

## CHAPTER 7

# Open Scholarship

*The guerrilla band should not be considered inferior against the army which it fights simply because it has inferior firepower.*

—Che Guevara

### Introduction

In the previous three chapters the focus has largely been on projects and institutional practices. These large-scale movements are shaping the open education landscape and are where the key features of the battle for open are most evidently manifest. However, just as significant are the individual practices that shape the paths and features within that landscape. This chapter will look at how individual academics are adapting their own scholarly practices by adopting open approaches.

My previous book was entitled ‘The Digital Scholar’ (Weller 2011), but it could have just as aptly been called ‘The Open Scholar’. ‘Digital’ and ‘open’ are not necessarily synonymous of course – someone could create all their outputs in digital format but store them on a local hard disk, publish in journals that are not open access and not establish an online identity. This could

be termed digital scholarship, but the digital element here does not indicate any substantial alteration in practice. In my previous book I suggested that ‘digital scholar’ was really a shorthand for the intersection of three elements: digital, networked and open. The first two are necessary conditions, but it is really the open aspect that brings about change in scholarly practice that is worth commenting on.

Open practice has an obvious relationship with higher education. As Wiley and Green (2012) put it, ‘Education is, first and foremost, an enterprise of sharing. In fact, sharing is the sole means by which education is effected.’ Apart from rare (and they are much rarer than many academics believe) cases of commercial advantage regarding research, sharing as widely as possible should be at the heart of educational practice. The digital, network, open triad makes this sharing easier, drastically alters the scale at which it can be achieved and removes obstacles and costs associated with doing so, but it arises from this fundamental point that sharing is central to education.

Veletsianos and Kimmons (2012) propose that open scholarship takes three forms:

- (1) open access and open publishing,
- (2) open education, including open educational resources and open teaching, and
- (3) networked participation, concluding that open scholarship is a set of phenomena and practices surrounding scholars’ uses of digital and networked technologies underpinned by certain grounding assumptions regarding openness and democratization of knowledge creation and dissemination.

Most of these practices, such as open access publishing and open teaching, have been covered elsewhere in this book, so this chapter will focus on three elements: what Veletsianos and Kimmons

call ‘networked participation,’ which is individual activity across various media and networks; online identity and how it relates to traditional academic practice; and new possibilities in research practice that open techniques give rise to.

As with previous chapters, the aim is not to provide the definitive overview of open scholarship as a topic, but to focus on how openness is significant as part of mainstream practice. This subject is less well defined than that of MOOCs, OERs and Open Access, as it addresses changes to academic behaviour afforded by open practice and technology. These three areas (networked practice, identity and new research approaches) then can be seen as representing a particular take on open scholarship, which in reality subsumes the previous chapters also.

### Networked Practice

When I wrote *The Digital Scholar* in 2010/2011, the picture regarding academic use of social media and new technologies was one of wariness. Proctor, Williams and Stewart (2010) summed it up, saying, ‘Frequent or intensive use is rare, and some researchers regard blogs, wikis and other novel forms of communication as a waste of time or even dangerous.’ This ‘approach with caution’ attitude still seems to prevail, with Esposito (2013) reporting ‘a cautious interest in Web 2.0 tools to support inquiry activities’. Similarly Gruzd, Staves and Wilk (2012) report that most research institutions do not make use of online profiles when considering promotion, but they suggest this is beginning to change.

What has changed is the increased adoption of social media tools amongst society in general, so academics are more likely to have an identity in such places that mixes professional and personal. There has also been an increase in academic-specific sites such

as Academia.edu, ResearchGate and Mendeley. Academia.edu (2013) reported nearly 9 million registered users in 2013, and ResearchGate over 3 million, although how many of these are active is not clear. The combination of these two factors means that academics are more likely to have some form of online identity.

Veletsianos (2012) identifies seven ways in which scholars use Twitter: to share information, resources and media; to share information about teaching; to request assistance from and respond to requests from others; to engage in social commentary; to engage in digital identity and impression management; to explicitly network and connect with others; and to highlight their participation in other networks, for example, linking to blogs. This corresponds with work by Fransman et al. (2011) at the OU who found that 26% of academics had Twitter accounts, which while not a majority, represents a significant uptake from the very specialised adoption of such tools previously. These were used in a variety of ways, such as communicating within project teams, disseminating findings and musing and generating research questions.

The higher-education focused sites such as Academia.edu represent a 'safe' or more obviously relevant route to establishing an online identity for many academics. These sites relate explicitly to academic practice, compared with general social media, which many academics perceive as frivolous or irrelevant. As one respondent in the Fransman study stated, 'The problem is I'm not really sure what the function of Twitter or these other technologies are or at least how I would use them.' And others view them with suspicion and fear; one participant claimed, 'You wouldn't send your history article round to the world and his wife because you'd end up with it not being yours! And even once you've published it you have to be careful because of the copyright so you can't just stick it anywhere.'

In declaring the rise of open scholarship then, one must be careful not to overstate the case. As with many other aspects of open education, the story of open scholarship has been one of steady adaptation and growth rather than sudden revolution. Selwyn (2010) cautions that there is a strong tendency of solipsism from educational technologists relating to social media and openness. Discussions about the potential of social media in education are ‘self-contained, self-referencing and self-defining ... These are generally conversations that only ever take place between groups of social media–using educators – usually using social media to talk about the educational benefits of social media.’

This does however create a dilemma for educators, since the direction of social media and openness will be influenced by their actions. As we saw with OERs, it is necessary to go through a belief-driven stage in order to construct the context wherein impact can be measured. Empirical observation of what has happened forms a fundamental approach for the objective researcher when examining the effects on society at large, but in terms of shaping their own domain, it is an excessively passive approach that would be self-fulfilling or defeating, depending on one’s perspective. It also presents the current context as neutral, which may not be the case. The presence of many institutional practices may actively discourage open scholarship. For example, the relationship to tenure and the advice that Cheverie et al. (2009) found was that ‘word of mouth to younger colleagues discourages digital scholarship in the hiring, tenure and promotion process.’ Open scholarship is unique amongst interests for academics because it is an as yet undefined area that is both about scholarship and defined by them. This indicates that there is a tension between the context in which academics operate and the potential of open scholarship, which relates to academic identity.

## The Open Scholar and Identity

Open scholarship creates new opportunities and tensions for individuals, and one means of examining these is to consider the concept of academic identity. In this section, general theories of identity will briefly be considered, academic identity in particular. We will then consider how open scholarship impacts on these notions of identity and the relationship with traditional forms of academic identity.

The pioneering work on identity is that of Mead (1934), who argued that one's concept of self is most fully developed when community attitudes and values are integrated. A strong component in the construction of identity is the degree to which either we absorb the values of the community we are in or find a community whose values we can absorb comfortably, summarised in the dictum 'self reflects society'. The strength of these identities has tangible behaviours – the salience of religious identity correlates with time spent on religious activities (Stryker and Serpe 1982), for example. This social view is echoed by Snow (2001), who stated that identity is largely socially constructed and, as well as belonging, includes a sense of difference from other communities. In this framing, identity is seen as 'a shared sense of "one-ness" or "we-ness" anchored in shared attributes and experiences & in contrast to one or more sets of "others"'. Looking at national identity, Canetti (1962) determined that 'crowd symbols' are significant in constructing these shared values. He argued that for England, the sea is a crowd symbol, while for the French it was the Revolution. These crowd symbols, he contested, were more significant than history or territory and represented common, well-understood symbols, which could sustain a popular feeling of nationhood.

With regards to academic identity, Henkel (2005) identifies a number of significant attributes, with autonomy important amongst these, highlighting that 'autonomy is integrally related to academic identity.' Changes in the structure of higher education has meant that the department an individual belongs to is now not as central to their identity as it once was. Henkel argues, 'The department is now only one, and not necessarily the most secure or important, focus of academic activity and identification.' Becher (1989) stresses the importance of disciplines in academic identity, arguing that academia can be seen as comprising distinctive 'tribes', with their territory established through rules and conventions as significant as the knowledge domain itself.

Turning to aspects of open scholarship, blogs probably represent the most established form. Ewins (2005) uses the postmodern term 'multiphrenic' to describe the multiple identities that authors project, with perhaps a different one for their discipline, their campus based persona and their online persona. It is false to think of any of these as a 'true' identity; they project different aspects of the individual, which are related to the social norms of that context. Dennen (2009) points out that at the genesis of a blog, the academic must make decisions about that identity: What type of tone will the blog adopt? What topics will it cover? How much of the author's personal life should be revealed? She suggests that, just as on campus there exists a set of social norms, so it is online, and the blogger responds to these. These identity norms spread across the highly connected blogosphere 'based on a viral movement of individual actions across blogs.'

These new identities can be in conflict with traditional ones, as Costa (2013) argues, stating, 'Higher education institutions are more likely to encourage conventional forms of publication than innovative approaches to research communication.' She goes on

to suggest that although universities are not opposed to change, their own identity is deeply associated with certain traditions, which are reinforced through 'strategies that coerce individuals to play by the rules' and the creation of certain myths.

Bringing these strands together, we can establish a picture of the open scholar and how their identity relates to practice. The notion of crowd symbols from national identity has an equivalence with central tenets of disciplinary belief, be these iconic papers or methods. As a member of an academic discipline these crowd symbols help define identity. However, as Dennen points out, blogging, and by extension other forms of online identity, have their own social norms, which could be seen as a set of competing crowd symbols. The online identity may also provide a route to re-establishing core academic values such as autonomy.

Open scholars are thus in a rather schizophrenic position. They can occupy two different domains, which may have competing values. For example, the open scholarship community places a precedent on immediacy, sharing small outputs and working through ideas in the open. The traditional disciplinary community places more value on considered, larger outputs and not releasing these until late in the research process. For open scholars the intersection of these sometimes competing social norms can create tension.

By way of analogy, we can think of open scholars as any group in a nation that has a strong local identity which may be at odds with their national one. This can be seen with mountain dwellers, who have a strong affinity with other mountain folk, as well as with their own nation. Analysing those who live in the Swiss Alps, Debarbieux and Rudaz (2008) found that 'mountain people throughout the world – beyond their cultural, religious or political differences – easily feel at one' and that 'A mountain farmer

in the Valais canton has more in common with a mountain farmer in Nepal than with someone living on the Swiss Plateau.’ For those who live in the Alps, they have a dual identity which crosses the various borders, so there is a strong Alpine community which transcends national borders, but at other times, their national identity will have prevalence. For instance, when dealing with weather they are predominantly Alpine, but when it comes to supporting a football team they may revert to their national identity and be French, Italian, Swiss, etc. Many of us have this multiple identity, but it is less complicated for those who dwell in cities. Whilst someone might classify themselves as a Londoner and British, the urban identity operates at a distinct level to the national one, whereas, for Alpine people these identities can intersect and overlap.

Open scholars find themselves in a similar position, having a loyalty to their discipline, but also working within social norms in the open community. By considering the norms of the two communities it is possible to identify tensions and determine the benefits of each in realizing scholarly functions. With regards to the battle for open, academic identity can be seen as an influencing factor in all of the broader movements. For example, open access publishing relates to how a researcher shares their work, and a publication record can be seen as a core element in academic identity for many. Similarly, the use and sharing of teaching content through OERs and MOOCs is fundamental to the identity of educators. Understanding how openness relates to identity and how it is being shaped by online practice may seem like an interesting but peripheral concept, but it will determine the shape of open education. In the next section, this will be explored in more detail by examining how open scholarship can affect one particular practice.

## The Art of Guerilla Research

We are accustomed in academia to conceptualising research as having certain components: it is often externally funded research, and it produces a traditional output such as a journal article or book. We think of research as having a certain 'size' for something to count. One of the implications of open scholarship, though, is that it creates different ways of approaching research. The dominant attitude towards how research is conducted was shaped prior to the arrival of digital, networked and open technologies. Some of that attitude is undoubtedly still valid, but there are also a host of possibilities that are prohibited by remaining wedded solely to that view.

One such aspect is what might be termed a Do It Yourself and Do It Now approach. For instance, establishing a journal was an arduous task that needed negotiations with publishers and a sufficient business model to be workable. For some areas, such as interdisciplinary journals, the projected market might be too small to be economically worthwhile. However, the development of open online journal software such as OJS and Google's Annotum removes many of these considerations. An individual could start a journal in an afternoon. I experimented with creating a Meta EdTech journal (Weller 2011), which republished open access journal articles I selected from other journals (as an experiment into the possibilities rather than as a serious journal). Such a journal could feature original contributions, be experimental in format or create an interdisciplinary journal by republishing existing articles with a commentary. No permission is required to create it, and it can operate at low cost. Of course, one might argue that the presence of a publisher provides legitimacy, but if the individual (or team) have sufficient networked identities, then that creates its own form of legitimacy.

Another form of research might be to create an app; for instance, when a team at the OU created Facebook apps for students (Weller 2007), their working assumption was that they would act as if they were external parties and not have access to any privileged information. Although it required specialist software development in the spare time of one of the team, the apps were developed for no cost and with no permission required. Building apps might be a legitimate means to gather research data.

A third example is the interrogation of open data. Tony Hirst's blog gives many examples of mining data from government sites or social media tools such as Twitter to investigate hypotheses. He investigated how influential spending data was on local council decisions (Hirst 2013), or who was tweeting links relating to a BBC television programme and how they were connected (Hirst 2012). Another approach is to use public writing as a textual source; for instance, travel blogs have proved to be a rich seam of research data, producing articles on identity (Kane 2012), marketing (Schmallegger and Carson 2008) and methodology (Banyai and Glover 2012).

I should stress that none of these examples are meant to supplant traditional approaches to research. They are not superior to them, but in addition to them. They are often complementary also. An initial piece of individual low-cost research may form the basis for bidding for funding for more substantial work.

What is common to all of these, and indeed to many of the open education approaches such as the original MOOCs, is that they do not require permission, except maybe some relating to time allocation. In his review of the film *The Social Network*, Creative Commons founder Larry Lessig (2010) pointed out that it was this removal of permission barriers that was the really significant part of the Facebook story: 'What's important here is that

Zuckerberg's genius could be embraced by half a billion people within six years of its first being launched, without (and here is the critical bit) asking permission of anyone. The real story is not the invention. It is the platform that makes the invention sing.'

This same freedom applies to scholarly practice also, including how we conduct research, disseminate results, and teach. This 'just do it' approach can adopt a term from software development: 'guerrilla research'. Unger and Warfel (2011) argue persuasively for it, claiming that 'Guerrilla research methods are faster, lower-cost methods that provide sufficient enough insights to make informed strategic decisions.'

Guerrilla research has the following characteristics:

- It can be done by one or two researchers and does not require a team.
- It relies on existing open data, information and tools.
- It is fairly quick to realise.
- It is often disseminated via blogs and social media.
- It doesn't require permission.

As stated, guerrilla research needn't be in competition with formal, funded research. In fact it's a good way to get started on this. If a researcher needs to demonstrate to a funder that a project is worth investing in, then being able to show some interesting preliminary findings is useful, as is the ability to demonstrate through illustrative analytics that the blogs and tweets of their initial findings generated a certain level of interest.

Some of the inherent waste in current practice often goes unnoticed, because it is accepted practice that academics have been enculturated into. For example, some researchers can spend considerable time, months even, developing research bids to submit to funders. Stevenson (2013) calculated 3 months for a proposal,

but the Research Councils UK found that 12 days for a conventional proposal was the average (RCUK 2006). The success rates of bids are decreasing as it becomes more competitive; for instance, the ESRC state that only 17% of bids were successful in 2009–10 (ESRC 2010). If a bid is unsuccessful then sometimes it will be modified and submitted elsewhere, but often it is simply abandoned and the researcher moves on to the next one. That equates to a lot of lost time and knowledge. The RCUK report in 2006 estimated that £196 million was spent on applications to the eight UK research councils, most of which was staff time. The number of applications increases every year – there were 2,800 bids submitted to ESRC in 2009–10, an increase in 33% from 2005–6, so this figure is likely to have increased significantly. Some of these 2,800 proposals were studentships, which have a higher success rate, but even taking an optimistic figure of 800 bids accepted to account for studentships, this still leaves 2,000 failed bids. If we take RCUK’s figure of 12 days as an average per bid, then this equates to 65 years of effort, and this is just one of several major research councils in the UK and Europe to whom researchers will be bidding. Obviously this is just an indicative figure, and there are many assumptions in its calculation that one could challenge, but nevertheless, the nature of research as it is currently conceived has a lot of waste assumed within it. This is not to suggest that the peer-review process is not valid, but that the failure to capitalise on rejected bids represents a substantial waste of resources. As with open source software and OER approaches to teaching, open approaches to research may provide a more efficient method.

Many of these bids represent valid research and may fail on technicalities relating to the proposal format. Guerrilla research may represent a means of realising some of these, although in some areas, particularly science, it isn’t possible. However, a more

open approach to research development would reduce the overall wastage. The competitive nature of bidding often precludes public sharing of bids, though, especially in the development stage, and as such, it represents one of those areas of tension between open scholarship and traditional practice.

## Conclusions

Open scholarship could be a book in itself, and there are many aspects of it here that have not been covered. Citizen science is one such area, where academics are developing platforms and approaches to engage the wider public in science have seen great success. For example, projects such as iSpot allow users to take photographs of different species and ask for identification, and this can be used to plot the distribution of certain species. Open data, changes to the peer review system to make it post review, establishing online communities – all of these are fruitful areas of open scholarship. The focus here has been to demonstrate one particular aspect, that of research, and how it can be affected by open practice, but the same can be applied to teaching or public engagement or any other form of scholarly activity.

Open scholarship is not without its issues. Although privacy is distinct – since open scholarship is about choosing to share certain aspects and privacy is about the unpermitted invasion of those elements that one chooses not to make public – many feel uncomfortable with any form of online presence. It may be that having such an identity is now an integral part of being a scholar, so an element of compulsion underlies some of the proselytising about open scholarship. This is particularly true of learners, some of whom may have legitimate reasons for not wishing to establish an identity in the open (for example, if they have been

the victims of cyberstalking). Learning is inherently an uncomfortable process, a learner is moving from a position of (relative) ignorance to one of (relative) expertise. Implicit in this process is exposing some of that ignorance. As even one of the advocates of open teaching, George Siemens (2014), stresses we should not forget the vulnerability of learning. Thus a closed, safe environment such as an institutional learning platform may provide the right context for many learners.

It is, however, also part of the role of education to equip learners with the skills as well as the knowledge they need. Increasingly this will involve the development of digital or web literacies. These are not the subject of this book, but operating effectively and safely in the open and constructing an appropriate online identity will be key amongst them. For example, Jim Groom has founded the Domain of One's Own project out of University of Maryland Washington (Udell 2012). This provides all students with their own domain names and web space. As well as maintaining their own blog on WordPress, they can install other software and 'carve out their own space on the web that they own and control'. They can take over ownership of this when they graduate. Groom sees this level of control, linked to the individual not the institution, essential in establishing an online identity.

It is also necessary to be wary about the downside of operating in the open; there are numerous stories of people being dismissed from jobs for injudicious posting or tweeting, and academics should not feel immune from this. Perhaps of greater concern is the manner in which others may wilfully misuse open debate against the academic. Many educational bloggers take up blogging precisely because it allows them to comment on political issues and the state of higher education. The UK blogger who uses the pseudonym *Plashing Vole* frequently criticises the UK

government and found himself threatened by a national newspaper with a potential story calling for his resignation (Plashing Vole 2013). The story did not run in the end, but even the existence of the threat is enough to make some scholars worry about operating in the open.

The battle for open in terms of open scholarship is less well defined than in other aspects of open education, perhaps because it is a less well defined area itself. It is less a battle with external forces usurping practice, but more an internal one, between existing practice and the opportunities available. The relationship with commerce is one that is less fraught here; academics will use commercial sites such as Twitter, ResearchGate, Slideshare, etc., for as long as they are useful. The functions these support are part of a richer mix of the open scholar's identity, so any one is less vital than the fundamentals of publishing or teaching, where the commercial interests have created greater tension.

The discussion of the identity of open scholars reveals that there is a tension within education itself, which is of more significance. As universities increase their awareness of the value of open scholarship to their own reputational brand, so more of them create guidelines for how to operate. Generally these are helpful and aimed at supporting the open scholar, but as more of the world moves online, so the potential damage from the types of 'Twitter storms' we see elsewhere increases. This creates a possible tension for the open scholar and the institution. The reason many scholars operate in the open is the freedom it offers; this liberty is perhaps the key characteristic of open scholarship, as we saw with the potential for guerrilla research. As with early MOOCs, open access publishing and use of OERs, what open scholarship permits is experimentation and autonomy, and that may be the direction the battle takes in this area.

We have now looked at the four main areas of open education that this book covers, open access, open education resources, MOOCs and open scholarship. In each of these a case can be made for the success of the open approach and its shift into the mainstream of educational practice. Simultaneously, in each area there are issues that arise that are specifically related to the new challenges of openness. The central argument of this book, that openness has been successful but now faces a battle for its future direction, is manifest in each of these four topics, but the exact nature of the success and the tensions varies with each. Having demonstrated the nature of the battle for open in these four specific areas, the last three chapters will return to considering the overall argument.