for instance Amazon, among many others).

Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food:

> "The advice is to read the selection from Ch. 1, "The Invention of Cooking," from Felipe Fernández-Armesto's Near a Thousand Tables: a History of Food. …. Amazon. The book has a 'Look Inside!' feature, and I manage to get to the first chapter online! Or at least the first six pages as I soon found out. Chapter two begins at page 20 so I am sure to miss quite a bit. Not sure though whether or not I'm missing the required part (it just says 'this part')."

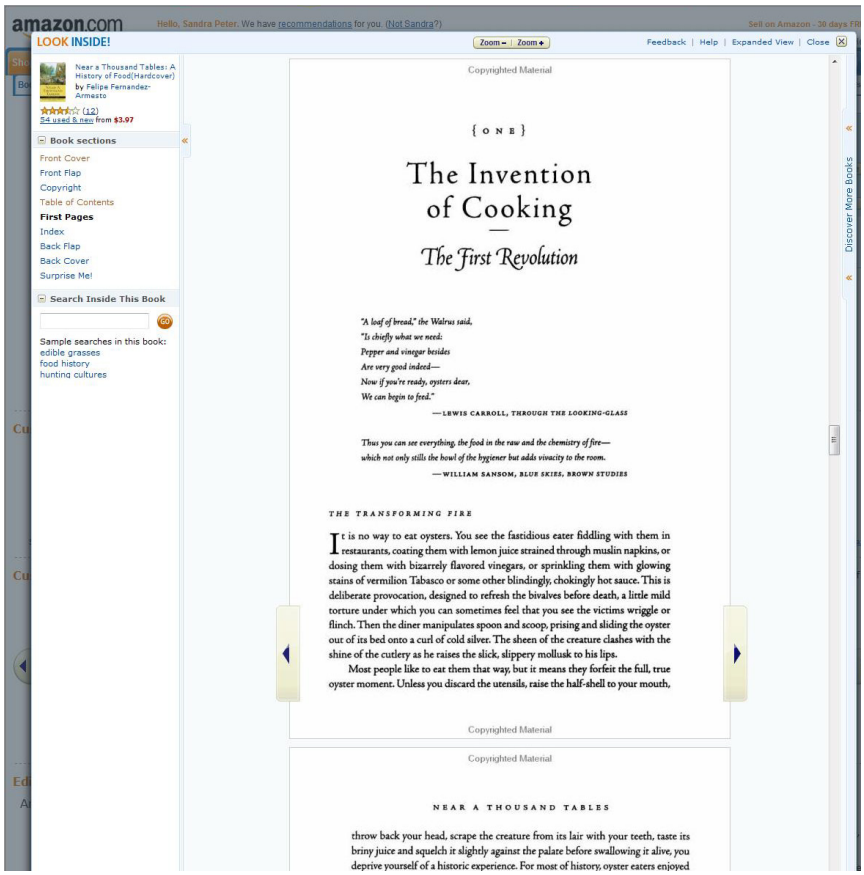


Fig. 4.13 Amazon preview ('*look inside*') pages

Following the availability of the pages on Amazon, I go over the reviews provided by other readers of the book over the past eight years. Unwittingly, I am joined up with other people and Amazon[29] (re)creates a social space that resembles an actual conversation. This is even

[29] I have also relied on Google Books during my experience with open educational resources. Although not an online retailer itself, Google Books behaves in a similar manner to Amazon. Since I have previously considered Google Search for my analysis, I chose to now focus on Amazon as it provides for a more nuanced discussion of how such sites shape social spaces.

more apparent in spaces which easily enable discussion (for instance I subsequently looked into a Book Discussion forum page http://forums.egullet.org/index.php?/topic/13011-near-a-thousand-tables-by-felipe-fernandez-armesto/). These texts enable me to join the practices of others on the internet, although their interests, skills, qualifications and identity are not transparent. I find their comments a provocation to discussion, I see ideas that make me reconsider my own reading of the text.

Again it is nearly impossible to guess how these spaces will appear to any particular learner, and how they enable a specific experience and learning path. They also join the learner up with a particular set of choices other users make, and supply suggestions based upon them. Usually these social spaces do not articulate directly with open educational resources; they nonetheless provide at least the semblance of a community with similar interests.

Understanding search engines and online retailers as texts, with the ability to coordinate people's actions, in different places, at different moments, allows us to see manifest ruling relations. Consent to power is given in at least two ways. First, it is provided through the choices we make. Google offers paths through knowledge that we follow. Secondly, consent to authority is provided again through participating in the spaces texts create. The consent flows from free but increasingly constrained choice-making. We need to understand how access to experience is determined. Our actions are a product of our individual decisions as much as they are organised and reproduced by institutional texts.

I would like to return to the way a learner dips in and out of these of these spaces and the links between the various texts. If we reconsider how the texts are activated, we can get a glimpse of the intertextual linkages:

> "While listing ideas/sources – the task needed an annotated bibliography – I checked the internet on my iPhone: paradox of choice – I have the book at home – I cannot recall his name. Barry Schwartz. I see a link to videos – his TED talk. I will have to watch it again – I am sure I've seen it before. The next link also catches my eye. Freakonomics – another book I have read […] I checked the link on my phone."
>
> "no link is provided so I did a quick search on Google. The first link is to a Book Discussion forum page….The second is to Amazon"

Texts do not stand alone; they are linked and interlocked. Smith (2005) talks about intertextuality, in the sense that institutional texts are dependent upon other institutional texts. She is mainly concerned with hierarchies and how higher level texts can establish frames for interpreting and control lower level texts. Smith (2005) cautions us to look for hierarchies in a "textual and conceptual" relation, not in the institutional organisations or necessarily related to them (p. 187).

I am driven from one text to another, going back and forth between reading assignments, Google, Amazon and forums. Notice how course tasks and Google provide hubs to which I return time and time again. The links between texts produce the realities in which my access to learning with open educational resources is realised. Although we can distinguish texts that have the ability to relate and organise other texts, the hierarchy that emerges is not a clear one.

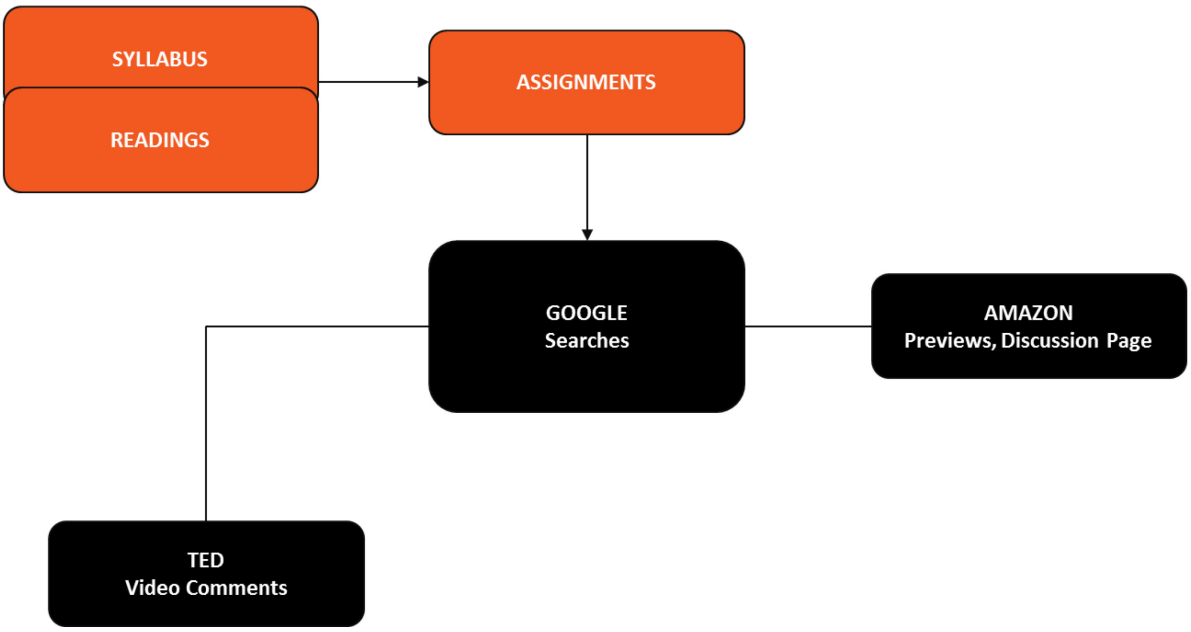


Fig. 4.14 Mapping significant institutional texts

Figure 4.14 shows how the syllabus and Google equally mediate sequences of action and activation of other texts. Although it is easy to simply conceive of them as merely presiding over other texts, the interplay between the two reveals a more complex image. They take turns at shaping action and influence is transferred almost seamlessly from one to the other. The interplay between traditional texts and new texts is rooted not only in the advances of technology but also in how new texts are regarded by learners, their perceived status as neutral aids for achieving learning goals. I will return to what this means for the mechanism

through which global education as an institution enters the learner's experience in the following section.

4.4 Conclusions

At this point I turn to how I now understand my journey of access to learning using open educational resources, given the issues raised by the previous two, on the one hand competing, on the other hand complementary accounts of the journey: one of how I became the student of *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* and one of how my experience was textually tethered to institutional processes, some visible but most hidden.

I will discuss how these accounts come together to provide insights into a number of different aspects. First I will discuss a few insights that have emerged with regard to the methodology and methods I have called upon in this study, namely how to treat observations as a substantial source of data and call upon different selves to provide different lenses on an event. I will then turn to how the two accounts extend our framework for understanding accessibility (in terms of literacy, time, location and technology), association and awareness. I will then discuss what they allow us to say about the complementary facet of open access in the form of choice.

Before I turn to a discussion of open access, I want to make a few remarks regarding questions of data and analysis that are an ongoing matter for discussion for any research method. In particular with regard to analytic autoethnography and institutional ethnography, there is a more nuanced way to treat (self) observations as a really substantial source of data.

As different approaches to ethnography call upon different selves (Peter and Farrell, 2012), my analytic autoethnography and the institutional ethnography called upon different selves. In analytic autoethnography the remembering self was particularly important for understanding how the self comes to the experience (in this case to open access). The remembering self is also crucial for understanding how one ultimately makes sense of an experience and ends up integrating it in one's world view, however it paints a very different picture of the actual immediate experience. If we are interested in analytic autoethnography providing answers regarding the everyday, we must find ways of accessing the experiencing self to gain insight into the insider's experienced account. This becomes especially critical in ethnographic studies

that use the remembering data to make claims about people in their lived lives. In institutional ethnography, the question of how the ethnographer gains access to the everyday is answered by the experiencing self. The experiencing self is fit to answer questions about lived experience without losing the subtleties that speaking from, in the experience can provide.

Since ethnography's core concern is with "the meaning of actions and events to the people we seek to understand" Spradley (1979, p. 5), how data is constituted differently when people answer questions about their past experiences and their immediate ones is especially critical. Researchers should not make the mistake of using memory to account for the experiencing self, use remembering data to make claims about people in their everyday lives. The circumstances under which data can elicit insights and the types of insights it can elicit must be considered. The experiencing and the remembering self (Kahneman and Riis, 2005) provide different dimensions to responses and can provide two lenses on an event.

Institutional ethnography has also allowed me to understand, among other things, search engines as paradigmatic texts which shape people's actions in intended and unintended ways. It is well suited not only to analyse what we traditionally would describe as texts but also increasingly technologically complex forms that order the everyday such as the highly personalised search engines. Institutional ethnography does not seek to understand search engines (or global education for that matter) as institutions. Rather it aims to look at their coordinating activities and how they link into other activities to make visible the ruling relations from the point of view of people participating in them. In this sense looking at search engines as texts through the lens of institutional ethnography allows us to see them from a specific angle – in this case that of open access to learning – as they enter the learner's lives.

Refining the framework for openness

I will now return to the conceptualisation of open learning I introduced at the end of Part 1 (recall figure 2.5). Learning as open resources plus surrounding open context that requires, in addition to accessibility (in terms of technology, literacy, location and time), the users to be aware of its existence and potential, and have the opportunity to engage in meaningful communities (whether they are real or virtual). I will start with accessibility and look at how we can refine our understanding of literacy, time, location, and technology and start to explore the interplay between these dimensions.

First, considering a more nuanced approach to literacy, in terms of three interconnected dimensions: operational, cultural, and critical – integrating language, meaning and context (Green, 1988, 1999) provides a more robust conceptual framework to address literacy in the context of open access from a learner perspective. I suggest that this approach works well for discussing literacy in the domain of open educational resources which are potentially technologically complex and culturally infused. It manages to cover the complexity of existing and potential new education initiatives as it is not grounded in a particular technology or pedagogy, place or time.

Second, it also highlights how open access to learning calls, simultaneously, on all three dimensions of the concept. If we are to understand the demands of literacy, it is necessary that we take an integrated view of literacy, and do not privilege or highlight certain dimensions of the concept at the expense of others. The operational dimension is essential for open learners in order to have access to the resources in the first place, but to focus solely on questions of technology neglects the other dimensions of the concept that permeate all aspects of learning with open educational resources. It stresses the importance of a 'critical attitude' that takes up social and cultural practices in the context of new texts that authorise and direct action as well as shape social spaces. The cultural dimension of literacy also emerges in the wide range of cultural practices associated with open access through open educational resources. Learners without an understanding of the convention of what is or is not appropriate, would find it hard to experience, discover and create meaning in the context of open educational resources. It also suggests that in order for the learner to claim an education he or she needs we need to enter discussions around the different dimensions of literacy.

While the operational literacy required might be developed to some extent through our use of email, web surfing, online shopping, use of social media and so on, we cannot assume the same for cultural or critical literacies. We often tend to assume that, especially with regard to the generation raised with digital technologies, critical literacies tend to develop through our constant engagement with technology. Yet studies show that many are not truly 'web literate' (Rowlands, Nicholas, Williams, Huntington, Fieldhouse, Gunter, Withey, Jamali, Dobrowolski and Tenopir, 2008). Rowlands et al. (2008) show how young people do not possess the critical skills to evaluate the content they find on the internet. They also note how the current generation relies heavily on search engines and tends mostly to 'view' rather than read information they find. What is more, Weiler (2005) notes that students are more concerned

with the time it takes and how difficult it is to find information than how accurate that information is, and Head and Eisenberg (2009) observe that they prefer brevity and consensus in the sources they pursue in order to find course-related information. Learners cannot be assumed to be able to achieve their learning goals if they are unable to navigate or select from biased or out-of-date resources, especially given the overabundance of options and information. Additionally, I have shown how online algorithms, filters and tailoring can create a hidden set of options and nudge us into a course of action that is not entirely of our own making. We need to expand our account of literacy to include an understanding of how new textual practices (e.g. search engines) direct experience and learning. Similarly, institutional ethnography highlights the importance of cultural literacies, by emphasizing how materials are locally authored, and pedagogically specific, not pedagogically neutral. In this respect, open educational initiatives have the potential to become a 'neo-colonial' movement, providing access to an overwhelmingly 'western' education. Not only are most open educational resources created in western countries by universities and organisations that belong to a broadly western (if not generally American tradition), but such resources are also the most visible ones, as they are often created by prestigious universities and featured prominently in repositories as well as search engine results. Such aspects continue to be exacerbated in the context of emerging open educational initiatives (such as massive open online courses) and I will reprise this discussion in section 6.4.

Such considerations become extremely relevant given the fact that actual learners (as well as potential learners) come from many countries around the world: for instance, MIT OCW (2011) reports over half of its traffic (56%) is non-US, the Stanford University offered introductory *Artificial Intelligence* course enrolled students from more than 190 countries[30] and Coursera[31] currently enrols students from 196 countries. New open initiatives, such as MITx, also see traffic from across the world: although dominated by United States, India and the United Kingdom, the countries that provide most of the rest of their users are Spain, Pakistan, Canada, Brazil, Greece and Mexico (MIT, 2012)[32].

[30] Reported by *The New York Times*, March 4, 2012 http://www.nytimes.com/2012/03/05/education/moocs-large-courses-open-to-all-topple-campus-walls.html

[31] As of August, 2012 http://blog.coursera.org/post/29062736760/coursera-hits-1-million-students-across-196-countries

[32] http://web.mit.edu/newsoffice/2012/mitx-edx-first-course-recap-0716.html

Green (2012) also emphasizes an understanding of 'literacies' as opposed to 'literacy'. An understanding of distinctive literacies is particularly important in the context of open educational resources as it contributes significantly to a more refined understanding of access from a learner perspective.

A broader framing of literacy, beyond the digital, also cautions us against necessarily assuming open access requires a commitment to cutting edge digital content. In the assumption that open educational resources are for 'digital natives' (Prensky, 2001) who are literate in ways 'digital immigrants' are not, lies the implication that they expect, require and prefer a highly interactive and sophisticated digital experience. Recent experiences seem to confirm that a simple technical approach works well: in a presentation at TED in February 2012[33] Peter Norvig shared lessons learned from teaching a massive open online course:

> "Here, an overhead video camera is recording me as I'm talking and drawing on a piece of paper. A student said, "This class felt like sitting in a bar with a really smart friend who's explaining something you haven't grasped, but are about to." …… Our typical video is two minutes, sometimes shorter, never more than six, and then we pause for a quiz question, to make it feel like one-on-one tutoring."

Learner engagement was also identified as critical in the context of other emerging open educational initiatives. Udacity founder Sebastian Thrun argues that increased student engagement will be they a key improvement offered by initiatives like his educational start-up – Udacity compared to traditional open educational resources (Carr, 2012).

Literacy, in terms of understanding convention, also raises the issue of copyright. Copyright has been extensively discussed with respect to the development of open educational resources themselves. However, from a learner perspective, the issue of copyright becomes not only about the resources but also about the host of materials that they call upon in order for the learner to achieve his or her learning goals. With regard to open educational resources, a learner's ability to study with open resources is not visibly hindered if these resources are copyrighted, but still openly accessible. What is more, this is also the case if additional materials are available (for instance through book previews or online repositories) and learners can access them. This situation presents an interesting conundrum: on the one hand, it would seem that since copyright issues are largely invisible to independent learners, they are

[33] http://www.ted.com/talks/peter_norvig_the_100_000_student_classroom.html

not as significant as previously assumed to them in terms of open access to learning. On the other hand, there is a clear danger that stems out of the fact that such issues are backgrounded: independent learners' behaviour has the potential to create situations that are unethical or even illegal in nature. Furthermore, issues of copyright and intellectual property are likely to become increasingly significant as learners not only consume but also create content out of learning through open educational initiatives. An extensive discussion of such issues is beyond the scope of this thesis. However, it will be increasingly important to highlight and ensure that independent learners understand how materials are licensed and the importance of openly licensed content.

Open access often means dis-embedding learning from the normal time-location constraints. In my study I perceived any time and space as potentially available for me to access resources and continue my learning. Although the course did formalise deadlines, it did not offer me strict guidelines and timeframes to completing homework assignments. In the case of such asynchronous courses this has implications with regard to the social spaces that I can potentially access.

A different approach was taken by Peter Norvig and Sebastian Thrun, who taught the open class on artificial intelligence at Stanford and reintroduced due dates. The videos in their massive open online course could be watched at any time during the week but at the end of the week learners had to finish their homework. They concluded that this motivated students to continue with the course and ensured that they were all working on the same problems at the same time. This had implications for forums and discussions groups (mostly self organised) which were more likely to have answers to students' questions.

However, as Godwin and McAndrew (2008) point out, we should refrain from assuming that social networking is sought-after by all learners, nor that we should promote it as such. Drawing on OpenLearn users (The UK Open University's 600 free online courses offering) McAndrew, Scanlon and Clow (2010) find more 'content-driven' learners than 'social' learners, who prefer working through content as opposed to learning through interaction with others with shared interests.

If we reconsider the notion that dimensions such as open time and location are a matter of degree (rather than binary constructs), we can also see how opening up time for instance has the effect of closing up aspects of association. On the other hand reducing the freedom to

complete assignments at any time can open up possibilities for association. Similarly, location is, at least partially, subordinated to technology. In this case, my ubiquitous access to technology enabled the spatially distributed experience I had. The more 'open' the technology (laptop, mobile phone and 24/7 internet connection), the more at liberty I am to choose where and when I access the course. The less accessible the technology to the learner, the more he/she is tethered to a specific place and/or time.

These aspects are inextricably linked in how they afford the learner access to realising his/her learning objectives. They are also framed by both their aspirations and their expectations, as shaped by the sense they have of their own identity and how it could relate to open learning opportunities. Their awareness of the existence and potential of such opportunities is crucial, and in the context of emerging initiatives cannot be taken for granted.

Achieving learner access

Achieving access becomes as much a matter of learning with open educational resources as engaging with them in the first place. My experience suggests that a vast array of open educational resources available to the learner might not necessarily be an unequivocally positive notion. Consumer research finds that as the number of possibilities and information we have on them increases, we tend to consider fewer options and less information (Hauser and Wernerfelt, 1990). Too much choice can be perceived as a burden and become the source of confusion, anxiety and insecurity (see Schwartz, 2004a, 2004b, Salecl 2009, 2011). The bewildering array of open options can lead to paralysis and learners will fail before they even start.

In order to avoid these dangers we must first recognise that it exists, and then look at ways to alleviate it. If we hope for open educational resources to be the answer for self learners it is quite possible that a limited number of choices might be better. Alternatively we can rely on 'experts' or institutions to guide us – what Schwartz (2004a, 2004b) recognizes as another modern paradox: as individual freedom grows, so too does dependence on others.

The dimensions of choice are also linked to subsequent satisfaction and motivation (see Schwartz 2004a, 2004b, Iyengar and Lepper2000). Iyengar and Lepper, 2000 found that students in a college course wrote better essays if they chose from 6 rather than 30 essay topics. They were also more dissatisfied and regretful with their choices when faced with more

rather than fewer options. Arguably, fewer options might also be better for independent learners in the long run.

Open content is essential for open access, but enabling access requires that we manage the choices we have. This means coming to open access with an awareness, not only of the existence and potential of such educational initiatives, but also with the awareness of how to make such choices.

In the context of open educational resources, Santos (2008, p. 8) cautioned that there is no consideration of the "resources and skills that are essential at the very minimum to benefit from OERs" and lists a computer, an internet connection and internet literacy that would enable the learner to search the web using that computer. Access is indeed limited to, as Santos observes, a certain learner profile, but that learner profile should be understood in a more sophisticated manner by accounting for accessibility, association and awareness as they come together to enable learners to make decisions and engage with their own learning (see figure 4.15).

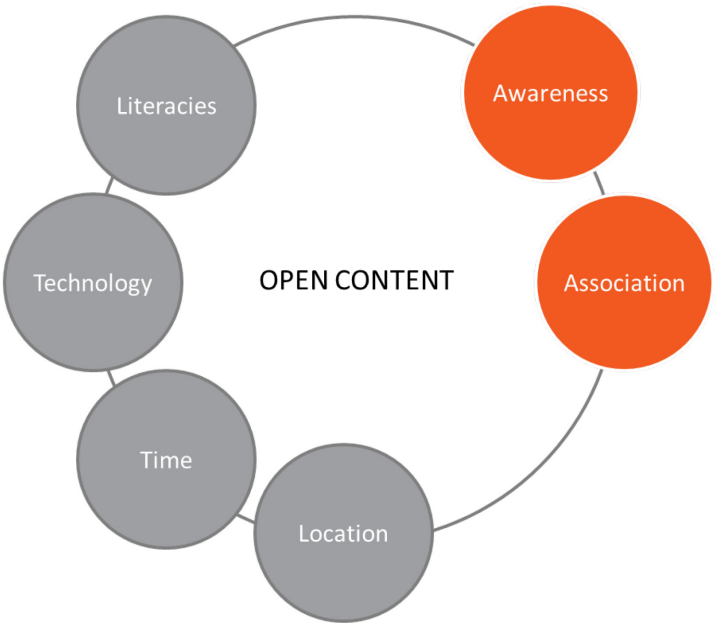


Fig 4.15 A refined framework for open access

They are inextricably linked as each component is connected to and supports the others to give individuals the ability to claim their learning (or educational) opportunity to achieve their learning goals. Making learners aware of these empowers them to become better able to achieve access for themselves. What is more, revealing underlying relations of ruling, largely

invisible to learners allows them to address such aspects more critically and understand how these dimensions of their experience are constructed and constricted by larger relations of ruling.

The framework also draws attention to the broad and complex nature of open access from the learner perspective, and the many facets that need to be considered if access is to be realised. The framework can also be used as a resource and guide for analysis and further research. In this sense, this understanding is of course schematic. It is generally rather than specifically defined in order to allow the mapping of further insights and conceptualisations. For instance, an understanding of the various dimensions of literacies and how they articulate with other aspects of access would allow us to reconsider Wiley's (2009a, 2009b) 4R framework describing open content in terms of the rights it affords the user (reuse, redistribute, revise and remix). Not all 'Rs' are created equal when we evaluate demands on the user past the operational and consider cultural and critical aspects as well.

This chapter has revealed that the story of open access is far more complex than current debates about the potential of open educational resources to democratise access to education for all might suggest. I have used analytic autoethnography (Anderson, 2006a) to examine learner experience with open educational resources and develop theoretical understandings of access through my own experience with *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* offered though MIT's OpenCourseWare initiative. I have used institutional ethnography (Smith, 2005) to analyse that experience in the context of an ambiguously bounded, emerging, global education as manifest through both conventional and new texts that organise the lived experience and unmasked more profound instances of power, as embodied by search engines. I have also expanded on the theoretical discussions around the possibilities afforded by bringing two methodologies into conversation, as well as by closely examining what is the status of the data and what is a legitimate form of interrogation; how is it meant to inform theory and what is its relationship to theory.

The next part of this thesis will complement the picture of access I have presented in parts 1 and 2 by examining how an open mindset and awareness of the existence, opportunities and promise of access to knowledge and learning, come into existence, how they are being shaped and how they can be changed.

Part 3: Re-imagining education

5. Imaginaries and interventions

I have so far proposed two avenues for understanding open access to learning. The first – Part 1 of this thesis – examined the range of revolutionary education initiatives that have emerged in the last decade under the umbrella term of 'open educational resources'. However, an 'open' mindset was discussed too, as the ideal of openness extends beyond the domain of academia and education. It is the foundation of a growing number of initiatives that have taken hold in recent years: open source software, open hardware, Project Gutenberg, Wikipedia, WikiLeaks, Peer-to-patent and many others. They are surrounded by a myriad of other debates and pressures around openness in various domains across media, entertainment and technology. Openness is the "mark of our time" and creates a context in which these new educational initiatives can take hold and thrive. The historical account of open access to learning also highlighted the significant role that awareness of opportunities played in the success, but also the failure, of open access. It spoke both to awareness of the existence of opportunities as well as awareness of their promise of access to knowledge and learning. Imagination could make or break institutions and access hung on what learners believed they were being part of and how this changed their sense of themselves. The second avenue, my investigation of open access learning journey with MIT's *Writing on Contemporary Issues: Food for Thought* – Part 2 of this thesis – also revealed how the sense I had of my own identity and how it could relate to open learning opportunities shaped both my aspirations and my expectations. Furthermore, the institutional ethnography hasn't provided an avenue for realising its commitment to social justice and has not answered how to go beyond revealing relations of ruling to making an intervention in a phenomenon in progress.

These insights challenge us to take another perspective, one that seeks to examine how such an 'open' mindset and awareness come into existence, how it is being shaped and can be changed. In this section I examine open access to learning using the notion of 'social imaginary'. Specifically, I am interested in how the social imaginary provides a useful framework not only for examining another facet of open access but also an avenue for possible interventions.

In this section I wish to highlight the complex issues and questions that need to be addressed when approaching current debates regarding open access and the future of higher education. The aim of this section is not to provide a definitive answer to how the notions of open access

should be understood. In this sense this section further develops institutional ethnography's social justice commitment not only by revealing ruling relations but also pointing to possible interventions. Dorothy Smith (1987) emphasizes that we are "responsible in what we write to those for whom we write" (p. 224). In the case of open access, this can be fostered not only through understanding how the phenomenon is differently institutionalised, but also by understanding how the notion is nested in society and in various other debates, and how these in turn shape how we experience reality.

Although the previous two parts of this thesis have highlighted the significant role that awareness and a sense of possibility play for open access, we first need to unpack and examine how such notions can be understood in a consistent manner. It is for this reason that I will start by examining the social imaginary as a useful, dynamic framework in which to develop this understanding and detail my conceptualisation of the term for these purposes. I will then turn to how the imaginary takes shape, how it is the locus for the interplay of other sometimes complementary, sometimes contradictory understandings. I will conclude by addressing how we can conceive of the current time as a moment of intervention, a fluid, emerging, diffuse moment when this imaginary comes into existence. I will look at possibilities for transformation and realisation of the potential for opening access to learning.

5.1 Conceptualising the imaginary

I will now explore how the notion of social imaginary can provide a useful metaphor/framework for examining another facet of open access as well as an avenue for possible interventions. I need to understand how certain aspects of the (still emerging) theoretical conceptualisation of the social imaginary can map the way individuals imagine open access and how I can recruit the notion to understand avenues for actual, practical intervention. My aim is not to illustrate every aspect of theorising of the social imaginary, but rather to explore the applicability of some of the work done by Taylor (2002), Castoriadis (1975), Lacan (1966) and Althusser (1971, 1984) to these purposes.

Exploring 4 ideas around the social imaginary

Since it was introduced in the 1930s, an ongoing struggle to define the 'social imaginary' has always been used differently by different theorists. The notion I will use in this section draws on the conception of Lacan, Castoriadis, Althusser and Taylor's formulations of the 'social

imaginary'. I detail four ideas that come from work theorising around the social imaginary and influence my conceptualisation of a social imaginary. The first two ideas, consistent with institutional ethnography's focus on the textual realisation of material practice, speak to how language is at the core of the notion and the social imaginary is developed through images, stories, and mass media. I also draw on two other aspects that are less material, but speak to the structure and the potential of the imaginary, not only for replication of practices, but also for change.

First, language produces individual specific imaginaries. Levi-Stauss's 'symbolic function' was adopted by Lacan (1966), who put the idea of language at the core of the concept of the social imaginary. Lacan's imaginary is constituted in language and is the 'fantasy' of an individual, rather than a series of abstract cultural constructions. It is language that provides access to, creates and enables the imaginary. Lacan finds that premises and meanings are derived by individuals from spoken language and they shape the perception of individuals, and their reality. Although Lacan is not concerned with the social practices (his interests lie mostly in conceptualising the function of language in psychoanalysis), his theoretical work was developed, by Althusser (1984), among others, who saw the implications of Lacanian theorising for analysing the imaginary as it organises and structures real social relations. He is concerned with ideology as having an imaginary dimension, that exists outside the individual, but that comes to define the space in which the individual interacts with society. Ideology "represents the imaginary relationship of individuals to their real conditions of existence" (1971, p. 162), the "imaginary relation of these individuals to the real relations in which they live" (1984, p. 39) and its effects can be found in all discourses (1971, p. 172, note 16).

Second, the social imaginary is developed through images, stories, legends and mass media. In his book on *Modern Social Imaginaries,* Taylor (2004) defines the concept as follows:

> "By social imaginary, I mean ……..the ways people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations." (p. 23)

His definition does not lend itself particularly well to empirical application, but it does capture very well our own intuitive conception of the notion. His social imaginary is shared by people 'in the everyday' and enables their everyday practices. For Taylor (2002, p. 106) imaginaries

are lived in the everyday life: “ordinary people ‘imagine’ their social surroundings” as “carried in images, stories, and legends”. Rizvi (2006) complements this view by observing that “a social imaginary is thus carried in images, myths, parables, stories, legends and songs and most significantly, in the contemporary era, in the mass media” (p. 196). We can think for instance about how, based on the way we see ourselves in relation to others and the world around us, we take part in elections, recycle, or even engage (or choose not to) in casual conversation with strangers. Taylor’s imaginary is at the same time factual and normative, and reflects common understandings, a shared common sense (2002, p. 106; 2004 p. 24).

I will now turn to two other aspects of the social imaginary that are less material, but allow me to explore the structure and the potential of the imaginary not only for replication but also for change.

Third, the social imaginary is a layered, structured concept, that links the individual and the social level and is constituted through a network of representations. Cornelius Castoriadis offers us a very useful understanding of the structure and the layering of the individual-social imaginary.

Castoriadis (1975) cautions us that we should not attempt to reduce the social imaginary to the individual representations (p. 366 in translation). He uses the term “significations” and network of significations to denote collective representations of meaning:

> “’Reality’ for a given society is constituted through the synergy of all these schemata of significance. Reality, language, values, needs and labour in each society specify, in each case, in their particular mode of being, the organization of the world and of the social world related to the social imaginary significations instituted by the society in question.” (p. 371 in translation)

He also distinguishes between ‘central’ significations (for instance the family, law, the state) and ‘second order’ significations – ones that are ‘attached’ or ‘related’ to something. He further clarifies that “this entails – and to be sure, even requires – that part of the social imaginary significations has an actual ‘equivalent’ in the individual” (p. 366 in translation). However, compared to the individual imaginary, the social significations “have no precise place of existence” (p. 143 in translation).

Although Castoriadis' work focuses on the social imaginary as a single, unified, group or society level construct, he does acknowledge the individual level imaginary along with the social level. In his view, the autonomous individual imaginaries can resist and fight to escape unifying social constructions, world views. It is in this layering of the individual-social imaginary that individuals can not only frame the world and imagine their actions but also change their world views and imagine diverging futures.

It is here that we can look at a fourth aspect of the social imaginary, in the way it holds the potential basis for change, freedom and creativity in ideas and behaviour. There are multiple social imaginaries and they themselves are open to change. Althusser's (1984) social imaginary also gives us notions of contradictory social relations and ideologies that determine the social imaginary, as opposed to independent notions, or ones over-determined by a single force. What we end up with are alternative and multiple ways of imagining the world. Taylor (2002) also acknowledges 'multiple modernities' (p. 1), and thus argues against the singular social imaginary by referring to a plurality of imaginaries. For Taylor (2002) social imaginaries, such as modernity, start off as 'theories held by a few people' (p. 24) that then penetrate and spread through the wider public. Rizvi (2006) also notes how images and messages are 'constantly in motion' and can transform our social imaginaries (p. 197). For Taylor (2002) the media provides a way for individuals to participate in and disseminate the 'common mind'.

An imaginary framework

For me 'a' social imaginary is socially enabled and manifest in the everyday. My imaginary is an applied notion that reflects how the individuals' sense of themselves affects their being in the world. The notion is socially produced and aspects of it can be widely shared, but it is part of the (remembering) self. I will be recruiting this highly theoretical notion to examine the very practical demands of possible interventions in the imaginary around open access in order to make access 'real'.

First my conceptualisation of the imaginary takes the centrality of language and the consideration that social organisation is increasingly textual (Smith) to direct attention towards the foundation of the imaginary in the activation of texts (printed, digital, visual, audio).

I will call on the notion of multilayered/ two dimensional imaginary in order to understand how the imaginary is constituted. My framework distinguishes two dimensions: the individual and

the social. Because the individual imaginary is partial, the individual is located both within the social imaginary and outside of it (see figure 5.1).

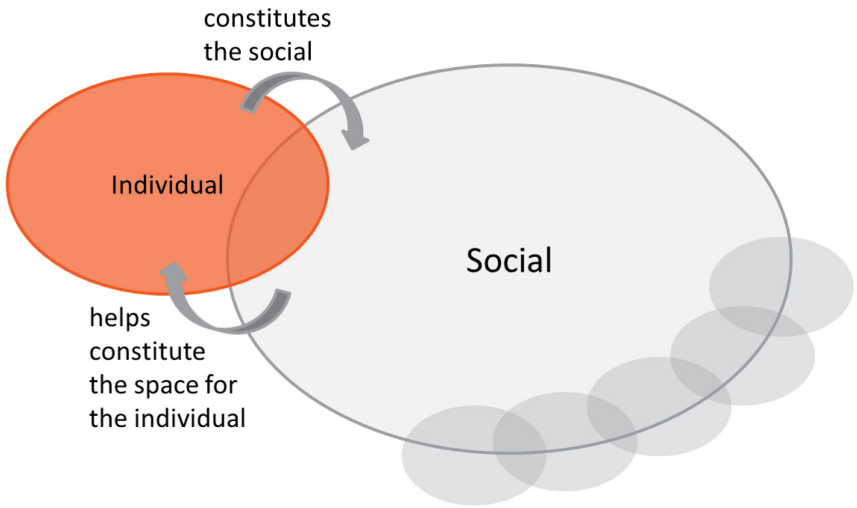


Fig. 5.1 The dimensions of imaginary

At the level of the individual, his/her imaginary is constituted through his/her everyday reality and textual engagement. It is also 'learned' from the social imaginary as the individual re-appropriates social level concepts. The social imaginary is conveyed through images, stories in the mass media. At the social level, the social imaginary is being (re)created in the current context and by the coming together of individual imaginaries. In turn the social imaginary helps constitute the space for the individual.

I use the term (social) imaginary to refer to the social level imaginary of open access and other imaginaries that underpin it. I use *frames* to refer to various facets within these imaginaries. I use 'imaginings' to refer to individual level imaginaries of open access.

In this framework, for me the question of 'access' that is expressed as the learner's ability to claim his or her learning opportunity to achieve his or her learning goals, becomes one of how to examine an emerging imaginary that is constituted at least in part by individuals themselves. In the context of a developing, evolving phenomenon (open educational initiatives), I am more interested in how the social imaginary emerges and helps constitute the space for individual imaginings. I focus on how the social imaginary around open access is constituted. This demands an analysis of what images, stories and representations come together to produce the imaginary around open access to learning. It also highlights the need to recognize that accessibility and distribution of modern media (including its digital forms) expand their reach

beyond national boundaries. I will return to these aspects in more detail in the following section.

Such an endeavour is inevitably, always partial. I do not intend the next section to be definitive; I rather intend it to allow the recognition of emerging patterns and relationships (section 5.2) and to provoke further thought regarding the possibilities of intervention (section 5.3). I have purposefully limited the spectrum of imaginaries that I discuss, as I consider they enable a sufficiently comprehensive understanding of open access. Given the novelty and emerging nature of the representations I have also used many excerpts from the media to allow the reader not only to hear, but also to experience, the information in the case of open educational resources/massive open online course and higher education frames. I have used fewer excerpts in the case of relatively more established phenomena (such as openness and globalisation).

The goal of the next section is to sketch out the imaginaries and multiple frames around open access.

5.2 The imaginary access

In this section I will use the concept of *imaginary* and *frames* to develop my exploration of how these concepts can contribute to our understanding of how open access is imagined and provide a basis for discussing how the commitment of research to making a difference in society can be realised in this context. I will first illustrate how the imagining of open access is currently being shaped in the media in conversations around massive open online courses (MOOCs), ongoing debates around the meaning, role, value and future of higher education as well as ideas of openness and globalisation as seductive marks of our time. I will discuss how these representations come together to create imaginings and possible futures of access and education.

Before I begin, I need to remark on the fact that in this instance the structure of the social imaginary of course does not lend itself well to examination. The phenomenon under investigation is rapidly taking shape. It is transforming, fragmenting, reorganising itself under our very eyes. How should we then access the imaginary? If we understand it as being socially produced and reflected in how the individuals' sense of themselves affects their being in the

world, then there is little guidance as to the space I should carve out or the means to access it. This implies that there are expressions of the imaginary and imagining not only in the activity of people but also in the shaping of it through images, stories and representations coming together in the public media and public discourse. The space through which I chose to understand open access encompasses conversations around massive open online courses and ongoing debates around the meaning, role, value and future of higher education. I also look at increasing manifestations of the open mindset in various unrelated domains in the last thirty years, ground in renewed ideas of openness and globalisation. The content of the materials I investigate offers meaning and shapes the social imaginary and imaginings of people. It offers an answer to questions of meaning, purpose and opportunity and allows us to recognise emerging patterns and relationships around open access.

Of course such frames, especially in the context of such a phenomenon will always be partial and incomplete. But my exploration is driven by my purposes of understanding the nature of open access and the place for intervention rather than endeavouring to take a complete snapshot of the phenomenon, unfeasible in its entirety. My open access imaginary highlights the different facets, patterns and relationships that come together to play a key role in ordering the imaginary and creating the space for individual imaginings and actions. It should be noted that this is a discussion of the ideas that have colonised the imaginary and certain aspects clearly run contrary to the analysis of open access in the previous parts of this thesis. It is not the purpose of this section to scrutinise the imaginary, but to expose it in order to understand the space in which the research commitment to intervention can be realised.

Each article, radiocast or newscast undeniably reflects more than just one element/frame or even more than one imaginary. For instance, the word cloud for a recent article on open educational resources in *The New York Times* illustrates a number of different facets that are highlighted as an elite university expands its online offering (see figure 5.2 for an example; additional representations can be found in Appendix 6).

Fig. 5.2 Sample word cloud for *The New York Times* article "M.I.T. Plans to Expand Its Free Online Courses" December 19, 2011, p. A22

Figure 5.2 also highlights the fact that although, in what follows, prominent facets of the imaginary are presented systematically and in a certain order, they emerge concurrently and organically in various media items.

I also acknowledge that such conversations are only part of the emerging debates regarding open educational resources in academic publications, conference proceedings and/or online forums (see for instance the Journal of Open and Distance Learning, the 'iterating toward openness' blog[34] written and maintained by Brigham Young University's professor David Wiley etc.) as well as ongoing conversations by national and international organizations involved in in producing, driving or financing such initiatives (see for instance the 2001 Budapest Open Access Initiative, the 2002 UNESCO Forum on the Impact of Open Courseware for Higher Education in Developing Countries, the 2007 Cape Town Declaration, the 2012 UNESCO Paris Declaration etc.). Furthermore, related discussions are emerging in the blogosphere and on twitter. Although such 'discussions from the inside' play an important role in understanding the phenomenon (and as such have been discussed in other parts of this thesis), they do not constitute my primary focus in my investigation of the social imaginary. Such sources are rarely encountered by the larger public and potential learners, and are not normally featured or disseminated in public circles, so at this point they make only a peripheral contribution to the broader social imaginary.

[34] http://opencontent.org/blog/

5.2.1 Open educational initiatives (OERs/MOOCs)

It is important to try to understand and investigate the social imaginary as it forms and informs the imaginings and life practices of society and potential learners. What picture of the imaginary can be recovered? I start by enlisting imaginary of open educational resources as reflected today in the debates around massive open online courses. I will look at a four prominent facets of the imaginary as they are being constructed around open educational resources in general and more specifically its current forms of massive open online courses (MOOCs). I will start first with the underlying iterative nature of these discussions.

The potential of open educational resources has sparked numerous discussions over the past 10 years regarding the future of learning and new educational practices. In 2001, *The New York Times* heralded the possibilities of "Auditing Classes at M.I.T., on the Web and Free" as MIT was preparing to post its content (lecture notes, syllabuses, exams, simulations, lecture captures etc.) online and make it freely available at the same time (The New York Times[35], Goldberg, 2001). Two years later, a similar narrative revolved around "Every lecture, every handout, every quiz. All online. For free. Meet the global geeks getting an MIT education, open source-style." (Wired[36], Diamond, 2003). Today we see new iterations of these discussions as sparked by massive open online courses (MOOCs) such as Stanford's *Artificial Intelligence* open course in 2011 and the emergence of start-ups like Udacity and Coursera in 2012. CNN[37] (Bennett, 2012a) sees the promise of education for all: "Initiatives like the ED-X partnership between Harvard and MIT promise to give non-traditional students elements of a world-class education online, and for free." The result is "People from any country, any background and any income level can receive an elite education at virtually no cost." (CNN[38], Bennett, 2012b).

Current discussions however do not fully acknowledge the preceding conversations in the context of this newfound open access to learning and education. They focus prominently on new initiatives at the expense of previous or established 'open practices'. I will return to what this means for the imaginary after I introduce its different facets.

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[35] It this chapter I have added the newspaper, broadcaster or other media sources to references (e.g. The New York Times, Goldberg, 2001) in order to highlight them as they are pertinent to the arguments I develop around the social imaginary. Where available I have also included the electronic version of the source. A version of this particular article is available at http://www.nytimes.com/2001/04/04/us/auditing-classes-at-mit-on-the-web-and-free.html

[36] A version of this article is available at http://www.wired.com/wired/archive/11.09/mit.html

[37] Contribution available at http://edition.cnn.com/2012/06/13/opinion/bennett-higher-education/index.html

[38] Contribution available at http://edition.cnn.com/2012/07/05/opinion/bennett-udacity-education/

Frame 1: "Let the revolution begin." (The New York Times, 2012)[39]

Interviewed in a recent article in the *Wall Street Journal*, the President of Stanford University, John Hennessy said when considering the effects of such changes on the future of education: "There's a tsunami coming." (The Wall Street Journal[40], Mossberg, 2011). Similarly, Sebastian Thrun, the Stanford professor who taught the *Introduction to Artificial Intelligence* open online course, claims such resources "will disrupt all of higher education" (interview in The New York Times[41], Keller, 2011). He goes as far as to say that fifty years from now there will be only ten institutions in the whole world that will deliver higher education (interview in Wired[42], Leckart, 2012). Such images of disruption and revolution echo in the media around the world. *The Atlantic*[43] (McKenna, 2012) announced the "The Big Idea That Can Revolutionize Higher Education: 'MOOC'" and asked "Is this the future of efficient, effective education?", while *The New York Times*' Thomas Friedman welcomed the "college education revolution" (Friedman, 2012). In the UK, *The Guardian*[44] (Vasagar, 2012) predicts "Coursera set to shake up higher education model after adding twelve US and European institutions including Edinburgh University" and the BBC[45] (Coughlan, 2012c) foresees an "experiment that could re-invent the landscape of higher education". *The Times of India*[46] (Pereira, 2012) sees 'a force to reckon with': "Recent developments in higher education have prompted some experts to opine that the field is ripe for cataclysmic changes. The expected changes are tied to Massive Open Online Courses (MOOCs), and they can have a far-reaching effect on institutions of higher learning, including business schools." In Australia, *The Australian Financial Review* speculates that such offerings could shakeup education as we know it: "open online resources set to revolutionise tertiary learning" (Bull, 2011). *The Sydney Morning Herald*[47] (Dunn and Cincotta,

[39] A version of this article is available at http://www.nytimes.com/2012/05/16/opinion/friedman-come-the-revolution.html?_r=3&hp

[40] A multimedia version of this article is available at http://online.wsj.com/article/SB10001424052702303640104577440513369994278.html

[41] A version of this article is available at http://www.nytimes.com/2011/10/03/opinion/the-university-of-wherever.html?pagewanted=all

[42] A version of this article is available at http://www.wired.com/wiredscience/2012/03/ff_aiclass/all/

[43] A version of this article is available at http://www.theatlantic.com/business/archive/2012/05/the-big-idea-that-can-revolutionize-higher-education-mooc/256926/

[44] A version of this article is available at http://www.guardian.co.uk/education/2012/jul/17/top-universities-free-online-classes?CMP=twt_gu

[45] Contribution available at http://www.bbc.co.uk/news/business-18191589

[46] A version of this article is available at http://articles.timesofindia.indiatimes.com/2012-05-29/education/31887183_1_business-schools-new-courses-traditional-courses

[47] A version of this article is available at http://www.smh.com.au/technology/technology-news/free-courses-from-worlds-top-unis-a-swipe-away-in-online-revolution-20120811-241i5.html

2012) reports that "Higher education is in the middle of a digital revolution, and who has access to it, and how it is done, will shift dramatically in the next few years." In Canada, *The Globe and the Mail* [48] (Wente, 2012) warn us that "the revolution is just beginning."

Of course such claims are not new. They go back further than the inception of the MIT OCW initiative. Disruption and revolution in higher education have followed technological change, from the printing press to radio, to television and the internet. In an article in *Forbes*[49] in 1997, Peter Drucker claimed "Thirty years from now the big university campuses will be relics. Universities won't survive. It's as large a change as when we first got the printed book." (Lenzner and Johnson, 1997). Today *Forbes*[50] (2012) asks if we are witnessing "the beginning of the end for traditional higher education?" (Adams, 2012).

Frame 2: 'The best of the best'

The transformations that open educational resources and massive open online courses bring to notions of access are also consistently legitimised in the public sphere by the continuing recognition that it is elite (American) institutions that provide these opportunities. This revolution is headed by "best courses from the best professors at the best universities in the world" (The Globe and the Mail[51], Wente, 2012). Around the world "what is starting to happen is the opening up of information and resources from some of the world's leading universities, often for free, which can be used anywhere, by anyone" (The Sydney Morning Herald[52], Dunn and Cincotta, 2012). What is achieved becomes 'best of the best': "Massive open online courses combine the best of college -- exceptional instruction -- with the best of technology -- online interactive learning (The Atlantic[53], McKenna, 2012).

This is especially prevalent with the current wave of open initiatives that are headed by Stanford, Harvard and MIT (even start-up like Coursera are visibly linked to institutions like Stanford and Princeton etc.). Magazine and newspaper global rankings of universities – as

[48] A version of this article is available at http://www.theglobeandmail.com/commentary/online-university-for-the-masses/article4426073/
[49] A version of this article is available at http://www.forbes.com/forbes/1997/0310/5905122a.html
[50] A version of this article is available at http://www.forbes.com/sites/susanadams/2012/07/17/is-coursera-the-beginning-of-the-end-for-traditional-higher-education/
[51] A version of this article is available at http://www.theglobeandmail.com/commentary/online-university-for-the-masses/article4426073/
[52] A version of this article is available at http://www.smh.com.au/technology/technology-news/free-courses-from-worlds-top-unis-a-swipe-away-in-online-revolution-20120811-241i5.html
[53] A version of this article is available at http://www.theatlantic.com/business/archive/2012/05/the-big-idea-that-can-revolutionize-higher-education-mooc/256926/

visible for instance in the *Newsweek* ranking of the Top 100 Global Universities – go to reinforce the legitimacy and leading status of the institutions involved.[54] Universities like Harvard, Stanford, MIT regularly top such charts, including arguably the most influential such rankings as the *Times Higher Education* World University Rankings or the Academic Ranking of World Universities compiled by China's Shanghai Jiao Tong University. They are regularly cited in the media and consistently raise the visibility, desirability and reputations of universities.

In addition, often the case is made for their links to successful companies and high-tech innovation and development initiatives. Google for instance is mentioned through Sebastian Thrun's association as vice president of Google responsible for the development of the Google self-driving car. 'Roots' in Silicon Valley further tend to legitimise the opportunities afforded by such courses. Again the media constantly strengthens the perceptions of quality and excellence.

Frame 3: 'Show me the money'

While for most of the past 10 years open educational resources were seen as 'free', 'provided at no cost', 'the only cost is an internet connection', current debates around emerging massive open online courses are increasingly highlighting corporate interests, venture capital and business model narratives. Online courses provided by Harvard and MIT through their not-for-profit enterprise edX will be assessed through Pearson VUE, a Pearson business and global leader in computer-based testing with over 450 test centres in over 110 countries. According to the BBC[55] (Coughlan, 2012a) "this will give online courses 'real world' value…… as well as providing supervised exam centres they will also authenticate the identity of online learners."

The issue of credential is clearly linked to higher education as a business. John Etchemendy, the Stanford provost makes it clear that "Our business is education, and I'm all in favor of supporting anything that can help educate more people around the world. But there are issues to consider, from copyright questions to what it might mean for our accreditation if we

[54] I am not interested here in debating the rankings' usefulness and/or accuracy; rather in their function globally as signallers of excellence in academia (although in many cases the rankings disproportionally focus on the research function of universities).
[55] Contribution available at http://www.bbc.co.uk/news/education-19505776

provide some official credential for these courses, branded as Stanford." (The New York Times, Lewin, 2012b).[56]

Initiatives like Coursera and Udacity are for-profit platforms. They are seen to provide 'low cost education': "Educators and policymakers have long dreamed of providing universal, low cost, first-class higher education. Their wish may come true soon thanks to an unlikely source: Silicon Valley. The mecca of the technology universe is in the process of revolutionizing higher education in a way that educators, colleges and universities cannot, or will not." (CNN, Bennett, 2012b).[57] Although they offer free access, and the online courses are free to complete and certified by the institutes themselves, they also offer paid certification, in the case of Udacity, through in person exam via Pearson VUE. Such paid aspects are quickly picked up by the media. *The Australian*[58] (AP, 2012) reports "MOOCs still open but no longer free - A day after joining a prestigious national venture [Coursera] to offer free online courses, the University of Washington announced it would also offer credit for some of the courses - for a fee." *The Atlantic*[59] (McKenna, 2012) refers to Coursera as the equivalent of a discount department store chain: "A 'Target' For College – Offer high-quality products at a low price and consumers tend to notice."[60] Coursera offers free access, courses and free statements of accomplishment signed by the instructor to those who successfully complete the class. NPR's *All Things Considered* however stresses the point that "Coursera is a for-profit company with $16 million in venture capital behind it. Eventually, it will look to turn a profit for those investors." (NPR, 2012a)[61].

Frame 4: 'There is no crystal ball'

Yet for all the claims of revolution, disruption, unparalleled learning opportunity and certification, a prominent frame that emerges in current discussions of massive open online courses is that of an uncertain future. No one knows exactly what the impact of the still

[56] A version of this article is available at http://www.nytimes.com/2012/03/05/education/moocs-large-courses-open-to-all-topple-campus-walls.html?pagewanted=all
[57] A version of this article is available at http://edition.cnn.com/2012/07/05/opinion/bennett-udacity-education/
[58] A version of this article is available at http://www.theaustralian.com.au/higher-education/moocs-still-open-but-no-longer-free/story-e6frgcjx-1226430308516
[59] A version of this article is available at http://www.theatlantic.com/business/archive/2012/05/the-big-idea-that-can-revolutionize-higher-education-mooc/256926/
[60] Target is a one of a number of discount department stores, such as Wal-Mart and Kmart, which sell a wide range of products at prices lower than those at traditional retail outlets.
[61] Broadcast and transcript are available at http://www.npr.org/2012/09/30/162053927/online-education-grows-up-and-for-now-its-free

developing open educational resources and associated initiatives will bring. As this is acknowledged in public conversations, the open question of the future of open educational resources is being asked. Answers position it either as a wait and see problem, or attempt to define it through its relationship to traditional higher education.

As these answers range from 'anyone's guess' to 'end of traditional higher education' they paint a murky picture of the future. *USA Today*[62] (Marklein, 2012) emphasizes this uncertainty: "How MOOCs will change the higher education landscape is still very much an open question, but the possibilities are mind-boggling. Theoretically, for example, a single MOOC on a particular topic could accommodate every student in the world." *Forbes*[63] (Adams, 2012) says that "Perhaps what we'll see in the end will be an entirely new beast, an educational world gone digital, but maintaining crucial ties to locality and real community for students. But no one has even begun to look that far into the future." Again these calls are reminiscent of discussions in 2001 around the possibilities of open courseware: "there will probably be a lot of uses that will really surprise us and that we can't really predict" (The New York Times[64], Goldberg, 2001).

Dramatic changes are predicted for all but leading universities in the near future: "…if I were president of a mid-tier university, I would be looking over my shoulder very nervously right now, because if a leading university offers a free Circuits course, it becomes a real question whether other universities need to develop a Circuits course" (The New York Times[65], Lewin, 2012a). A new report from Moody's Investors Service – "Shifting Ground: Technology Begins to Alter Centuries-Old Business Model for Universities" (2012) – picked up in by several media outlets, predicts that rise of massive open online courses, mostly associated with leading universities, are spelling doom for many mid-range higher education institutions and colleges. In a similar argument, in Australia, the *Sydney Morning Herald*[66] and the Grattan Institute higher education program director Andrew Norton say that "Since the deregulation of

[62] A version of this article is available at http://www.usatoday.com/news/nation/story/2012/09/12/college-may-never-be-the-same/57752972/1

[63] A version of this article is available at http://www.forbes.com/sites/susanadams/2012/07/17/is-coursera-the-beginning-of-the-end-for-traditional-higher-education/

[64] A version of this article is available at http://www.nytimes.com/2001/04/04/us/auditing-classes-at-mit-on-the-web-and-free.html?pagewanted=all&src=pm

[65] A version of this article is available at http://www.nytimes.com/2012/05/03/education/harvard-and-mit-team-up-to-offer-free-online-courses.html

[66] A version of this article is available at http://www.smh.com.au/technology/technology-news/free-courses-from-worlds-top-unis-a-swipe-away-in-online-revolution-20120811-241i5.html

Australian universities this year….there is legitimate concern that online higher education could cannibalise universities' more mainstream offerings, especially as, unlike say, Harvard or Stanford, most Australian universities do not turn away 90 per cent of student applicants" (Dunn and Cincotta, 2012).

In a very popular discussion regarding the future of universities in the era of massive open online courses, the *Canadian Broadcasting Corporation Radio's* "The Sunday Edition with Michael Enright" reported on *The Big Disruption: Universities in the Digital Age* [67] (CBC, 2012):

> "A virtual classroom with hundreds of thousands of participants……In 2012 the future of the university has arrived. Radical change is in the air. From the pot bangers of Montreal to high-powered thinkers in Silicon Valley, the traditional model of the university is under attack. The digital revolution - which has upended journalism, publishing, movies and music - is poised to storm the ivory tower. Under enormous financial pressure, and facing a strong push to "democratize" knowledge, the university is being asked to re-imagine itself. In question: the very nature and purpose of higher education, at a time when demand for it has never been greater."

The 4 frames - an imaginary discussion

We are in the midst of a phenomenon that is still taking shape, and that has, and will continue still, to provide fuel both for public conversations and academic ones. They paint a picture of an emerging imaginary as a mixture of narratives (see figure 5.3) focusing on the issues of practical developments and concerns rather than inspirational or more nuanced discussions around the world of possibilities around open access to education. Often so framed by opportunity they are trailed by uncertainty.

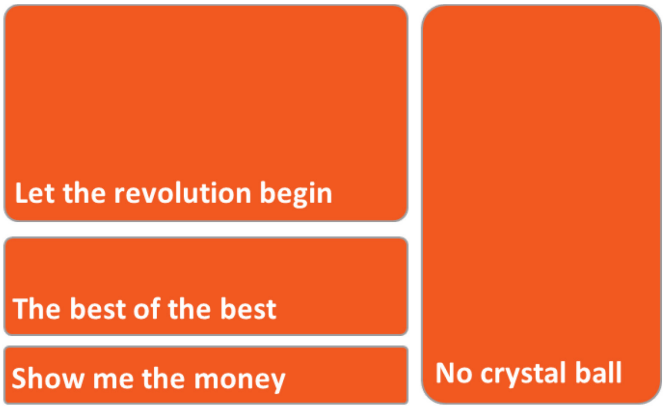

Fig. 5.3 Frames of imaginary of open educational initiatives (OERs/MOOCs)

[67] Broadcast and transcript are available at http://www.cbc.ca/thesundayedition/shows/2012/09/09/universities-in-the-digital-age/

I will now look at how these imaginings are nested within larger debates around higher education, changing notions of openness, globalisation and affordances of technology. Since open educational resources (and massive open online courses) define themselves against traditional models of higher education, it is natural to first address the imaginary of current higher education. As Rafael Bras, provost of the Georgia Institute of Technology asserts in an interview for the BBC (Coughlan, 2012d)[68], "It seems clear that higher education is currently experiencing the first ripples of a wave that could drastically alter the method, scope and scale of educational access and delivery".

5.2.2 Changing Higher Education

The imaginary of the future global higher education has been defined by a number of conversations in the media and policy around the meaning, role and value of higher education, its soaring costs and its place in the changing landscape of job requirements and economic factors. There seem to be two overarching narratives emerging around higher education. The first that envisions the higher education system fundamentally unable to cope with the changing world (higher education bubbles, worthless degrees, an obsolete structure); the second sees it undergoing transformation (evolving forms, change and adaptation).

These narratives have as their foundation established assumptions around the meaning and purpose of higher education that have evolved over the past century. They cluster around four main ideas (see figure 5.4): first the transmission of content and standardised knowledge (and or training) in order to create a future workforce, second as a certification/ accrediting system, third as learning about the world and being in the world (including building and maintaining a culture and democracy), and forth as a social, coming of age experience. The first two refer to the '*capability*' role of higher education (actual and signalled), the latter two to the '*disposition*' of the learner (intellectual and social). I have intentionally omitted the research mission of the higher education institutions as this would broaden the scope of this discussion beyond what is necessary and sufficient in order to address the imaginary of open access, from a learner perspective.

[68] Contribution available at http://www.bbc.co.uk/news/education-18857999

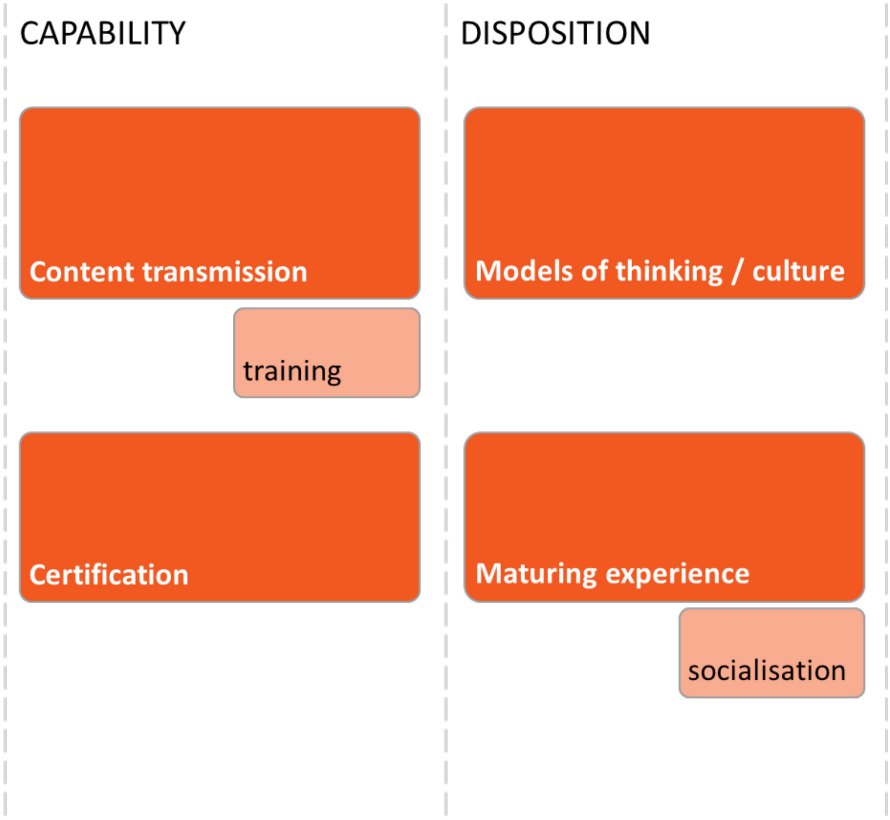

Fig. 5.4 The meaning and purpose of higher education

These four aspects of the meaning and purpose of higher education have evolved historically, in a constant tension with each other. These conceptions of education are linked in the imaginary of higher education.[69] Although Mark Twain famously asserted "I never let school get in the way of my education", this view of education bringing together capability and disposition entwined in a unitary institution, has for a long time, inhabited our minds. We have to consider following current debates in the context of this view having colonised the imaginary.

Rising costs and the (investment) value of higher education

One frame that has emerged with regard to higher education is that rising costs are making it less and less affordable for both individuals and governments. This conversation is underpinned by rising tuition and increasing student debts across the developed world.

[69] Obviously there are entire books devoted to this topic. As discussed previously, a detailed analysis is beyond the scope of this project.

Referring to the US, CNN[70] (Censky, 2011) suggested that "surging college costs price out the middle class" with tuition and fees at public universities having "surged almost 130% over the last 20 years – while middle class incomes have stagnated". *The Economist*[71] (2012) debated "college-cost calamity" noting that the "average cost of college per student has risen by three times the rate of inflation since 1983". Given that the financial resources required to obtain a degree are acquired primarily through credit, *The New York Times*[72] (Martin and Lehren, 2012) notes how in the United States "taking on debt has become a central part of the college experience for many students" in "A generation hobbled by the soaring cost of college". Stories of students with large loans after graduation, tell powerful stories. The article estimates that, according to the US Department of Education, "if the trends continue through 2016, the average cost of a public college will have more than doubled in just 15 years" (The New York Times, Martin and Lehren, 2012).

The worry of rising costs is also echoed in countries that have state supported and even free education. They face an increasing tax burden, and consistent inadequate funding. In Australia there are renewed discussions with regard to government funding of tertiary education, although "students already have among the highest share of private expenditure for higher education in the OECD" (The Australian[73], Hare, 2012). The same article notes that "uncapping of fees in New Zealand in the 1990s had seen prices triple in just a couple of years" and the same effect was observed in the United Kingdom (The Australian, Hare, 2012).

Such discussions have sparked concerns and lead to speculations on whether or not we might be facing an 'education bubble' akin to the housing bubble. This popular recurring argument in the media has been, as *New York* magazine[74] puts it: "The cost of college […] has grown far too high, the return far too uncertain, the education far too lax" (Smith, 2011). *The Washington Post*[75] (Whoriskey, 2012) joined the debate over the value of college education as an economic investment to report that "architecture, arts degrees yield highest unemployment" –

[70] A version of this contribution is available at http://money.cnn.com/2011/06/13/news/economy/college_tuition_middle_class/index.htm
[71] A version of this article is available at http://www.economist.com/node/21559936
[72] A version of this article is available at http://www.nytimes.com/2012/05/13/business/student-loans-weighing-down-a-generation-with-heavy-debt.html?pagewanted=all
[73] A version of this article is available at http://www.theaustralian.com.au/higher-education/uni-study-grants-no-benefit-to-public/story-e6frgcjx-1226443406346
[74] A version of this article is available at http://nymag.com/news/features/college-education-2011-5/
[75] A version of this article is available at http://www.washingtonpost.com/business/economy/new-study-shows-architecture-arts-degrees-yield-highest-unemployment/2012/01/03/gIQAwpaXZP_story.html

up to 13.9 precent among recent college graduates. An online article in *The Economist*[76] (Schumpeter, 2011) makes the case that tuition costs are too high, students debts are crippling, and returns from getting a college degree over-rated – an argument echoed in various formulations in TV, print media and the blogosphere. The article goes on to quote economist Paul Krugman in *The New York Times*[77] pointing out that developments in ICT may reduce not only the demand for low skilled jobs but also for more specialised, highly skilled ones:

> "Most of the manual labor still being done in our economy seems to be of the kind that's hard to automate. Notably, with production workers in manufacturing down to about 6 percent of US employment, there aren't many assembly-line jobs left to lose. Meanwhile, quite a lot of white-collar work currently carried out by well-educated, relatively well-paid workers may soon be computerized. Roombas are cute, but robot janitors are a long way off; computerized legal research and computer-aided medical diagnosis are already here." (The New York Times, Krugman, 2011)

Indeed many view this future as already here. Technology displacing not only car drivers (according to Google, their driverless Toyota Priuses have completed over 480,000 kilometres of autonomous-driving without any accidents) but also journalists and financial analysts (*Forbes*'s *Narrative Science*[78] creates seamless headlines, stories and industry reports, using various voice, style and tone, from data), as MIT economists Erik Brynjolfsson and Andrew McAfee argue in "Race Against the Machine"[79] (Los Angeles Times, 2011, The New York Times, Lohr, 2011).

Future jobs

This view is reflected in another frame that has emerged – in many western countries and especially in the US – with regard to the future of higher education: that universities are not equipped to prepare learners for the demands and workplaces of tomorrow. In 2011 *New York*

[76] A version of this article is available at http://www.economist.com/blogs/schumpeter/2011/04/higher_education
[77] A version of this article is available at http://www.nytimes.com/2011/03/07/opinion/07krugman.html
[78] See http://blogs.forbes.com/narrativescience/profile/
[79] See for instance http://articles.latimes.com/2011/nov/28/opinion/la-ed-economy-20111128 and http://www.nytimes.com/2011/10/24/technology/economists-see-more-jobs-for-machines-not-people.html?_r=0

magazine[80] noted that "The notion that a college degree is essentially worthless has become one of the year's most fashionable ideas" (Smith, 2011). Not only are many of the jobs that employ people today a recent development in the economy, but there is little reason to believe anyone can predict what new jobs will look like in the next 10 years. Given the pace of change in ICT, many disciplines are educating students for jobs that do not yet exist.

A dominant frame has been that the continuous changes and improvements in new technologies will inevitably lead to a rise in demand and hence opportunities for graduates (Brown and Lauder, 2006). More recently this view has been challenged not only by uncertainty but also by a relatively small group of very public and very successful individuals who have forgone a university education. Steve Jobs, co-founder and chief executive officer of one of the most successful companies in the world – Apple (and previously also Pixar), dropped out of Reed College in Portland, Oregon after six months. He spent, however, another 18 months auditing various classes, including one on calligraphy. Bill Gates dropped out of Harvard and went on to set up what became the world's largest PC software company (Microsoft) and became a billionaire. Another one of the world's largest software companies, Oracle, was founded by Larry Ellison who left the University of Chicago, after having first dropped out of the University of Illinois. Michael Dell, founder and CEO of Dell, was a pre-med student at the University of Texas at Austin before he dropped out. He also became a billionaire. More recently, the co-founder of Twitter, Jack Dorsey, left the University of Missouri, only to drop out of New York University later. The founder of Tumblr, David Karp, who did not attend college at all, was nonetheless, named as one of the top 35 innovators in the world by the MIT Technology Review.

Although in these are reality isolated cases, such individual narratives are very powerful: the story of Mark Zuckerberg, the founder of Facebook who left Harvard after one year, was the subject of an Oscar nominated movie – *The Social Network*. With a very high public profile, Richard Branson, founder and chairman of Virgin, and a star on several television shows, left school at sixteen. His autobiography, *Losing My Virginity* is an international bestseller.

This frame is reinforced not only by the media but also by entrepreneurs. For instance a very visible and representative figure of this raising scepticism, the billionaire venture capitalist Peter Thiel, has received a lot of attention for urging students to drop out of universities.

[80] A version of this article is available at http://nymag.com/news/features/college-education-2011-5/

Under his "20 Under 20 Fellowship", the co-founder of PayPal and first investor in Facebook, pays twenty selected students USD 100,000 to walk away from college/universities and pursue their passions to change the world:

> "Thiel Fellows are given a no-strings-attached grant of $100,000 to skip college and focus on their work, their research, and their self-education. They are mentored by our network of visionary thinkers, investors, scientists, and entrepreneurs, who provide guidance and business connections that can't be replicated in any classroom. Rather than just studying, you're doing." (www.thielfellowship.org)

Television business news channel CNBC broadcast a documentary[81] about the fellowship featuring the pitches of the young entrepreneurs who "don't need a degree to start a business, and who don't need a degree to change the world". One of the fellows, Connor Zwick aptly asked "am I getting anything out of school or am I just wasting my time when I could be making a difference?" (CNBC, 2012).

Such narratives have been eagerly taken up by the media, especially in the context of current debates around the rising cost of education, diminishing job opportunities for graduates and sharp, worrying and urgent arguments have been cropping up around the world.

Of course, despite these narratives and the reality of rising costs, debt and uncertainty, a large number (or indeed the majority?) of students and potential students still want to attend a higher education institution. The four main ideas that form the foundational assumptions around the meaning and purpose of higher education are deep-seated in people's imagination. Higher education is still the way to learn, find employment, network and grow up.

At the same time, the 'education on the brink of a revolution' is a powerful idea. The narrative of higher education fundamentally unable to cope with the changing world – higher education bubbles, worthless degrees, an obsolete structure. In some sections of the media it tends to overshadow the frame which sees traditional higher education undergoing transformation. Change and adaptation in the development of delivering courses on the internet, the development of open textbooks etc. are overshadowed by another revolutionary frame, the one driven by massive open online courses. I will return to how the various frames around

[81] A summary this broadcast is available at http://www.cnbc.com/id/45243912?__source=vty|20under20|&par=vty

open access come together after I discuss the open, globalised mindset in which they have emerged.

5.2.3. Openness

The imaginary context in which educational initiatives can take hold and thrive is one of increasing 'openness' in all domains. The 'open' mindset and our understanding of openness have changed fundamentally over the last 15 years.

Considering human motivation, Pink (2009) tells the story of two Encyclopaedias that have been launched since the mid-1990s. First Microsoft started an encyclopaedia called Encarta. It used professional writers and editors to develop thousands of articles and made it available both on CD and online. The second encyclopaedia was a project based on anonymous internet volunteers who would write and contribute to articles in an openly editable model. Wikipedia would be available online for free to anyone.

Pink (2009) asks us to consider a thought experiment: "think forward fifteen years. According to my crystal ball, in 2010, one of these encyclopedias will be the largest and most popular in the world and the other will be defunct. Which is which? In 1995, I doubt you could have a found a single sober economist anywhere on planet Earth who would not have picked that first model as the success."(p. 16). And yet, in 2009, Microsoft closed down Encarta and Wikipedia went on to become the largest and most used encyclopaedia in the world. It currently features over 4 million articles in English alone, and articles have been created in 285 languages[82].

We can use this thought experiment to understand the significant change in the social imaginary that has come about in the last 15 years. Today no one finds it difficult to imagine the Wikipedia model being applied or indeed being a successful model.

The Wikipedia model however is not the only such open model. Another highly visible initiative to emerge in the 1980s and 1990s was open source software. Software developers publish their software with an open source license, allowing anyone to use it and modify it freely. The internet browser Mozilla Firefox and the GNU/Linux operating system (and its offshoot Android) are leading examples of such developments, built and maintained by volunteers.

[82] http://meta.wikimedia.org in August, 2012

The content of such initiatives is usually licensed freely under a Creative Commons Attribution Share-Alike license. Everyone is free to share (copy, distribute and transmit the work), to remix (to adapt the work) and to make commercial use of the work, provided that he or she attribute the work in the manner specified by the author and he or she share alike (that is if they alter, transform, or build upon this work, the resulting work be shared only under the same or similar license) (see http://creativecommons.org/licenses/by-sa/3.0/).

As discussed in chapter 1, the open mindset is visible in countless other recent initiatives, such as Project Gutenberg (a volunteer effort to digitize and make available full texts of novels, poetry, short stories, cookbooks, reference works and periodicals whose copyright has ended), online archives of The British Library, The American Museum of Natural History, content produced by magazines such as Wired and television networks such as C-SPAN and Al Jazeera, open-source electronic prototyping and hardware and technology design information (Arduino, The Global Village Construction Set), to name but a few.

It is within this context that discussions around open educational resources and conversations regarding the future of higher education emerge. Openness is not only about retrieving content (watching, reading, listening), but also about the culture of making (writing, producing, transforming, creating, publishing). Openness emerges as a fundamental frame that characterizes not only recent changes in how we 'think' and 'do', but also as the foundation for future changes.

5.2.4 Globalisation[83]

In the past decades the world has become increasingly characterised by the exponential growth in the movement of goods, capital and people around the world. As such, images of globalisation are consistently reflected in all types of media. Although such dramatic changes in global economy culture and society are not universal, as clearly some parts of the world have not been included in this new global landscape (see for instance Stiglitz, 2006), nonetheless the possibilities of globalisation are increasingly a part of the social imaginary.

[83] There are numerous studies, articles and books on Globalisation. It is not my purpose to provide a detailed account of all facets of globalisation. I am ultimately interested in how globalisation contributes a frame to the imaginary of open access.

Possibilities afforded by digitisation mean that increasingly people understand books, images and music to be accessible anywhere in the world. For instance, the publication of the Danish Jyllands-Posten editorial cartoons depicting the prophet Mohamed created international reactions and had considerable cultural, social as well as economic impact on people and organisations in a number of Middle Eastern, European, African and North American countries.

Search engines such as Google are making information, provided one has an internet connection and unrestricted access, available anywhere in the world. Books like Thomas Friedman's *The World is Flat* (2005), loudly assert that "Never before in the history of the planet have so many people – on their own – had the ability to find so much information about so many things and about so many other people" (p. 152). He goes on to quote Google founder Sergey Brin "If someone has broadband, dial-up, or access to an Internet cafe, whether a kid in Cambodia, the university professor, or me who runs this search engine, all have the same basic access to overall research information that anyone has. It is a total equalizer. This is very different than how I grew up. My best access was some library, and it did not have all that much stuff, and you either had to hope for a miracle or search for something very simple or something very recent"(Friedman, 2005, p. 152). Today, both Thomas Friedman's metaphor of a 'flat world' and Brin's view of disappearing geographical and historical separations in a world where everyone is seen to have equal access to information, are increasingly common and shared by many, especially in the western world.

The web is shaping and reinventing not only what people do, but also how they do it. The current rise of 'collaborative consumption' (Botsman and Rogers, 2010) – web-powered sharing of goods, assets, projects and skills – is redefining how people think about supply and demand. For instance, *Kickstarter* is the world's largest funding platform for creative projects, leveraging the power of crowds. *Etsy* is the largest e-commerce website for handmade items, that has moved the idea of 'craft fairs' online. *Airbnb* provides unique accommodations through a community marketplace that allows anyone to list, search and book properties. Such projects (and countless others) have redefined the marketplace, buying, selling, sharing, funding, trading for the digital age. They have also redefined how we think about access to resources and services.

Social media platforms (Facebook, YouTube, Twitter, etc.), personal devices (such as smartphones, laptops, tablets, etc.), wireless technology and associated developments (see for instance VoIP – voice over internet protocol) are drivers of both practical changes and

dispositions. They are seen to constitute defining issues of our time and fundamental building blocks of the future.

5.2.5 The imaginaries of open access

I will now draw on the four imaginaries that I have described to uncover emerging patterns and relationships and explore how they amalgamate to form an imaginary of open access. Again I am not claiming that these four imaginaries are the only ones that contribute to the imaginary of access. Indeed the imaginary of access draws on countless others, and in the case on individual imaginings on the discrete experiences. The four I have explored are however the most prevalent in the media and they play a key role in ordering the imaginary and creating the space for individual imaginings and actions.

These imaginaries are connected in networks and hierarchies of interdependence. Figure 5.5 attempts to present such connections visually. It is not meant to fully account for all such connections.

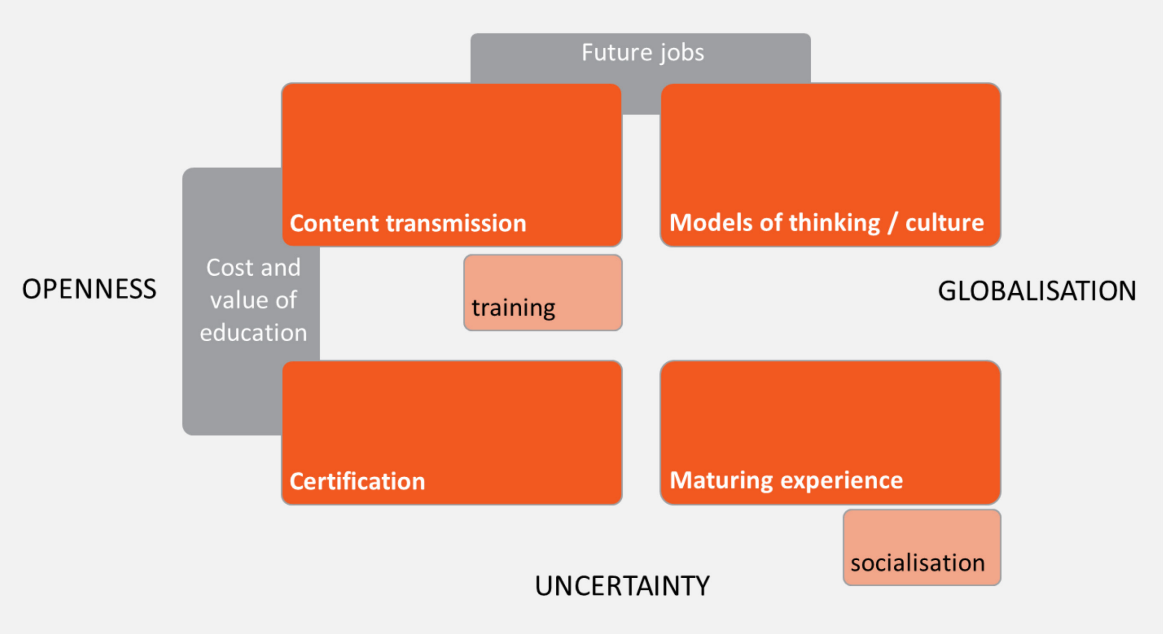

Fig. 5.5 The different facets of imaginaries around open access

It is useful to consider the facets of open educational initiatives as they define themselves against current models of higher education. They are 'the storm' that is predicted will disrupt and revolutionise higher education. They build on the forms, visibility, desirability and

reputation of established institutions. They make propositions of value to displace concerns regarding traditional investments and costs. They are also underscored by an open, globalised mindset that allows education to be dis-embedded from national constraints. On the one hand the 'global geeks' are getting 'open source-style education', on the other, new institutions are spanning the globe (US based Coursera[84] has recently partnered with universities in Toronto Canada, Lausanne Switzerland and Edinburgh UK). The imaginary of open access is not insulated, it overlaps with and is nested in other imaginaries, it is contradicted, supported or endorsed by various other frames.

The imaginary around open access is also trailed by uncertainty: "How (massive open online courses) will change the higher education landscape is still very much an open question" (USA Today[85], Marklein, 2012). Speaking of technology, Kevin Kelly (2011) makes the case that:

> "We make prediction more difficult because our immediate tendency is to imagine the new thing doing an old job better. That's why the first cars were called 'horseless carriages'. The first movies were simply straightforward documentary films of theatrical plays. It took a while to realize the full dimensions of cinema photography as its own new medium that could achieve new things, reveal new perspectives, do new jobs. We are stuck in the same blindness. We imagine e-books today as being regular books that appear on electronic paper instead of radically powerful threads of text woven into one shared universal library." (*What Technology Wants*, 2011)

In a similar way, open educational initiatives seem in part to colonise our imaginary much like 'horseless carriages' – we imagine 'location' free courses.

I have argued that imaginaries are connected at various points and they provide each other with meaning and content. Together they give us a picture of the imaginary of open access. It is important however to examine not only what is present in the imaginary, but also how what is not there shapes the space. I will now focus on absences and silences in this space.

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[84] It has also partnered with California Institute of Technology, Duke University, Johns Hopkins University, University of Virginia, Rice University, UC San Francisco, University of Illinois and University of Washington

[85] A version of this article is available at http://usatoday30.usatoday.com/news/nation/story/2012/09/12/college-may-never-be-the-same/57752972/1

First, a lot has been said about enrolment rates in courses such as Stanford's *Introduction to Artificial Intelligence* and MIT's 6.002x Circuits and Electronics (160,000 learners registered for the first, and 155,000 learners registered for the second). 9,000 students succeeded through to the mid-term in MITx' online course in electronics, and over 7,000 ended up passing the course. Of those, 340 people scored perfect scores, including a 15 year old learner in Mongolia[86] (MIT News[87], Hardesty, 2012). Discussions around completion rates fail to take account of the fact that "to teach this number in a conventional course would have taken 40 years" according to edX president, Anant Agarwal (Hardesty, 2012).

The learners in MIT's online 6.002x Circuits and Electronics also went on to use MIT's OpenCourseWare materials for 6.003 *Signals and Systems* to create and study in their own version of the course 6.003z (MIT News[88], Hardesty, 2012). When learning that MITx had decided not to offer the follow-up class as a massive open online course, a high school student from India (who had earned 97% on the initial course) together with another two community members from the MIT cohort created an open online course using open educational resources as well as learner created resources (see 6003z.amolbhave.in). Stories of discontinuation of initiatives or of learners as producers rarely if ever penetrate the public discourse.

While institutions, initiatives and instructors are prominently featured in the media, learners are usually represented as numbers, large invisible masses. Their actual experience with open access is missing from view as much as it is missing from research. So is their future – for instance their experience in the job market. There also aren't many visible 'inspirational' narratives in the context of massive open online courses. Such absences also go towards altering (or failing to alter) people's imaginings.

The underlying economic, social and political backdrop is also seldom acknowledged past its influence on the education as cost and investment. If we consider the imaginary (of open access) we need to account for this backdrop in two ways. The first is indeed related to how the imaginings of people are skewed in times of economic hardship. Uncertainty avoidance can

[86] The 15 year old was a high school student whose teacher used the online lectures and textbook in his class.

[87] A version of this article is available at http://web.mit.edu/newsoffice/2012/mitx-edx-first-course-recap-0716.html

[88] A version of this article is available at http://web.mit.edu/newsoffice/2012/mitx-edx-first-course-recap-0716.html

drive people towards the safer, established alternatives. Secondly, the past few years of uncertainty (the global financial crisis, social and political unrest and upheaval in the Middle East etc.) can/could also have influenced the imaginary, by replacing potential 'inspirational narratives with ambiguous ones. As Stanford provost John Etchemendy put it, "We're considering this still completely experimental, and we're trying to figure out the right way to go down this road." (The New York Times[89], Lewin, 2012b). This framing becomes important in the context of an emerging, developing imaginary.

So what does this all say about individual imaginings and, especially new, emerging imaginings around open access? In the next section I will explore how these insights help us understand the possibility for intervention.

5.3 An imaginary intervention

This section explores how the social imaginary holds the potential basis for self-determination, access and change. In order to do this we need to have a closer look at individual imaginings and, especially new, emerging imaginings around open access. This section again is not intended to be predictive or definitive; I rather intend it to be speculative and meant to provoke further thought and discussion regarding the future of access. This section also allows me to explore some avenues for further research and action.

First I want to return to the individual and how his/her imaginary is constituted through his/her everyday reality and textual engagement. The social imaginary helps constitute the space for the individual. His/her imaginings are constituted in and from the social imaginary as the individual re-appropriates social level concepts. As discussed in section 5.1, this social imaginary is also, at least in part, conveyed through images, stories in the mass media.

In this framework, the question of access that is expressed as the learner's ability to claim his or her learning opportunity to achieve his or her learning goals, becomes a question about the potential learners' imaginings. I approach this section in the spirit of Dorothy Smith's (2005) commitment "to reorganise the social relations of knowledge of the social so that people can take up knowledge as an extension of our ordinary knowledge of the local actualities of our lives" (p. 29).

[89] A version of this article is available at http://www.nytimes.com/2012/03/05/education/moocs-large-courses-open-to-all-topple-campus-walls.html?pagewanted=all

In a discussion of possibilities and proposals, of 'where we can go' Smith (2005, p. 221) recounts, among others, the work of Susan Turner, who was concerned with developing institutional ethnography as a tool that could be used by activists, not only for research purposes but also as a skill to help them reveal the invisible relations of power that permeate their everyday/everynight work lives. She goes on to contend that the institutional ethnography researcher is often faced with a 'technical' outcome to research projects, that is not well suited to people in their everyday lives. What is needed is for the institutional ethnographer to 'translate into the language of the everyday' their discoveries and insights so they can be taken up by people in their everyday work lives.

Institutional ethnography implicitly imagines a world in which knowledge is created more equally and used to challenge relations of control. This suggests that we need to address directly the actual circumstances of the learners' lives. I propose that this can be done not only by revealing the structure of the social imaginary and highlighting dominant narratives, relationships and absences, but also by considering how to actively shape/construct an imaginary of access.

In the conclusion to their book on *Mapping social relations* Campbell and Gregor (2002) discuss the practice of institutional ethnography and note that some research is conducted within situations that require/revolve around 'thinking out' change (p. 113). They summarise work done by Gary Kinsman writing institutional ethnography from inside political activism and providing an alternative account in which "he exposes the ruling relations as he came to know them from inside a social movement" (p. 121). As a phenomenon that is still fluid, emerging, yet to take a clear shape, open access in the context of new educational practices offers researchers the same opportunity of impacting and shaping a movement. It also offers of course the same challenge. My research is also in the midst of a phenomenon that is still unfolding, and analysing it is significantly different to analysing 'data that stand still'. Campbell and Gregor (2002) note how such an account "can be corrected when a new piece of information is uncovered or a different public response occurs" (p. 121).

In another instance of attempting to make institutional ethnography useful and accessible to communities without formal research training, in their everyday lives, Campbell (1998, reported in Campbell and Gregor, 2002) adapted institutional ethnography to research problems experienced by people with disabilities. She disseminated the outcomes of her research through industry reports, articles and conference presentations. However she reports

that the outcome that has attracted the most positive response was a board game conceptualised and designed by the research team:

> "the game incorporates into cards what the team members learned from their research experience. Called 'Ain't life Ducky' the game offers players the opportunity to experience vicariously what a person with disability lives through." It "offers a basic mapping of some of the social relations of community service delivery that, when opened up through discussion, lead to new insights" (Campbell and Gregor, 2002, pp. 119-120)

Campbell and Gregor (2002) also note that one contribution of the project was to offer a way to think about how, as researchers, we can try to "'democratise' the relations of research". The findings of institutional ethnography can materialise and bring to life the mandate of valuing and foregrounding the standpoint of those it researches.

Unpacking open access from a learner perspective and opening it up for critical analysis is thus not enough. In the following parts of this section I will discuss how I can hope to reach potential learners in their everyday lives and bring the reality and potential of open access through open educational resources to them. I will start by discussing what should the engagement with potential learners incorporate (the 'what'), after which I will turn to the manner in which we can actively contribute to the imaginary of access (the 'how').

The start of a conversation: WHAT

As discussed so far in this chapter, currently open access is growing into a complex imaginary through the emergence of new educational initiatives – from open courseware to massive open online courses, to for-profit institutions. The content of this conversation is crucial to learners' imaginings of access. In order to enlarge their understanding of the meaning and possibilities of open access we need to contribute to the conversation as it infiltrates (and potentially transforms) the imaginary.

Writing about the political from a very pragmatic standpoint, during the social uprisings in France in 1968, Castoriadis (1992) makes the case that change is based first on understanding the imaginary: "To transform things….. we have to understand them; to advance them we have to orient ourselves" (p. 125 in translation). What follows is the need for movements to

articulate their thinking and develop their structure; they must 'acquire a face' (p. 128 in translation).

I argue that in making research accessible and useful to individual learners there is a need to create/contribute to the 'reality of access' in order to shape the context for the debate around access through open educational resources to emerge, a context fit to respond to the challenges that lie ahead. This context would incorporate the reality of open access, in all its dimensions, and would reconceptualise the metrics used when considering open access and the range of choices it offers. It would also make the link to a rich past by reconstructing historical forms of open access as they emerged over the last centuries.

First we need to acknowledge and make known the current realm of possibilities around new educational practices and articulate the reality of experience of open access. In current conversations (see section 5.2) it seems taken for granted that people are aware of the opportunity for access in the form of open educational resources. In 2012 there has been increasing public exposure for open initiatives, overwhelmingly represented by the newest incarnation of the phenomenon – MOOCs (as discussed in the previous section). However the range and magnitude of the phenomenon, as represented by the range of initiatives, learner numbers and profiles need foregrounding. Apart from my own story of access, there are countless other stories emerging of individuals achieving their learning goals with open educational resources. The following are a number of such stories that can illustrate the reach and range of opportunities for potential learners. Bringing such stories to potential learners would help shape the imaginary.

Some such stories come from public figures. For instance, at the age of 54, Bill Gates, former CEO and current chairman of Microsoft, decided to study energy and took Physics and eleven other courses through MIT's OCW initiative. British comedian Dara O'Briain, asked on BBC 4's *Front Row* if he would ever go back to finish his PhD, reported having done the same "I have gone back and done… courses on iTunes U. It's towards the back of the iTunes store but there are MIT courses and Oxford courses… and there is an Oxford *Quantum Mechanics* course that I remember… and the exam itself I did caffeined out of my brain cause I had to cram all quantum mechanics in an evening… on iTunes U there is an entire Quantum Mechanics course and I have sat through it again with the huge advantage that when the man starts talking and it

gets too fast you press the space bar and it stops and time ends… and I may do more of those!" (BBC 4[90], Wilson, 2012).

However, most stories of open access are not high profile ones. Nicholas Presnell "stumbled upon the videos by Gilbert Strang, a professor of mathematics, while he was trying to solve a problem at his job as an electrical engineer at Honeywell Aerospace" (The Chronicle of Higher Education[91], Young, 2009). The online lectures solved Mr. Presnell's technical problem. While still in high school, Aditya Rajagopalan watched all the lectures from Yale's *Econ 159: Game Theory* (which became part of Open Yale Courses in 2007), where Benjamin Polak, a professor of economics and management provides an introduction to game theory and strategic thinking (Young, 2009).

Lam Vi Quoc, a 22 year old from Vietnam was introduced to Laboratory in Software Engineering – also known as MIT's OpenCourseWare 6.170 – which helped him create a program that allowed Ho Chi Minh City residents to find bus routes by destination (Wired[92], Diamond, 2003). Rogelio Morales, a metallurgical engineering graduate of the University of Venezuela, studied with MIT OCW's 9.537 – Special Topics in Vision Science and 13.017 – Design of Ocean Systems I and recounts how such open educational resources have great potential to help not only him, but others across the country: the New Neighborhood program "use OCW to download information for poor people on technology, or humanities, or other areas. This has allowed a lot of people to access this information who might otherwise have been unable to do so" (MIT, 2006). Bill Humes, US Navy Aerospace engineer stationed at the Patuxent River Naval Air station in Maryland uses lecture notes from MIT OCW's 3.35 Fracture and Fatigue while working on a "project to increase fracture resistance in F-18 Super Hornet Canopies" (MIT OpenCourseWare Case Study Slides, 2010). Similarly, Captain Kevin Gannon, a trainer at US Navy's Southwest Regional Maintenance Centre in San Diego improved organisational effectiveness after taking ESD.60 – Lean Six Sigma processes and 15.322 – Leading Organizations (MIT OpenCourseWare Case Study Slides, 2010). Robert Crogan, an entrepreneur, uses MIT's OCW to develop geothermal energy in the East Caribbean (MIT OpenCourseWare Case Study Slides, 2010).

[90] This episode of *Front Row* was first broadcast on BBC Radio 4, 7:15PM Thursday, 12 April 2012.
[91] A version of this article is available at http://chronicle.com/article/Students-Find-Free-Online/48776/
[92] A version of this article is available at http://www.wired.com/wired/archive/11.09/mit.html

More recently, Sebastian Thrun, the Stanford professor who taught the *Introduction to Artificial Intelligence* open online course and then went on to found Udacity, tells powerful stories of learners using Udacity open online courses: a single mother of 2 working 40+ hours a week and whose job was in jeopardy, another participant who has completed a course from a remote area of Afghanistan, with little access to a reliable internet connection (or electricity for that matter), finishing assignments in between incoming mortar and rocket attacks (Thrun, 2012a). See Appendix 7 for a more detailed account of a number of such stories of access.[93]

Such selections of descriptive representations are powerful illustrations of the reality of open access, and can help create a context in the imaginary of access. While some stories, especially high profile ones do make their way into public media, most are circulated in publications aimed at providers of open educational resources or others already involved in such educational initiatives in some capacity. However stories of access alone are, of course, not enough.

They should allow us however, to introduce insights from research/findings that would enable learners to achieve access. Accordingly, I am not claiming that we should strive to paint a naïve picture. On the contrary, it is about making the reality of access known. This is a space defined not only by the educational initiatives themselves but also by the extent to which learners have effective access to the right combination of technology, literacies, location and time. An excessive focus on questions of technology obscures the fact that open access to learning calls on multiple literacies – operational, critical and cultural – as participants need to engage with a wide range of practices associated with learning through open educational resources. It also allows discussion of the way time and location are a matter of degree rather than binary constructs, and their impact on other dimensions of access. Furthermore, such stories would allow discussion about how a host of online algorithms, filters and tailoring can create a hidden set of options and nudge individuals into a course of action that is not entirely of their own making.

[93] Of course there must be significant stories of failure to accomplish one's learning goals in the context of open educational initiatives. Such stories rarely emerge but are evidenced by the high attrition/ failure to complete rates in the case of some initiatives such as massive open online courses (see for instance MIT, 2012). My discussion of stories of access is, however, aimed at illustrating how powerful accounts of the real and realised possibilities of open access can help create the context in people's imaginary of access.

Giving such context to learners allows us to start reframing the imaginary of access (recall figure 5.5 in the previous section) and allows us to open the debate around access by flipping its different facets to reflect how access can be *conceived and achieved* by the individual learners.

Current realities of open access are one way to impact the imaginary and conversations surrounding access. (Re)constructing the history of open access is another powerful way to retell existing narratives and by showing how access continues to be instituted in different ways and how learners continue to struggle for access. Rewriting history from the learner's perspective provides a necessary alternative perspective in the social imaginary and can give an account of both the opportunities and the demands access has made and makes on participants.

The number and complexity of choices that learners are faced with in the open access learning space also needs to be highlighted. Learners need to be aware of the fact that a bewildering array of open initiatives can be perceived as a burden and become the source of confusion, anxiety and insecurity and even lead to paralysis, thus giving them more control over their ability to achieve access.

We also need to change/re-consider/shift the metric we use in our public conversations. We still tend to measure learning/ education in terms of cost (the more expensive the better) and status of provider. The two are often inexorably linked. Yet from a learner perspective of access with open educational resources there is a potential of a new imaginary to shift from high cost to convenience. We can think of the similar shift that occurred around music/sound 10 years ago, with the introduction of the iPod. Whereas in the 1980s and 1990s music was all about the quality of the sound, and the more expensive the equipment, the better the sound (speakers, amplifiers, cables etc.), after 2000 it became about accessibility and convenience (the iPod).

Remaining with the imaginary of sound/music it is helpful to consider how this shift occurred. The iPod was not an overnight success when it came out in 2001. Stoute (2011) recounts how Apple only managed to sell 150,000 units in its first nine months, while its other products, such as the iPhone sold almost 200,000 a day. Stoute continues to tell how Apple entered deals for product placement in music videos, including back then, chart topping American rapper 50 Cent and his new eagerly awaited single "P.I.M.P.". 50 cent's video started with close-ups of

the iPod; Mary J Blige and Jennifer Lopez also held iPods in their videos and Apple sold 28 million iPods in 24 months.[94] The product alone was not enough to change meanings in the imaginary. Construction of meaning is also about the 'how', not just about the 'what'.

I have looked at some of the content that can be incorporated to help start reframe the social imaginary and individual imaginings around open access so that access can be fully *achieved* by the potential learners. Foregrounding the learner would shift the imaginary to recognize the space of the learner and account for both the opportunities and the demands of open access. As the social imaginary of open access develops, we can alter evolving narratives to account for the learner, write and re-write new ones, that is to say construct, deconstruct and re-construct the content and structure of the social imaginary.

The start of a conversation: HOW

Having looked at establishing a context, I will now turn to the question of *how* to actively contribute to the imaginary of access. Dorothy Smith (2005) urges us that "though some of the work of inquiry must be technical, as mapmaking is, its product should be ordinarily accessible and usable, just as a well-made map is, to those on the terrain it maps" (p. 29). She implies that intervention needs to be clear and straightforward, focusing on the practical, real-life implications of its insights without necessarily calling on the researcher's full theoretical groundwork. She also suggests that it should be 'well-made'. I will now consider what this means for *how* we can contribute to/shape the imaginary of access. I will show that forms, storytellers and mediums are all important to the way researchers pursue avenues for actual, practical intervention.

There is an implicit assumption in much of the analytic autoethnographic research as well as institutional ethnography that it is sufficient to make the invisible visible. However, in order to change the minds of people in their everyday lives researchers must first seek to generate interest and capture their attention.

I will start by looking at a first key consideration for the way an intervention is designed and discuss the form of the insights in order to make the message accessible and engaging. Dorothy Smith uses the analogy of maps to discuss research output for institutional ethnography. I find the metaphor very useful for exploring intervention as well. The form and

[94] From Stoute's (2011) perspective the success is enabled by the existence of a 'shared mental complexion' across demographic divides.

structure of maps is radically different depending on the audience maps are meant for. In 1931 Henry Beck, an engineering draftsman, designed the London Underground Tube map with an eye towards the passengers who would use it rather than accurately representing the entire wealth of information regarding the geography of the terrain and distribution of transport. This resulted in a radical departure from previous approaches: omission of some information, distortion of other information and overall simplification. No longer were tracks overlayed on a geographical map, but instead represented schematically, as a diagram of how to get from one place to another. Beck's map was an instant success and continues to form the basis for modern transport maps around the world.

The map of the London underground highlights the need to find a balance between conveying as much information as accurately as possible and the need for simplification. Simplification and alteration for the purposes of clarity[95] and impact raise the question of what is the right information to leave out. There is a danger here that researchers might obscure certain significant aspects that will in turn stay invisible to people in their everyday lives.

For Beck, one of the effects of simplifying the map using only lines drawn at certain angles, colour coding and a limited number of symbols was an elegant, aesthetically pleasing result. Aesthetics affect how we experience content, and in the context of the social imaginary this aspect becomes particularly important. It affects not only the extent to which we engage with the content as a whole but also which aspects of it we choose to pay attention to, thus making the 'how' as important as the 'what'.

In research conducted in 2008, Vertesi explores how the London Underground map 'becomes' London for many people, and how they use it to understand, navigate and refer to the city. He shows how an inspiring map influences the social imaginary. In the case of open access, this can mean for instance, selecting certain learner access narratives over others, making them engaging and inspirational/inspiring. Again, researchers must be cautious not to be driven by this need to be engaging. Castoriadis (1992) cautions us:

> "Just as permanent 'seriousness' is the height of the grotesque, so permanent feast is endless sadness. To accept the seriousness/festiveness antinomy as absolute is to accept the leisure civilization of our time. One breaks life into two portions, a 'serious'

[95] For instance Beck only uses lines drawn in multiples of 45 degree angles and colour coding and a limited number of symbols.

> part delivered over to organizers and a 'free' part delivered over to salesmen of pleasure and entertainment [spectacle] – which may include, at the limit, revolutionary 'happenings'." (p. 131 in translation)

Evocative autoethnography offers a number of forms of writing that are suited for intervention in a general audience space and have the purpose of thoroughly engaging the reader at the same time (see for instance Ellis, 2000 (p. 193) for examples of the use of fiction and literature, art, and performance; concerned with 'how research is presented').[96] Watson (2011) explores the use of fictional forms (and relatedly semi-fiction and creative non-fiction) as a tool researchers employ to present their work in order to maximise the engagement that readers have with their work.

In the beginning of this chapter, I discussed how the social imaginary is carried not only through narratives, stories and the printed media, but also through images and visual media. The rise of an increasingly visual culture means that the form of the intervention would have to take into account the growing centrality of images and visual media to how we communicate and perceive the world.

It is not only the form of the intervention that is important. The avenue/channel that researchers choose to employ is just as significant. The historical approach put forward in chapter 2 makes the case for the print media as one such option. An historical reconstruction of open access to learning showed how, for instance in the case of coffee houses (or Penny Universities), the imaginary surrounding access was at times quite actively constructed and reinforced in print media. During the seventeenth and eighteenth century, Joseph Addison and Richard Steele, who in 1711 founded *The Spectator* and others, had a deliberate aim "to bring philosophy out of the closets and libraries, schools and colleges, to dwell in clubs and assemblies, at tea-tables and coffeehouses" (Addison and Steele, 1711). The idea of the coffee house and access, of "what society should be like, not what it is like" (C. Ellis, 2004, p. 198) was fervently promoted by Addison and Steele, and carried on and reinforced by writers at the time and since.

[96] It should be noted that evocative autoethnography (C. Ellis, 2000; C. Ellis and Bochner, 2000) uses creative analytic practices to conduct research. As discussed in chapter 3, I am not advocating its use in methodology, but rather, given the fact that it privileges "stories over analysis, allowing and encountering alternative readings and multiple interpretations" (C. Ellis and Bochner, 2000, p. 745), the use of its creative practices for intervention.

Similarly today, the newspapers have had a great impact in the imaginary of access for potential learners: the success of Stanford's *Artificial Intelligence* open course last year was due in large part to the exponential increase in enrolment after *The New York Times* article. Although massive open online courses had been around for years, the media attention propelled it forward in a way nothing else had managed to do.

A number of avenue/channels can be considered in order to reach potential learners in their everyday lives and bring the reality and potential of open access through open educational resources to them.

Over the past years there has been an increasing number of researchers in economics, sociology, psychology, geography, history, and biology among others, who 'reconstruct' the content of their (or their peers') research to reach a general audience. For instance, in *Thinking, Fast and Slow* (2012), Nobel Prize winner in Economics Daniel Kahneman brought to a general audience the research he has conducted over the past three decades, in particular his work around cognitive biases in human thinking. In *Guns, Germs, and Steel: The Fates of Human Societies* (1997), professor of geography and physiology at UCLA Jared Diamond argued that the differences in the historical development of civilisations stem from differences in their respective environments. Similarly, economist Steven Levitt discusses application of economic theory in *Freakonomics: A Rogue Economist Explores the Hidden Side of Everything*, biologist Richard Dawkins describes evolutionary processes in *The Selfish Gene* (1976) and *The Blind Watchmaker* (1986), and so on.

Many such initiatives also lend themselves well to the creation of more visual content, often in the form of documentaries. In the past 15 years documentaries have had an increasingly role in shaping the social imaginary around a number of issues (see for instance the impact of Al Gore's campaign based 2006 *An Inconvenient Truth* or Davis Guggenheim's 2010 *Waiting for 'Superman'*).

Another alternative is creating online content. The blogosphere for instance could be argued to carry the potential to shape the social imaginary. However they often lack the necessary visibility, and the time it takes for ideas to enter public consciousness can vary greatly. With the rise of social networking, it has also been argued that social networking sites and video sharing sites have the potential to overtake traditional media with respect to the impact of

their content and ability to shape public discourse (see for instance the *Kony 2012* awareness campaign).

The fluid, rapidly changing nature of open access also requires that timing of intervention be considered. As public media reports on "The year of the MOOC" (The New York Times[97], Pappano, 2012), this moment allows for a degree of public engagement and debate that might diminish, as it did shortly after the advent of open courseware and other such educational initiatives. Furthermore, if the phenomenon keeps its momentum, then current debates around it will continue to permeate and shape the social imaginary. It then becomes crucial to contribute now to the development of a sophisticated imaginary of access that would allow potential learners to achieve their goals. If it does not, history illustrates how quickly initiatives can lose their appeal and vibrancy. Speaking of the coffee houses as a 'dead metaphor', Ellis (2004) sees them devoid of both meaning and opportunity: "since it had always been as much an idea as a building or a business, it was an idea that had lost its grip on the imagination of the people" (p.208).

I have considered how to actively shape the imaginary of access as an answer to the mandate to intervene in the everyday to improve access and contribute to making learning free. In order to enable new individual imaginings to emerge, I have proposed avenues to open the debate around access by flipping its different facets to reflect how access can be *conceived and achieved* by the individual learners. I have also explored the form that such interventions need to take in order to make the message accessible and engaging. I have discussed the need to address directly the actual circumstances of the learners' lives and to contribute now to the development of a sophisticated imaginary of access that would allow potential learners to achieve their goals.

5.4 Final considerations

In this chapter I set out to explore the structure of the social imaginary of a phenomenon that is rapidly changing and taking shape. My examination is thus partial, as open access and various educational initiatives continue to transform end evolve. I have looked at imaginaries

[97] A version of this article is available at http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html

of open educational resources and how these imaginings are nested within larger debates around higher education, changing notions of openness and developments and affordances of technology. I concluded by looking at how we can contribute to the imaginary of access through the content of the conversation with potential learners (the 'what') and the manner in which this can be done (the 'how').

Castoriadis (1992) argued for committing to practice, articulating thinking, developing a structure and thus a face. I have argued for an active role in creating the new imaginary, in 'Making open access a new normal'. The answer I have offered demands however, further commitment to practice in realising it. Contributing to this imaginary is critical to how a settlement will be reached.

This commitment to practice will also need to take into account the specific economic, political and cultural conditions within which meaning is created. It will be 'organised' by the content of debates in the media as well as the tone of the debates, as they contribute to the unsettling of the institution of education and the notion of access.

This part of my thesis may seem to have diverged somewhat from the commitment of both analytic autoethnography and institutional ethnography to the idea that people are expert practitioners of their everyday lives and worlds. However it has indeed followed from these research traditions' interest in learning from practitioners first. It has explored the possibilities that a social imaginary framework affords when investigating an emerging, fluid phenomenon. It has also shown how they can be extended in practice by showing how the content and manner of intervening can be evaluated.

6 Re-imagining (the question of) access

> **"I like to call this the year of disruption and the year is not over yet."**
> **Anant Agarwal, president of edX in an interview for *The New York Times*,** November, 2012

> **"The mecca of the technology universe is in the process of revolutionizing higher education… an Athens-like renaissance…"**
> **William J. Bennett covering MOOCs for CNN,** July, 2012

> **"There's a tsunami coming."**
> **John L. Hennessy, president of Stanford University, board member of Google and Cisco Systems in an interview with the *New Yorker*,** April, 2012

I set out to address the question of access to education, focussing particularly on the potential opening up of access to higher education that open educational resources seemed at this time to offer. I am finishing my dissertation in a year when the quotations above are representative of almost daily articles and news coverage of changes in higher education. It seems this question has never been more relevant or more timely to consider. Learners seem to have more and more opportunities to claim their learning (or educational) opportunity to achieve their learning goals. In this last chapter I discuss the fundamental insights afforded by the three lenses I have employed in the thesis. I then explore the emerging realities of new educational initiatives (including the rapid growth of massive open online courses and advent of new for-profit educational ventures). I seek to understand how the meaning of my problematic as well as my answers might be impacted by these new realities and how I might come to understand the question of open access and whether learning can be free differently.

In order to advance the current conversation it is also useful to consider/ anticipate some of the potential developments and concerns of the future. I will conclude with considerations and challenges for future research in the last section of this chapter.

6.1 Answers to questions of access

The title of my thesis has remained the same throughout my candidature. Its meaning however, and the complexity that its answers hoped to provide, have continually shifted and evolved. As I am finishing my thesis its meanings are once again challenged. In the following sections of this chapter I want to explore how we might come to understand the question of open access (and whether learning can be free) differently.

At the beginning of this thesis I proposed the title "Can learning be free?". The question was central to my research and over the past years I have come to understand it differently. I focused particularly on the potential opening up of access to higher education that open educational resources seemed to offer. I want to know how open access to learning is enabled through open educational resources, from the learner's perspective. I explored open access that is expressed as the learner's ability to claim his or her learning (or educational) opportunity to achieve his or her learning goals. I approached my research as a 'project of exploration' (Smith, 2005) which has lead me to propose three avenues for understanding open access, one conceptual, one empirical and one practical. The three lenses I have used have allowed me to understand different facets of a theoretically and methodologically challenging problematic.

First, an historical perspective on open learning and education allowed me to chart some of its development and ground current discussions around open educational resources – and their potential to help meet today's opportunities and challenges – in earlier incarnations of the phenomenon. I highlighted their inherent challenges and refocused current debates away from producers of content and technology concerns towards an economic and social phenomenon that is not constrained by traditional educational institutional boundaries. A need for further exploration of the macro, not just the micro emerged. I highlighted the importance of the social political contexts in which learners are made, and become, aware of resources, the social and cultural practices that they engage in to use the resources, and the nature of the associations that they develop. Access emerged as being *achieved* by the individual learners, being significantly about the practices that people engage in in order to achieve it for themselves.

In Part 2, I turned to investigate learner experience with open educational resources. I explored my own experience as well as the larger context of an ambiguously bounded,

emerging, global education. I developed my methodological approach (and in particular, analytic autoethnography as a systematic methodology) to provide a consistent way of exploring, interrogating and informing theory from my data. I also explored the use of institutional ethnography outside traditional work settings and developed a more refined understanding of texts. I argued for the fact that data was constituted differently when people answer questions about their past experiences and their immediate ones, and that this had far reaching implications for how we do ethnography, how data is collected, understood and what kind of claims one can make in relation to the data.

After overcoming these methodological challenges, my second empirical lens allowed me to highlight the allure of open educational resources, the burden of choice in the context of access and how issues of time and location are partially subordinated to technology. I explored different dimensions of literacy beyond a purely operational approach and what they entail in the context of open access to learning and how they were negotiated in a matrix of demands placed on the learner by family, work and other commitments. I explored engagement, and to the extent to which engagement leads to learning and achieving one's goals, pointed to implications for understanding learning with open educational resources. I then revealed the social relations that organise access to learning through open educational resources, through both conventional and new texts and unmasked more profound instances of power, as embodied by search engines.

Lastly, I examined how media representations come together to produce the imaginary around open access to learning and what interventions are possible and necessary if people are to achieve access for themselves. As a response to the provocation of institutional ethnography around intervention, I discussed how to actively shape the imaginary of access as an answer to the mandate to intervene in the everyday to improve access and contribute to making learning free.

Addressing the social imaginary and imagining of access has also highlighted the importance of addressing my problematic in all its dimensions. Researchers are often cautioned as to the dangers of wide views or attempts at addressing 'the big picture'. Silverman (2009) advises "your aim should be to say 'a lot about a little'… avoiding the temptation to say a 'a little about a lot'" (p. 86) and O'Leary (2004) cautions that "narrowing…. is essential to the research process" (p. 41). Most often a narrow focus is not only encouraged but also yields rewards for researchers who are able to make significant contributions to niche research. However, for a

phenomenon that is rapidly changing, it is indeed important to frame the everyday, taking the standpoint of learner, through a conceptual exploration, an historical perspective and to tackle the social imaginary as the answer to what we can do right now to improve access.

As I brought these particular lenses to bear on my topic, I was richly rewarded with substantial insights into a phenomenon in progress. However, studying access as it is in the process of transforming poses one additional challenge, that of responding to more recent developments. In the next two sections of this chapter (6.2 and 6.3) I thus examine how new initiatives and practices are changing the ecosystem around open educational resources and how they have the potential to challenge the meaning of learning, education and the very notion of 'open'. Such considerations are essential since they have framed how I addressed my problematic and will impact how we intervene to improve access and contribute to making learning free in the future.

Since writing about coffee houses in my review of some of the history of open access, such considerations prompt me to revisit some of the insights Penny Universities provided. When I wrote that chapter I was proposing that there may be a closing off of educational opportunity as a direct result of the failure to preserve the openness that had made such initiatives so successful in the first place. The demise of coffee houses (or of earlier student universities) reminds us of the extent to which free and unrestricted education can quickly become institutionalised. I believe we are now much closer to that possibility than we were when I wrote that chapter. In section 6.4 I consider the unsettling paradox that while open educational resources have the potential to greatly increase access, newer forms such as massive open online courses have the potential to significantly constrict access. I ask if it is possible for such current developments to lead to a more closed system.

Finally, in this last section of this chapter (6.5) I consider challenges for future research.

6.2 A changing ecosystem

In the first chapter of this thesis I looked at how open access to learning is enacted within an ecosystem with various content providers on one hand and users on the other (recall figure 1.4). This was perceived as a relatively stable system that could be, and indeed was being, steadily mapped by research (in particular in terms of institutional development, sustainability

and formal higher education reform). I made an argument for recognizing the importance of the under-researched independent learners, who also appeared to be a relatively stable, steadily increasing population. All groups seemed bound to follow relatively clear, incrementally changing trajectories.

In the context of the changes we have witnessed over the past year, as a result of a number of new educational initiatives, it is worth revisiting these aspects. These recent developments are potentially challenging the ecosystem around open educational resources in terms of who offers them, their shape and forms, who accesses them, as well as their relationship to formal higher education. Current trends in the educational landscape resonate with the historical evolution of stock brokerage firms. In the following analysis I will use them to draw some parallels and make more visible such changes to actors and how relationships between them are managed.

Stock brokerage has been around in one form or another for the better part of the last 900 years. After brokerage mechanisms first emerged in France, Flanders and Venice as far back as the 12th and 13th century, they continued to develop with the Dutch East India Company as the first multinational company issued stock, and shareholders became able to publicly trade shares in the company. Since brokerage firms (as we know them today) emerged from London's 17th century coffee-houses, they functioned in largely the same manner for the better part of the millennium. The open outcry trading environment meant a reliance on physical proximity and face to face interaction, which was believed to help traders read and respond to one another's signals and intentions. High costs in this system also meant that it was mostly wealthy high net worth investors who could afford access and the significant fees that came with service driven mediation. In the 1980s-90s however the 'Big Bang' occurred, and technology replaced open outcry trading with screen-based, electronic trading. The growing use of computerised systems as well as continuing deregulation meant radical changes. Floor trading disappeared in Europe, Asia, South America, Canada and Australia, with only a couple of shrinking sites remaining in the United States. The move to screen trading also meant the rise of the new kind of broker – the online discount broker. As costs went down small online brokers entered the market which facilitated the sudden growth in the number of small, individual investors. The online (web-based) access, convenience, as well as low fees – and hence the option for small investments and trades – meant new online brokers (such as E*Trade) appeared and took over a large part of the new 'mom and pop' investor segment. In

Australia, the Commonwealth Bank pioneered the online discount brokerage with the launch of CommSec, taking over more than 50% of the retail brokerage market.

Educational offerings have followed a similar route: for most of recent history, learners accessed higher education through institutions that provided a service much like brokers did. They mediated access to knowledge and credentialing, offered a service that involved face to face interaction and often at a significant cost. As technology penetrated, distance learning emerged. Much like brokerage companies in the late 1980s and early 1990s, educational institutions could move from a relationship driven mediation to a service driven one. As technology got better and better, there was enough access to information to enable the emergence of open educational resources and even massive open online courses. A technology driven service model started to emerge.

The changes that emerged in the case of brokerage firms and higher educational institutions and ventures share a number of significant features. Technology allowed existing firms to change but also enabled the emergence of new players on the market. In the last year alone, for-profit platforms such as Coursera and Udacity have developed to offer the world massive open online courses. Although they offer free participation, they are at least in part commercially driven. edX is a not-for-profit enterprise. However, the University of Texas System is joining the online platform and is considering offering credit for a fee (Coughlan, 2012b)[98]. Similarly, OER University, who "aims to provide free learning to all students worldwide using OER learning materials" (OERu, 2012), is nonetheless moving towards some form of commercialisation, announcing that the assessment services will be provided at a cost (assignments, grading and feedback).

Advances in technology also meant changes not only in the relationship between firms and investors, institutions and learners but also between firms themselves. Technology is redefining relationships across the industry. For brokerage firms this meant, for instance, that while companies were competing to service investors, on the technology side they offered each other services such as clearing and settlement or white labelled trading technology (the technology is offered as a service free of any branding). Similarly, changes are emerging between educational providers. At first, open educational resources were used by those producing them to support their own offerings. Now Antioch University is working together

[98] Contribution available at http://www.bbc.co.uk/news/education-19964787

with Coursera to offer its students credit for participating in massive open online courses: students enrol at Antioch University but in fact take courses created by other universities (Kolowich, 2012). Antioch University provides the 'shop front' and collects fees, much lower, however, than regular tuition. Such collaborations could enable a number of future blended learning models, where online content would come from any number of universities in the world and be used by universities who would build in local face-to-face support and opportunities for further student-instructor or peer interaction (Koller, 2012)[99].

In the case of brokerage, the price of trades has continued to drop since the introduction of screen trading, and the percentage of the population involved in trading increased dramatically. And in the case of education, although the cost of education in general has increased, open educational resources offer either free participation or have the potential to considerably reduce costs for learners (see table 1.1 for an overview of some of the current initiatives). This also means that at least in theory, the percentage of people involved in learning with open educational resources is projected to continue to grow (supported by current numbers of people accessing open courseware and enrolling in massive open online courses).

Regulation has mostly lagged behind industry developments brought about by brokerage firms. For a brief time, the Office of Higher Education of the state of Minnesota required state authorisation (filling out forms, getting approval and paying the appropriate fees) for anyone wishing to offer online courses (Vedder, 2012)[100]. This meant that Coursera's offerings were essentially banned and the online venture was asked to update its terms of service "to inform Minnesotans that they couldn't take Coursera's classes or, if they did, they had to complete most work outside the state" (Vedder, 2012). The Federal Government in the United States tried for a number of years, without success, to require all online providers to get state authorisation in every state where anyone chose to take any of their courses.[101] The

[99] Available at http://blog.coursera.org/post/35279101448/how-online-courses-can-form-a-basis-for-on-campus

[100] A version of this article is available at http://www.bloomberg.com/news/2012-10-29/the-unholy-alliance-against-online-learning.html

[101] Coursera's Terms of Service included the following "Notice for Minnesota Users: Coursera has been informed by the Minnesota Office of Higher Education that under Minnesota Statutes (136A.61 to 136A.71), a university cannot offer online courses to Minnesota residents unless the university has received authorization from the State of Minnesota to do so. If you are a resident of Minnesota, you agree that either (1) you will not take courses on Coursera, or (2) for each class that you take, the

ineffectiveness of any regulation stopping learners anywhere from taking free open online courses provided by MIT or Stanford or indeed Coursera or Udacity is clear. The ban in Minnesota was lifted almost immediately. Issues of oversight and enforcement of any such regulations are still unclear. However, in the educational arena, new companies, like Coursera have repeatedly signalled that they do not seek to become accredited or become a credential issuing organisation. Those however involved with issues recommendations for traditional higher education, such as The American Council of Education, are starting to work with organisations like Coursera and edX to issue credit recommendations for their online course offerings (Fain, 2012)[102].

Education, learning and access are still clearly in the midst of an ongoing transformation, partly due to technological and institutional forces, partly due to larger socio-cultural and economic pressures. The ecosystem in which learners are to achieve access is evolving and becoming increasingly complex. It will be important to recognise the need to revisit assumptions regarding their relationships and challenges to access.

I will now reflect on the potential that new educational initiatives and practices have to challenge the meaning of learning, education and the very notion of 'open'.

6.3 A change in meanings

I set out to investigate how open access to learning is enabled through open educational resources, from the learner's perspective. I was interested in open access that is expressed as the learner's ability to claim his or her learning (or educational) opportunity to achieve his or her learning goals. Understanding how the meaning of learning, education and the very concept of 'open' could be challenged by emerging initiatives and practices is essential to how we intervene to improve access and contribute to making learning free.

While certain analogies can help us recognise some of the questions and concerns that will face learners in open contexts, they also make us blind to possible radical changes to come to the very meaning of learning and openness. Although technology has brought about significant

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majority of work you do for the class will be done from outside the State of Minnesota." (https://www.coursera.org/about/terms)

[102] A version of this article is available at http://www.insidehighered.com/news/2012/11/14/gates-foundation-and-ace-go-big-mooc-related-grants#ixzz2D0FPgRnU

changes for education and access to learning, developments have largely followed in the tracks of the past and have thus largely challenged these notions in ways which were not incompatible with the past. Kelly (2011) illustrates how development tends to follow in the tracks of its predecessors: roads across the Roman Empire were built to accommodate Roman war chariots built themselves to follow behind two horses. Roman carts were built to follow the ruts of war chariots, tramways were built to follow horse carriages and railways followed the same dimensions even though carriages were horseless by then. In the Americas, European workers used the same dimensions to build a new transportation system from scratch. Even the size of the space shuttle followed this tradition: its two large solid-fuel rocket engines had to travel by railroad, through tunnels from Utah to Florida, hence they had to match the standard tracks going back to two horse drawn carriages in the Roman Empire (Kelly, 2011). Open educational resources have digitised classroom content, resources and assignments, have increased class size and participation, but have tended to follow the educational format that has been around for hundreds of years.

The challenge we are faced with is recognising the possibility of a radically different future. I have discussed previously (see section 5.2) how Wikipedia emerged as completely new model of developing encyclopaedias. Almost no one had considered the drastically different future. The future of reference compendiums was not to be Encyclopædia Britannica online with using established content and contributions from paid editors; it was new free format to which everyone could contribute in real time. Today Wikipedia is the largest encyclopaedia, having radically changed the default model in less than 20 years. Wikipedia also did more than change how encyclopaedias were developed, it changed *how encyclopaedias are used*, how people understand their ability to interact, create and utilise them.

Similarly, how access to learning is achieved by learners, how they understand learning and education and what constitutes open could be altered in the context of emerging initiatives and practices.

6.3.1 Potential challenges to the meaning and what constitutes learning and education

The possibilities afforded to individual learners by open educational resources in general, and more recently massive open online courses, mean they now have the ability to find courses lectures and materials on almost any topic at any time. As new imaginaries around them will settle, learners' use of such resources will no longer be separated from other aspects of their

life, interests or challenges. There is the opportunity for a more natural learning, motivation based structuring of learning and education to occur, focused around solving a problem or on just-in-time learning. Individuals have the ability to pick and choose their topics which means they can focus on a specific area of inquiry or specific problem (for instance water challenges, or helping residents of a city to find bus routes by destination, or develop geothermal energy in remote locations) rather than having to stick to traditionally established divisions across faculties and departments. As noted previously in stories of open educational resources use, we are already seeing such practices emerge. Learning can become much more driven by immediate learner needs – learners who might need just one course to develop a skill or a capability, at a certain point in their life. Sebastian Thrun goes as far as to say that "The idea of a degree is that you spend a fixed time right after high school to educate yourself for the rest of your career. But careers change so much over a lifetime now that this model isn't valid anymore"(*Forbes Magazine*[103]*,* Anders, 2012).

Such consideration will become increasingly important given that the rapid increase in the demand for highly skilled work that has long been predicted has not materialised (for a detailed analysis see Brown and Lauder, 2006). What is more, Brown and Lauder (2006) report that the continuing expansion of the traditional higher education system "may lead to the creation of a substantial wastage of talent amongst college and university graduates leading to a greater dispersion in incomes as graduates accept sub-graduate work" (p. 35). They quote Brynin (2002, p. 366, in Brown and Lauder, 2006, p. 43) who finds an "increasing demand for graduates but perhaps for work not traditionally at the graduate level" and highlight how graduates are used to accommodate the need for intermediately skilled individuals for which the supply is low.[104] Open educational initiatives offer one answer to such concerns as they can enable learning that is driven by learner needs, just-in-time, capability or solution focused, rather than restricted to traditional degrees (in terms of both time and content).

[103] A version of this article is available at http://www.forbes.com/sites/georgeanders/2012/06/05/udacity-sebastian-thrun-disrupting-higher-education/

[104] Brown and Lauder (2006) also note that traditionally governments have avoided addressing the problem by focusing on individual education and increasing access to education rather than focusing on creating jobs for the increasingly overqualified graduates. This is not surprising considering the social imaginary of higher education (especially in the western world) and its implications for political discourse. However, emerging changes in the current social imaginary, especially with regard to the future of higher education (as previously discussed in this chapter) would allow for a shift in public policy to reframe current debates and to resolve the current paradox.

Often the debate surrounding open educational resources has framed them as second best to the existing model. Many argue that no matter how sophisticated, open, including massive open online courses will not be able to match or replace human interaction in a physical classroom. Open online education will never be "education of the very best sort" (Mark Edmundson, a professor of English at the University of Virginia in article for *The New York Times*, July 20 2012[105]). However, open educational resources have the potential to define a different kind of learning and education. In a thoughtful blog post considering this question in the context of current massive open online courses, Shirky (2012) states that we are really looking at a "story we tell ourselves about higher education: what it is, who it's for, how it's delivered, who delivers it"[106].

Most likely a consensus around what learning and education are, or are becoming, is not going to occur soon. But the emergence of new meanings of learning and education will have implications for how we address the question of access to education. It will also have implications for a range of stakeholders beyond the individual learners, such as higher education institutions, governments and companies. It has the potential to redefine who provides education, what they provide and how they provide it.

There are a number of non-traditional educational providers: for-profit ventures like Coursera, which rely nonetheless on academics to create their range of offerings, but also new entrants such as The Khan Academy, created by Salman Khan whose previous job was in finance where he worked as a hedge fund analyst. The people behind educational initiatives, including massive open online courses, are also gaining increased notoriety: Salman Khan is the Khan Academy. Sebastian Thrun is the face of the *Artificial Intelligence* course and Udacity. The Floating University, another new educational venture aims to feature "today's biggest thinkers, practitioners and leading scholars" (The Floating University, 2012). 'Star' education is brought to you by the 'world's best thinkers': public intellectuals, conductors, investors and popularisers of science like Michio Kaku, Steven Pinker and Paul Bloom. Even the former Speaker of the U.S. House of Representatives Newt Gingrich taught a massive open online course on various policy issues and pledged to teach more from the White House if he were elected as president (Fain, 2012).

[105] A version of this article is available at http://www.nytimes.com/2012/07/20/opinion/the-trouble-with-online-education.html

[106] http://www.shirky.com/weblog/2012/11/napster-udacity-and-the-academy/

Open educational resources have the potential to redefine the role of organisations in terms of both who delivers education to learners, and what they deliver. New entrants like Udacity and Coursera are providing new places for access but also new forms. Shorter video lectures punctuated by questions or quizzes, courses of varying lengths, different types of assessment and feedback etc. New ways of learning, in terms of timing, synchronicity, distribution, disaggregation, localisation and pedagogies have the potential to permeate and spread, even become the norm.

For higher education providers, there will be as many opportunities as there will be risks. Ernst & Young Australia emphasize digital technologies as one of the fundamental drivers of major changes in Australian higher education, not only in regard to its operation and economic structure, but also its value and role in society (Ernst & Young, 2012). They predict that "New technologies will enable media companies to enter the university sector….[and the] so-called Massive Open Online Courses (MOOCs) are an early stage example of the search for new models" (Ernst & Young, 2012, p. 9). Universities are already seeing possibilities around flipping the classroom and changing lecture/tutorial roles and opportunities to provide more tailored degrees by complementing current, on-campus portfolios with external open courses to provide more tailored education. At the same time, in Australia, they are also being warned that the "current Australian university model – a broad-based teaching and research institution, with a large base of assets and back office – will prove unviable in all but a few cases" (Ernst & Young, 2012, p. 4).

Commercial companies also have a unique opportunity to explore the potential of open educational resources and provide employees training/ support as they engage with new and emerging educational initiatives. Employees engaged in such initiatives would share experiences and peer mentoring to create communities of learning and provide interaction. They may even produce such open offerings themselves, in the tradition of corporate universities.

Open educational resources also have the potential to redefine not only the role of organisations but also the role of the learner. A new, much more sophisticated learner will emerge not only to take advantage of open access but also to define their place in the context of existing higher education institutions. As changes in what constitutes learning and education emerge, learners themselves will need to develop a range of skills, abilities and

habits that will help them become adept learners in this new environment, whether in a coffee shop with open educational resources or within a traditional educational institution.

6.3.2 Potential challenges to the meaning and what constitutes 'open'

With the emergence of new open educational forms, including massive open online courses, much has been discussed in the public media, on blogs and increasingly in the academic arena (see for instance Daniel, 2012, Armstrong, 2012, Stewart, 2012) regarding the nature of these initiatives and with them the arrival of a new 'open'.

In the first part of this thesis I discussed the dimensions of 'open' in the context of open educational resources (in terms of rights, availability and technology), as well as from a learner perspective (in terms of resources, awareness, accessibility and association). I have also addressed how historically, the demise of student shaped universities, or later on coffee houses, reminds us of the extent to which free and untrammelled education can quickly become institutionalised. Time and time again, a failure to preserve the openness that had made them successful in the first place led to their decline.

It is increasingly important to (re)consider how 'openness' is being shaped by emerging educational initiatives and practices. First, the way in which these new practices, especially for-profit ventures, will generate revenue, their increasing public media presence and coverage will contribute to the way openness will be realised in practice and conceived of in the social imaginary. Such concerns were backgrounded to a large extent in the context of non-profit organisations (such as MIT, Stanford and most other universities involved in the open educational resource movement, and including some of the new players such as the Khan Academy). The concept of openness will again be reshaped at the intersection of access as a human and moral imperative and the perspective of new commercial interests.

Coursera for instance aims to "offer courses online for anyone to take, for free" and "give everyone access to the world-class education" (Coursera, 2012). Although at the time I am writing this, it is not yet clear how Coursera will monetize free education, a number of models are emerging as potential sources of revenue. One such model is having companies pay providers to be able to reach those who complete their courses. Another would see

companies, in effect, sponsor courses.[107] Companies could contribute and sponsor courses directly. Udacity will be collaborating with Google, NVIDIA, Microsoft, Autodesk, Cadence, and Wolfram to develop a new series of courses.

It remains to be seen whether or not the open courses of the future will be driven by wanting to provide students with "higher education for free" (Udacity, 2012a) or a specific education to cater to what employers or investors are looking for. MIT's OCW initiative provides access to virtually all MIT course content (MIT, 2011). Is the future of open access to only certain education? What will happen for instance to arts education, especially during tough economic times?

The open rights associated with open content in general (see Wiley, 2010) are also only characteristic of select new initiatives. While Udacity (2012) license their course content under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 license and edX plans to make the software used to build its courses open source (anyone else can use/reuse it), Coursera (2012) grants no such permissions: "All content or other materials available on the Sites, including but not limited to code, images, text, layouts, arrangements, displays, illustrations, audio and video clips, HTML files and other content are the property of Coursera and/or its affiliates or licensors and are protected by copyright, patent and/or other proprietary intellectual property rights under the United States and foreign laws". It also clearly states that "You may not take any Online Course offered by Coursera, or use any Letter of Completion as part of any tuition-based or for-credit certification or program for any college, university, or other academic institution without the express written permission from Coursera" (Coursera, 2012).

Openness, in the sense of a moral and philosophical imperative on the one hand and framed by commercial interests on the other is not necessarily at odds. On the one hand, commercial interests have the potential to undermine a truly open education, in the sense discussed in the first part of this thesis. On the other, combining a moral imperative ("[belief] that higher education is a basic human right" (Udacity, 2012a)) with a profit-generating necessity is not incompatible in a business venture. Kickstarter for instance is a 'crowd funding' website that

[107] The Chronicle of Higher Education (Young, 2012) obtained an agreement between Coursera and the University of Michigan at Ann Arbor regarding *Possible Company Monetization Strategies* and lists eight potential business models: certification, secure assessments, employee recruitment, applicant screening, human tutoring/ assignment marking, selling the platform to enterprises to use in their own training courses, sponsorships and tuition fees.

backs creative projects (Kickstarter, 2012). It facilitates gathering money from people anywhere in the world to fund artistic, creative endeavours in art, comics, dance, design, fashion, film and video, food, games, music, photography, publishing, technology and theatre, taking 5% of the funds raised. Dubbed by *The New York Times* (Walker, 2011) as "the people's N.E.A." (the National Endowment for the Arts - the US federal agency supporting the arts), Kickstarter has to date managed to raise $421 million (Kickstarter, 2012). The National Endowment for the Arts' yearly budget is only about $154 million.

The meaning of openness will not only be contested in a very practical sense, in the shape and content of the educational offerings, but also in how the social imaginary of openness will be constructed. Who will construct the imaginary of access and how will matter more than ever.

New entrants into higher education like Coursera and Udacity are using their high profile to promote their ventures as 'opening' education. Using Daphne Koller's 2012 seemingly neutral TED talk on *What we are learning from online education,* Daniel (2012) notes how often such public commentary is "thinly disguised promotional material by commercial interests" (p. 2). 'Open' however is loosely used by all new educational providers as well as the media to refer to new initiatives across the board, often at odds with various aspects of what is accepted as open in the sense of open educational resources.

As a result 'open' will become increasingly tied to the imaginary of massive open online courses. Open can thus mean low cost (for instance Udemy offers 'open' courses for which you can 'set a price'). The new 'open' can also eclipse previous open initiatives and their meaning. For instance, *The New York Times* article[108] on the history of massive open online courses (Pappano, 2012) makes no mention of earlier so called connectivist massive open online courses (cMOOCS as opposed to the new, more traditional xMOOCs). New practices are reconstructing the history of open educational initiatives in the social imaginary by overwriting earlier, more 'open' incarnations, such as open courseware. The opening of education is happening now and it is the newcomers who are making it happen: "The last thing I want is

[108] A version of this article is available at http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html

people asking whether Google is disrupting education. Better to ask if Sebastian is trying to disrupt education" (Salmon, 2012).[109]

While this creates the potential for new discourses to obscure or rewrite the history of openness it also makes it possible for other dimensions of these initiatives to become invisible. For instance, who is involved in creating them and for what purposes will not necessarily be as visible as in the case of traditional open courseware. This can also dilute the notion of open by blurring its boundaries to include the use of open courses by traditional universities (see for instance Antioch University partnering with Coursera to offer its students credit for participating in massive open online courses). Similarly the University of Texas System's participation in edX could see open courses where credit is offered for a fee.

What is 'open' is thus potentially shaping up as a distinctly different characteristic of newer initiatives, at the intersection of aspiration, commercial interest and public debate.

I started this section with three quotes that warned of revolution, disruption and virtual tsunamis in higher education. Change seems inevitable. I have discussed a number of considerations that emerge from new realities potentially being constructed by new educational initiatives and practices (including the rapid growth of massive open online courses and advent of new for-profit educational ventures). I have explored how the meaning of my problematic as well as my assumptions and answers might be impacted. I will now consider the unsettling paradox that the challenges to what is 'open' have the potential to, on the one hand, greatly increase access, and on the other hand, significantly limit access. Have current developments put us on a path to a more closed system?

[109] A version of this article is available at http://blogs.reuters.com/felix-salmon/2012/01/31/udacitys-model/

6.4 A new question (or have massive open online courses made open education impossible?)

"How did it get so late so soon?
It's night before it's afternoon.
December is here before it's June.
My goodness how the time has flewn.
How did it get so late so soon?" ***Dr. Seuss***

My research so far has given the insights and foundations to believe that the answer to my initial question – 'Can learning be free?' – was a possibility to live into. I found answers to the answer to what we could do to improve access, to help learners achieve access for themselves and make learning free. As I finish my thesis I am faced with the possibility that we might be closer to a closing off of educational opportunity than we are to opening it out. Is it possible for the current development of open educational resources, through a failure to preserve the openness that had made successful in the first place, to lead to a more closed system, as it has historically done? Indeed, "How did it get so late so soon?"

Caulfield (2012, cited in Daniel 2012) describes massive open online courses as being "at the intersection of Wall Street and Silicon Valley". As they seem to be moving/heading more and more towards the intersection of Hollywood and Silicon Valley (star performers and performances, cutting edge technology, sometimes so seamlessly integrated that users will fail to notice the 'special effects' in the background and continually innovating), we need to examine to what extent massive open online courses will draw attention away from smaller, less developed open educational resources. What will happen to open courseware initiatives in the wake of edX?

Investment size (quite considerable in the case of start-up like Udacity with $21 million, Coursera with $16 million, and edX $60 million in the past year alone) and user experience will continue to increase the gap between leaders, overwhelmingly American companies, featuring elite universities and educators, and the rest of the world. For a while open educational resources created around the world were on par. The University of Michigan for instance used open educational resources developed through the African Health Open Educational Resources Network, which encompasses universities across the African continent (Omollo, 2012). The new wave of openness is shaping up, however, as a distinctly western, if not

American, proposition. Could open education become synonymous with (and therefore potentially also limited to) a Western education?

Silicon Valley also shows us that open systems do not necessarily win out if the alternatives provide a better user experience and become more entrenched in the social imaginary. A relatively, searchable, indexable platform, the photo sharing website Flickr has become increasingly quiet/ stagnant as Facebook and Google Plus/ Picasa offered alternatives. They largely restricted sharing to one's social network, effectively closing the system.

The imaginary of open access also has the potential to further close learning and education, or at least reduce it to a handful of premium offerings. If "Udacity is an evolution of traditional universities" (Udacity, 2012a), or indeed seen as *the* evolution of traditional universities, learners will have few incentives to go somewhere else. The answer to the question of who will construct the imaginary of open will matter more than ever.

Another reason massive open online courses could contribute to further closing education is the potential of commercial companies not only to develop internal cohorts of learners, but also to enter as providers of online courses, whether indirectly through educational ventures or directly in the tradition of corporate universities. In 2012, Google offered its own free online course *Power Searching with Google* (Google, 2012), taught by Google's own search experts and offered a certificate of completion[110].

Of course, the new educational initiatives also have the potential to continue to open up education. MIT OpenCourseWare is set to launch a new and improved website in late 2012 (MIT, 2012), Udacity uses a Creative Commons license for its educational content and edX' s learning platform software will be made available open source (edX, 2012). And learners' access can be improved through how we shape the public discourse around the new access and learning, in very practical terms. We need to change perceptions and shape the imaginary of open access to make learning free.

[110] http://www.powersearchingwithgoogle.com/

6.5 Some challenges for future research

In the previous chapters I have discussed a number of avenues both for further research as well as practice. In this chapter I have raised a number of additional aspects with regard to changes in the ecosystem of open educational resources as well as potential developments in the meaning of learning, education and the very concept of 'open' as they are challenged by emerging initiatives and practices.

Furthermore, the future and the imaginary of open access to learning will require researchers to approach ideas and topics that are not part of the conversation today. This means that they will have to anticipate some of the key questions and concerns that are currently not part of the debate.

Research will also need to adapt its frames of reference. New initiatives are often contrasted with traditional higher education. This is not necessarily the most productive way forward, not only because we are comparing the performance of a relatively new phenomenon with one hundreds of years in the making, but also since new practices have the potential to create new forms of access and learning.

Researchers examining open access will need to pay increasing attention to the larger 'open' context in which both learners and various educational initiatives emerge and evolve. We live in a world in which the pace of change is increasing (whether informational, technological or even cultural and social). As a society we seem increasingly comfortable with, even expect novelty.

The emergence of new for-profit platforms on the one hand has the potential to provide 'big data' and enable researchers to collect, measure and analyse vast amounts of data about learners as they access open resources (learner analytics); on the other hand such data will increasingly be locked away and available only to the companies that provide the resources. What is more, the global but at the same time very local nature and impact of open educational initiatives means that researchers need to also address questions grounded in the learners' particular sets of conditions.

It will also be increasingly important for researchers to address not only the '*what'*, but also the "*where* and to *whom* they are saying it" (Selwyn, 2012, p. 331). While this focus is clearly emphasized and pursued by institutional ethnography (and, to a large extent, also analytic

ethnography in general, and analytic autoethnography in particular), it will be a challenge to be met by academics coming to open access from different theoretical perspectives. Selwyn (2012) discussed how certain educational topics tend to be debated and disseminated within limited, often closed and specialised networks. Dissemination and discussion with one's peers is of course a critical part of all research. However, as highlighted in the three parts of this dissertation, open access research reaches across a number of areas or inquiry. It also needs to speak back to those who would benefit most from increased access – the independent learners themselves. Selwyn calls for researchers to "make a meaningful contribution to the real world… [we] need to become far more public-facing and publicity-minded than is presently the case" (p. 332). In the context of open access to learning and education this call becomes an imperative.

As I am finishing my dissertation, there are hundreds of news items concerning the impact of open educational initiatives daily, there are numerous new initiatives across the world as traditional higher education attempts to realise the potential of open offerings, businesses try to monetize free education and learners embrace unparalleled learning possibilities. However, the fundamental interventions in open learning are not going to be technological. The social imaginary is critical and it cannot be left in control of commercial (or political) interests. The imaginary of open access is presently being shaped, and there is a unique opportunity to intervene before it settles.

APPENDICES

Appendix 1: Summary of open educational resources definitions

	Source	Definition
2002	UNESCO, 2002	"the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes" (p. 24)
2006	Hylen, 2006	Refines UNESCO (2002) to highlight free availability and as few restrictions as possible
2007	Atkins, Brown and Hammond, 2007	"teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others; include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge" (p. 4); include content that is not necessarily educational
	OECD, 2007	"digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research… includes learning content, software tools to develop, use and distribute content, and implementation resources such as open licences. This report suggests that "open educational resources" refers to accumulated digital assets that can be adjusted and which provide benefits without restricting the possibilities for others to enjoy them." (p. 11)
	Geser, 2007	Uses UNESCO 2002 as a reference point
2008	Schaffert and Geser, 2008	"that access to open content (including metadata) is provided free of charge for educational institutions, content services, and the end-users such as teachers, students and lifelong learners; that the content is liberally licensed for re-use in educational activities, favourable free from restrictions to modify, combine and repurpose the content; consequently, that the content should ideally be designed for easy re-use in that open content standards and formats are being employed; that for educational systems/tools/software is used for which the source code is available (i.e. Open Source software) and that there are open Application Programming Interfaces (open APIs) and authorisations to re-use Web-based services as well as resources." (p. 2)
	Peters and Britez, 2008	Use UNESCO 2002, OECD 2007 definitions
	OpenLearn, 2008	Defined as open content; seen as a larger term, beyond the educational field

	Lane, 2009	Uses Schaffert and Geser's (2008) four dimensions of openness
	Friesen, 2009	Uses UNESCO (2002) definition
	Wiley, 2009a	4R permissions: "1. Reuse – the right to reuse the content in its unaltered / verbatim form; 2. Revise – the right to adapt, adjust, modify, or alter the content itself; 3. Remix – the right to combine the original or revised content with other content to create something new; 4. Redistribute – the right to make and share copies of the original content, your revisions, or your remixes with others "
	Wiley, 2009b	4R permissions
	Peters, 2009	Uses Geser (2007) definition
	UNESCO, 2009	Encompass legal freedom, technical freedom, and cultural freedom
2010	Wiley, 2010	Encompass free, 4Rs permissions, technology and media choices that do not interfere with users exercising 4R
	OER Africa, 2010	"OER describes educational resources that are freely available for use by educators and learners, without an accompanying need to pay royalties or license fees"
2011	Sclater, 2011	Uses UNESCO (2002, 2004) as reference
	Butcher, 2011	"describes any educational resources (including curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and any other materials that have been designed for use in teaching and learning) that are openly available for use by educators and students, without an accompanying need to pay royalties or licence fees" (p. 5)
	West and Victor, 2011	"digitized educational resources that can be shared over the Internet" (p. 13)

Appendix 2a: The Rules and Orders of the Coffee-House (1674, published in the broadsheet *A Brief Description of the Excellent Vertues of that Sober and wholesome Drink, called Coffee, and its Incomparable Effects in Preventing or Curing Most Diseases incident to Humane Bodies*)


A BRIEF DESCRIPTION OF THE EXCELLENT VERTUES OF THAT Sober and wholesome Drink, CALLED COFFEE, AND ITS INCOMPARABLE EFFECTS IN PREVENTING or CURING MOST DISEASES INCIDENT TO HUMANE BODIES.

The RULES and ORDERS of the COFFEE-HOUSE.

A COFFEE BROADSIDE OF 1674. The first to be illustrated.

Frontispiece]

Appendix 2b: The Rules and Orders of the Coffee-House (1674)

"Enter Sirs freely, But first if you please,
Peruse our Civil-Orders, which are these.
First, Gentry, Tradesmen, all are welcome hither,
And may without Affront sit down Together:
Pre-eminence of Place, none here should Mind,
But take the next fit Seat that he can find:
Nor need any, if Finer Persons come,
Rise up for to assigne to them his Room;
To limit mens expence, we think not fair,
But let him forfeit Twelve-pence that shall Swear:
He that shall any Quarrel here begin,
Shall give each Man a Dish t'Atone the Sin;
And so shall He, whose Complements extend
So far to drink in COFFEE to his friend;
Let Noise of loud Disputes be quite forborn,
No Maudlin Lovers here in Corners Mourn,
But all be Brisk, and Talk, but not too much
On Sacred things, Let none Presume to touch,
Nor profane Scripture, or sawcily wrong
Affairs of State with an Irreverent Tongue:
Let Mirth be Innocent, and each Man see,
That all his Jests without Reflection be;
To keep the House more Quiet, and from Blame,
We Banish hence Cards, Dice, and every game:
Nor can allow of Wagers, that Exceed
Five shillings, which oft-times much Trouble Breed;
Let all that's lost, or forfeited, be spent
In such Good Liquour as the House does vent,
And Customers endeavour to their Powers,
For to observe still seasonable Howers.
Lastly let each Man what he calls for Pay,
And so you're welcome to come every day."

Appendix 3a: *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* course homepage (Boiko, 2008)

MITOPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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› Syllabus
› Readings
› Assignments
› Related Resources

Archived Versions
› Fall 2005

Home > Courses > Writing and Humanistic Studies > Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food

21W.730-4 Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food

As taught in: Fall 2008

"Still Life with Plate of Cherries" (1885-87) by Paul Cézanne. (Image courtesy of the WebMuseum.)

Level:
Undergraduate

Instructors:
Dr. Karen Boiko

Course Features
Course Description

Course Features

› Assignments (no solutions)

Course Description

"What people do with food is an act that reveals how they construe the world."
- Marcella Hazan, *The Classic Italian Cookbook*

If you are what you eat, what are you? Food is at once the stuff of life and a potent symbol; it binds us to the earth, to our families, and to our cultures. In this class, we explore many of the fascinating issues that surround food as both material fact and personal and cultural symbol. We read essays by Toni Morrison, Michael Pollan, Wendell Berry, and others on such topics as family meals, eating as an "agricultural act" (Berry), slow food, and food's ability to awaken us to "our own powers of enjoyment" (M. F. K. Fisher). We will also read Pollan's most recent book, *In Defense of Food*, and discuss the issues it raises as well as its rhetorical strategies. Assigned essays will grow out of memories and the texts we read, and may include personal narrative as well as essays that depend on research. Revision of essays and workshop review of writing in progress are an important part of the class. Each student will make one oral presentation in this class.

Appendix 3b: *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* syllabus (Boiko, 2008)

Course Meeting Times

Lectures: 2 sessions / week, 1.5 hours / session

Course Description

"What people do with food is an act that reveals how they construe the world."
- Marcella Hazan, *The Classic Italian Cookbook*

If you are what you eat, what are you? Food is at once the stuff of life and a potent symbol; it binds us to the earth, to our families, and to our cultures. The aroma of turkey roasting or the taste of green tea can be a portal to memories, while too many Big Macs can clog our arteries. The chef is an artist, yet those who pick oranges or process meat may be little more than slaves. In this class, we explore many of the fascinating issues that surround food as both material fact and personal and cultural symbol. We read non-fiction works by Toni Morrison, Michael Pollan, Eric Schlosser, Wendell Berry and others on such topics as family meals, food's ability to awaken us to "our own powers of enjoyment" (M. F. K. Fisher), and eating as an "agricultural act" (Berry). We also read Michael Pollan's best-selling *In Defense of Food* and discuss the issues this book raises as well as the rhetorical strategies it employs. Assigned essays will grow out of personal experience and the texts we read, and will include narratives, analytical essays, and essays that depend on research. Revision of essays and workshop review of writing in progress are an important part of the course.

Course Overview and Class Policies

Objectives and Assignments

The primary work of this class is:

- To develop your skills in writing and speaking clearly and effectively;
- To help you become aware of your own purposes as writers; and
- To help you become aware of the audience(s) you are writing for.

You'll write and revise four essays in addition to several short non-revised homework assignments. Each student will also make one oral presentation. Readings will serve to get you thinking and provide models of good writing; they'll provide inspiration for your essays and discussion points for Essay 2. Here are the major writing assignments for the course.

Essay 1 (3-4 pages) will grow out of your own memories connected with food. Essay 1 gives you practice in developing ideas based on your own experience and heightening your awareness of the audience(s) you write for.

Essay 2 (5 pages) will ask you to analyze and reflect on ideas from *In Defense of Food* and at least one additional reading, developing your own idea as you do so. Essay 2 gives you practice developing an argument and working with other writers' ideas.

Essay 3 (10 pages) is a research essay focusing on a topic of your choice from a list I will provide. It gives you the opportunity to develop your investigative and critical skills and your ability to organize a longer essay, along with practice using sources responsibly.

Essay 4 (2-3 pages) will be either a final reflection or a manifesto.

Other Writing

Homework will include some short (≈ 1 page) writing assignments:

- Responses to readings, based on prompts I will provide.
- A few reflections on your own experience with food.
- A vocabulary list, including etymologies and definitions.

We'll also do some writing in class to prepare for essays and check reading comprehension.

Portfolios

At our last class meeting, I'll collect a portfolio of all your written work for our class.

Oral Presentations

This class everyone will either give a 10-minute presentation on a food-related topic or participate in a debate on the thesis of *In Defense of Food*.

Class Participation

Please note that class discussions are part of the oral work of a communications-intensive class. All students are expected to participate in class discussions. Discussion should demonstrate not just familiarity with assigned readings but also critical thought.

Reading Materials

Required

Pollan, Michael. *In Defense of Food*. New York, NY: Penguin Press HC, 2008. ISBN: 9781594201455.

Recommended

Lunsford, Andrea. *Easy Writer*. 3rd ed. Boston, MA: Bedford/St. Martin's Books, 2008. ISBN: 9780312556273.

Appendix 3c: *Writing on Contemporary Issues: Food for Thought: Writing and Reading about the Cultures of Food* required readings (Boiko, 2008)

Readings

When you click the Amazon logo to the left of any citation and purchase the book (or other media) from Amazon.com, **MIT OpenCourseWare will receive up to 10% of this purchase** and any other purchases you make during that visit. This will not increase the cost of your purchase. Links provided are to the US Amazon site, but you can also support OCW through Amazon sites in other regions. Learn more.

Required Materials

Pollan, Michael. In *Defense of Food*. New York, NY: Penguin Press HC, 2008. ISBN: 9781594201455.

Recommended Materials

Lunsford, Andrea. *Easy Writer*. 3rd ed. Boston, MA: Bedford/St. Martin's Books, 2008. ISBN: 9780312556273.

O'Neill, Molly. *American Food Writing*. New York, NY: Library of America, April 19, 2007. ISBN: 9781598530056.

Readings by Session

SES #	READINGS
1	Didion, Joan. "Why I Write." In *Joan Didion: Essays and Conversations*. Edited by Ellen G. Friedman. New York, NY: Distributed by Persea Books, 1984, pp. 5-10. ISBN: 9780865380356. (Note: This essay is also frequently anthologized.) Morrison, Toni. "The Day, and Its Splendid Parts." *The New York Times*, March 27, 2008. Vapnyar, Lara. "Pot Luck." *The New York Times*, February 17, 2009.
2	Paddleford, Clementine. "A Flower for My Mother." In *American Food Writing*. pp. 318-320. Hunter, Evan. "Pancakes." *In American Food Writing*. pp. 335-336. Lewis, Edna. "Morning-After-Hog-Butchering Breakfast." In *American Food Writing*. pp. 480-486. Maynard, Chris, and Bill Scheller. "Manifold Destiny." In *American Food Writing*. pp. 545-550. Steingarten, Jeffrey. "Primal Bread." In *American Food Writing*. pp. 576-585.
3	Fernandez-Armesto, Felipe. "The Invention of Cooking." In *Near a Thousand Tables: A History of Food*. New York, NY: Free Press, September 2, 2003, pp. 1-8. ISBN: 9780743227407. *Supplemental* Carroll, Lewis. "The Walrus and The Carpenter." Through the Looking Glass and What Alice Found There, 1872. Ullman, Ellen. "Dining with Robots." In *The Best American Essays 2005*. Edited by Susan Orlean. Series edited by Robert Atwan. Wilmington, MA: Houghton Mifflin, 2005, pp. 121-130. ISBN: 9780618357130.
4	Leon, Kass. "Table Manners." In *The Hungry Soul*. Chicago, IL: University of Chicago Press, May 1, 1999, pp. 131-154. ISBN: 9780226425689.
7	Stacey, Michelle. "The Pleasure Teacher." *O Magazine*, May 2008. Pollan, Michael. "Cruising on the Ark of Taste." In *Best American Science Writing 2004*. Edited by Jesse Cohen. Series edited by Dava Sobel. New York, NY: Ecco/Harper Collins, 2004, pp. 201-206. ISBN: 9780060726409.
8	Berry, Wendell. "The Pleasures of Eating." In *What Are People For*. New York, NY: North Point Press/Farrar Strauss, 1990, pp. 145-152. ISBN: 9780865474376. Schlosser, Eric. "Why The Fries Taste Good." In *Fast Food Nation*. New York, NY: Harper Perennial, 2005, pp. 116-131. ISBN: 9780060838584.
9	Pollan. *In Defense of Food*. pp. 1-81.
10	Pollan. *In Defense of Food*. pp. 84-116.
11	Pollan. *In Defense of Food*. pp. 137-201.

Appendix 4: Sample blog post

a free education | Follow | New Post

Written by afreeeducation Edit
September 20, 2010 at 7:56 pm

Posted in Uncategorized

Private: Next please

leave a comment »

Still frustrated about my book not getting here (I'm sorry Amazon for ever going to Bordersonline), I have decided to look at session 3.

The advice is to read the selection from Ch. 1, "The Invention of Cooking," from Felipe Fernández-Armesto's Near a Thousand Tables: a History of Food. No link is provided so I did a quick search on Google. The first link is to a Book Discussion forum page (http://forums.egullet.org/index.php?/topic/13011-near-a-thousand-tables-by-felipe-fernandez-armesto/) which seems quite interesting. I will look into it a bit later. The second is to Amazon. The book has a 'Look Inside!' feature, and I manage to get to the first chapter online! Or at least the first six pages as I soon found out. Chapter two begins at page 20 so I am sure to miss quite a bit. Not sure though whether or not I'm missing the required part (it just says 'this part').

http://www.amazon.com/exec/obidos/ASIN/0743226445/egulletcom-20#_

Notes from reading

The great press baron, Lord Northcliffe, used to tell his journalists that four subjects could be relied upon for abiding public interest: crime, love, money, and food. Only the last of these is fundamental and universal. Crime is a minority interest, even in the worst-regulated societies. It is possible to imagine an economy without money and reproduction without love but not life without food. Food, moreover, has a good claim to be the world's most important subject. It is what matters to most people most of the time. (Felipe Fernández-Armesto, 2000, p xi)

Appendix 5: Low Risk-Negligible Risk Approval Letter

September 2010

Professor Lesley Farrell

Associate Dean (Research & Development)

CB10.05.119

UNIVERSITY OF TECHNOLOGY, SYDNEY

Dear Lesley,

UTS HREC 2010-362 – FARRELL, Professor Lesley (for PETER, Sandra, PhD student) – "Can learning be free?"

Thank you for submitting a Low Risk/Negligible Risk Impact Research Declaration Form.

We have considered your Declaration and agree your research does not require further review from the UTS Human Research Ethics Committee. Please keep a copy of your Declaration form on file to show you have considered risk.

For tracking purposes, you have been provided with an ethics application number, which is UTS HREC 2010-362N.

I also refer you to the AVCC guidelines relating to the storage of data, which require that data be kept for a minimum of 5 years after publication of research. However, in NSW, longer retention requirements are required for research on human subjects with potential long-term effects, research with long-term environmental effects, or research considered of national or international significance, importance, or controversy. If the data from this research project falls into one of these categories, contact University Records for advice on long-term retention.

If you or anyone connected with this research have any queries please do not hesitate to contact either myself, or the Research Ethics Officer, Ms Racheal Laugery on 02 9514 9772.

Yours sincerely,

Professor Jane Stein-Parbury

Chairperson

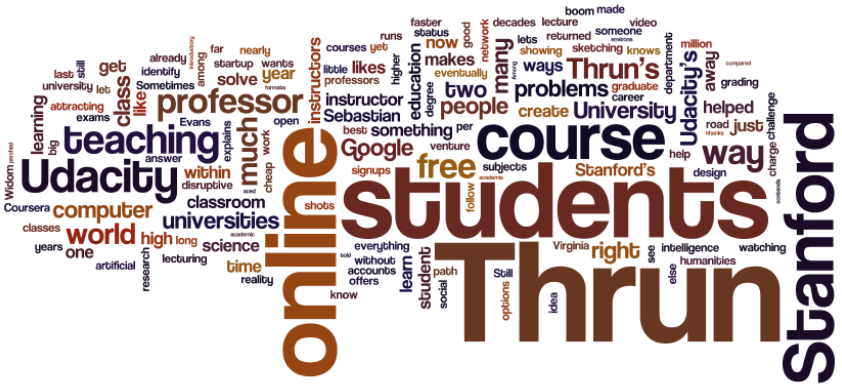
UTS Human Research Ethics Committee

Appendix 6: Additional word maps for selected media articles

The New York Times article "M.I.T. Plans to Expand Its Free Online Courses", December 19, 2011, p. A22

The Sydney Morning Herald, "Free courses from world's top unis a swipe away in online revolution", August 12, 2012

Forbes Magazine article, "How Would You Like A Graduate Degree For $100?", June 25, 2012



Appendix 7: Selected stories of access

Lam Vi Quoc, Ho Chi Minh City, Vietnam; featured in Wired, 2003: MIT Everyware, David Diamond

“Smart and upbeat, Lam, 22, is the first member of his family to attend college. He is the youngest of six children of Chinese-Vietnamese parents who are retired from the business they ran making cartons. A student in the information technology department of Vietnam's Natural Sciences University, in Ho Chi Minh City, he received a $500 scholarship to buy his computer and a $100 scholarship toward his studies. Lam, who spends six days a week at school, was introduced to Laboratory in Software Engineering - aka 6.170 - when one of his professors downloaded the course materials onto the university's server and made it required reading. As leader of his software lab team, Lam helped create a program that allowed city residents to find bus routes by destination. After graduation, he hopes to continue his studies in either Singapore or England, but to do so, he'll need another scholarship - something he says is unlikely unless he is one of three students chosen to be a graduate assistant at his own university. If that doesn't happen, he'll shoot for an IT job in Vietnam. "Maybe if I work for three years," Lam says, "I will be able to have my own house and a car.”

Captain Kevin Gannon, Southwest Regional Maintenance Center, U.S. Navy; in MIT OpenCourseWare Case Studies, 2006 and MIT OpenCourseWare Case Study Slides, 2010

Based at the San Diego Naval Station, the Southwest Regional Maintenance Center (SWRMC) provides maintenance support and maintenance training to more than 50 surface ships, aircraft carriers, and submarines of the U.S. Navy and Coast Guard. This is a weighty responsibility for Captain Kevin Gannon, Commander of the SWRMC — as is the complement of roughly 3,000 sailors and civilians under his command.

Captain Gannon, who describes himself as a “lifelong learner,” holds an undergraduate degree from Tulane University in mathematics, an MS in Mechanical Engineering from the Naval Postgraduate School in Monterey, and an MS in Systems Engineering from University of Virginia. But he is quick to point out that his education is not confined to formal schooling; in each of his positions in the Navy, Gannon has worked to keep abreast of new developments in his fields of expertise.

Gannon describes his main responsibilities at SWRMC as overseeing lots of industrial processes (anything from fixing a pump to overhauling a gun) — and he is constantly looking for ways to streamline these processes. This quest led him to MIT OpenCourseWare several years ago, while browsing for information on lean manufacturing.

“Lean is a tool that industry has been using for the last couple of years,” explains Gannon, “focusing on process improvement, and minimizing waste. I was looking generically for lean

information, and stumbled across OCW. I was really impressed. This site is a true intellectual gem. They have a couple of lean classes in the engineering section, such as ESD.60 Lean/Six Sigma Processes, that were very useful."

MIT OpenCourseWare has also proved helpful in other areas of Gannon's job. For example: leadership training for the sailors under his command is one of his major concerns. So, soon after discovering MIT OpenCourseWare, Gannon browsed the MIT Sloan School courses. "15.322 Leading Organizations has turned me on to all sorts of useful references," Gannon says. "We've used a bunch of books mentioned in the syllabus. And the lecture notes are also an important tool. They include documents on the problems and prospects of a changing organizational world, and models of organizational change. We've used these for our discussion and our teaching here."

"OCW has definitely accelerated our ability to train," Gannon says. "As far as I'm concerned, these courses are already tried-and-true. They've worked with a high-performing group. They're a nicely bundled package, and they're free. How can you beat that?"

Robert Croghan, Saint Lucia, featured in MIT OpenCourseWare Case Studies, 2006 and MIT OpenCourseWare Case Study Slides, 2010

On the island of Saint Lucia, dramatic coastal peaks shelter stunning interior expanses of rainforest, punctuated by lush valleys of fruit trees. The island paradise owes its idyllic climate in part to its tropical location, and in part to a dormant volcano several kilometers below the surface of the ocean that acts as a natural heat vent. Robert Croghan, an entrepreneur in Saint Lucia, has spent the past several years looking for a way to harness this natural resource to create an alternative energy source for the region.

"I'm working on a project to develop geothermal energy in the Eastern Caribbean," Croghan explains, "and install a high-voltage grid through an undersea cable that would connect several of the islands. Currently, about 92 percent of all power generated in the Caribbean is diesel-generated. And obviously, with the price of oil significantly increasing, it's creating a serious situation in regards to fuel supply."

In his explorations of the topic, Croghan has made use of much of the available literature on geothermal heat sources, including resources from MIT OpenCourseWare, a site he has followed with interest for years (Croghan's use of the site, it should be noted, is not limited to scientific information — he has also studied Spanish using 21F.751 –Spanish I).

Croghan also takes a broader view of MIT OpenCourseWare. As a resident of Saint Lucia (though a native of Canada), Croghan is intrigued by the concept of MIT OpenCourseWare because of the opportunities it creates for equal access to education. "In the Eastern Caribbean," Croghan says, "access to information is extremely restricted. There's no university in Saint Lucia, or on most of the other islands. If people want to earn a university degree, they have to go away to Europe, or the United States, or the University of West Indies in Trinidad."

Croghan is interested in setting up educational clinics in Saint Lucia. “I see an opportunity to set up remote educational centers,” he explains. “I could have a call center in India, for example, with a bunch of tutors helping the kids here, and they could all log on the computer and have a shared work space. And the kids would be getting as good an education as they would anywhere else. To me, that’s what OCW is going to enable.

“When I saw OCW,” Croghan says, “it went right to the very core of what I believe: if we hoard information, we can’t have progress. We get stagnant, and it gets accumulated in the hands of a few. And if that happens, we miss all sorts of incredible developments and opportunities.”

Jean-Ronel Noel and Alex Georges, Haiti; featured in MIT OpenCourseWare Case Study Slides, 2010

Entrepreneurs Jean-Ronel Noel and Alex Georges are working to bring renewable energy to communities throughout Haiti. Through their company, Enersa (enersahaiti.com) they planned to create solar panels to serve the needs of their country, but in their research and development process, they required guidance in electrical engineering. Noel found the materials he needed on MIT OpenCourseWare. “I was able to use the OpenCourseWare to learn the principles of integrated circuits. I found out that I could use an existing integrated circuit to make things more efficient, and I wanted an explanation about how it worked. I was able to learn this through the MIT OpenCourseWare.”

Enersa’s work has been supported by the non-profit Appropriate Infrastructure Development Group (AIDG). AIDG Executive Director Peter Haas describes how Noel and Georges leveraged OCW to build a successful business. “I was immediately impressed by [Noel], an engineer who taught himself the electrical engineering he was missing by using the free online engineering resources of MIT OpenCourseWare,” said Haas. “Also, after seeing the dramatic bootstrapping JR and Alex had done in starting their business, it was clear this team was different.” [www.aidg.org/incubation/enersa.htm]

Jean-Ronel Noel, a mechanical engineer by training, describes why OCW was his resource of choice: “It was much better than any other information I found on the Internet, since the other sites were written by electronics experts who assumed that it would be read by other experts. I didn't want to just copy the circuit without understanding it. MIT OpenCourseWare was different because it explained things step by step. Using the OpenCourseWare saved us a lot of time and money.”

Through Enersa, OCW touches lives well beyond Noel’s and Georges’. Enersa employs 18 full-time solar technicians drawn from the communities they serve, and Enersa’s products affect the daily lives of thousands of Haitians. Enersa produces residential and commercial solar systems and solar chargers for smaller items such as cell phones and lamps, but their signature product is a solar street lamp. In just two and a half years, they have installed more than 500 of these in 58 cities and remote villages in Haiti. Enersa’s activities were briefly interrupted by

the January 12, 2010 earthquake, but with an emergency loan from AIDG, they are back to full operation.

Malcolm Douglas, Telstra, Australia; featured in MIT OpenCourseWare Case Study Slides, 2010

With the exception of a brief detour into management in the late 1980s, Malcolm Douglas has spent most of his career as an engineer in the wireless and radio transmission field. For the last four years, Douglas has worked in the information technology department of Telstra — a large telecommunications firm in Australia – designing and supervising the installation of Internet protocol networks and server farms.

But Douglas also defines the term "lifelong learner." He holds a bachelor's degree in Communications Engineering from the Royal Melbourne Institute of Technology, as well as a postgraduate diploma in accountancy from Deakin University. He has earned Cisco certification through the Cisco Academy, and has taken Microsoft Windows and Sun Solaris 9 courses to keep him up to date in his field. In addition, he regularly trolls through the research pages of top engineering institutions – such as MIT, Stanford, Berkeley, and UCLA — to keep abreast of current trends.

From MIT OpenCourseWare, Douglas has downloaded syllabi and lecture notes for many of the courses in the computer engineering section (including 6.111, 6.823, 6.826, and 6.828). Douglas credits the detailed syllabi with creating the necessary structure and focus to allow him to systematically work through a broad subject and absorb the key concepts. Douglas also finds the references in the course notes very helpful, and often uses them to locate classic papers or publications that he had not previously encountered, opening new areas of inquiry.

In Douglas' opinion, the MIT courses offer an unusual blend of theory and practice. "I have found that MIT has an almost unique way of looking at the learning and teaching experience," Douglas says. "It is theoretically advanced, but grounded in learning by doing and building."

"Many courses at other institutions offer the same old textbooks and materials that very rarely change," Douglas says. "In fact, I often wonder how students learn to think! I am very impressed with the MIT approach, and it is also very refreshing for a practicing engineer to learn this way, because this is how we continue to learn in the workplace."

Massive open online course participant 1; featured in video recording, Sebastian Thurn's keynote address at the 18th Annual International Conference on Online Learning, October 11, 2012

"I'm completing the course from remote areas of Afghanistan, and often don't have great internet connectivity. Or electricity. Or internet connections that don't block youtube.

I spent the last few days under incoming mortar and rocket attacks, then dodging checkpoints under questionable legal status to exfiltrate a war zone to a third world airfield until things settle down. I had about an hour of fairly solid internet connectivity to be able to get the assignments done, and still managed to get a respectable score. This is a typical week here for me."

Massive open online course participant 2; featured in video recording, Sebastian Thurn's keynote address at the 18th Annual International Conference on Online Learning, October 11, 2012

"I work 40+ hours a week, I am a single mother of 2, and my younger child is only 7 months old. I have no time to concentrate, or to dedicate, and I've been hanging onto the class by my fingernails, wanting to learn, and to feel a sense of accomplishment.

Just before homework 5 was due, I suffered another series of great, chaotic difficulties in my life. My job has been threatened by the economic climate. My personal life kind of exploded. I'm on my own with the children. The baby has been sick, a family member is suddenly sick, another losing their home, the list goes on and on.

Why am I telling you way too much personal stuff? Because on November 13, I gave up. I told myself that I was ridiculous to think I could justify continuing this class, taking this time, given all the other problems that surrounded me.

And then that other Monday, I checked my email, and I saw the note you sent Saturday. And I stared at it for a while. And then I sighed, and told myself 'I can't quit now".

I took the midterm this weekend, mostly while holding a teething infant. None of my other issues have gone away. But I feel more determined than ever to see this through… for myself. Because I want to. Because it makes me feel good."

LIST OF CONCEPTS

Analytic Autoethnography (AA)

I am using the term analytic autoethnography to refer to the form akin to Anderson's (2006a, 2006b) autoethnography. He defines analytic autoethnography as one in which "the researcher is a full member in the research group or setting, visible as such a member in published texts, and committed to developing theoretical understandings of broader social phenomena" (Anderson, 2006a, p. 373). In contrast to evocative forms, the focus of analytic autoethnography is sociological analysis rather than evocative, emotional narrative.

Independent learners

I use the term independent learners to mean learners who are not formally enrolled in higher education institutions. Universities sometimes use the term 'self learners' to distinguish such learners from those who are currently enrolled in formal higher education institutions.

Institution

Institution refers to "a complex of relations forming part of the ruling [relations], organized around a distinctive function-education, health care, laws, and so on… [and] does not identify a determinate form of social organization, but rather the intersection and coordination of more than one relational mode of [ruling]" (Smith 1987, p. 160).

Institutional Ethnography (IE)

Institutional ethnography explores how experiences come to happen the way they do. It was developed by Dorothy Smith (initially as a 'sociology for women') and is today applied to a variety of contexts and denotes a 'sociology for the people' (see for instance Smith, 2005). Institutional ethnography offers a way to investigate the "linkages among local settings of everyday life, organizations, and translocal processes of administration" (Devault and McCoy, 2006, p. 15). It assumes that people are expert authorities in how they live their lives, and while they act in local settings, powerful translocal forces shape their everyday experiences (Campbell, 1998, p. 96).

Massive Open Online Courses (MOOCs)

I use the term massive open online courses to refer to a relatively recent form of open educational resources, openly accessible on the internet able to support large scale participation. For a discussion of recent variations in their definition as well as typology (traditional versus connectivist massive open online courses, or cMOOCs and xMOOCs) see for instance Daniel (2012).

Open CourseWare

I use the term Open CourseWare to refer to a form of open educational resources organised as courses, pioneered in 2002 by MIT through their MIT OpenCourseWare initiative.

Open Educational Resources (OER)

Open educational resources are widely understood to be "digitized educational materials" that are offered freely and can be used by anyone for learning and teaching (UNESCO, 2002, OECD, 2007). The term encompassed the "the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes" (UNESCO, 2002, p. 24). For a discussion of definitions see section 2.2 and Appendix 1.

Open Access (OA)

I am concerned with open access in the context of open educational resources. I am thus interested in open access that is expressed as the learner's ability to claim his or her learning (or educational) opportunity to achieve his or her learning goals.

Problematic

I use the notion of a problematic that is not conceptualised as a research question at the start of the inquiry: "a problematic sets out a project of research and discovery that organises the direction of investigation from the standpoint of those whose experience is its starting point" (Smith, 2005, p. 227). The problematic is a term mainly used in institutional ethnography and aims to focus investigation in a specific manner, differently from a traditional research question. It looks at a wider context that traditional research questions and thus allows the flexibility required to look at complex phenomena as they evolve and go through critical changes.

Ruling Relations

The concept as it is used in this thesis reflects Dorothy Smith's (1987, 1999, 2005) understanding, and refers to the "extraordinary yet ordinary complex of relations that are textually mediated, that connect us across space and time and organize our everyday lives – the corporations, government bureaucracies, academic and professional discourses, mass media, and the complex of relations that interconnect them" (Smith, 2005, p. 11).

Social Imaginary

I am using the term social imaginary broadly to refer to "the ways people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations" (Taylor, 2004, p. 23). I draw in my conceptualisation on Lacan, Castoriadis, Althusser and Taylor's formulations. For a detailed discussion see section 5.1.

Texts

Texts are understood as central to the way power is socially organised today. Grounded in the insight that methods of social control are largely and increasingly textual, Smith (1987, 1999, 2005) points to the need to examine texts if we wish to understand ruling relations. Texts are understood as having "fixed and replicable character… [and] can be any kind of document, on paper, on computer screens, or in computer files; it can also be a drawing, a photograph, a printed instrument reading, a video, or a sound recording" (DeVault and McCoy, 2006, p. 34).

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