

Monographs and Open Access

A report to HEFCE

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Executive Summary

Introduction

Monographs and other longer research publications have long been a crucial part of the scholarly communications landscape in many disciplines. In recent years, scholarly communication has itself been undergoing a rapid process of change. The academic community, the research organisations that support it and public funders of research are all questioning whether inherited publishing norms are truly fit-for-purpose in an increasingly open and online age. ‘Open access’, the achievement of which makes publications freely available to anyone with an internet connection, has become an increasingly prominent part of this debate.

HEFCE Monographs and Open Access Project

Having decided to exclude monographs and other long-form publications from its current open access policy on the basis of the advice it received from the Finch Report and from subsequent consultations, the Higher Education Funding Council for England (HEFCE) concluded that there was now a need to examine the issues around open access for monographs in greater detail. The HEFCE Monographs and Open Access Project, of which this report is the main output, has sought to move forward understanding of the opportunities and issues associated with the open-access publishing of scholarly monographs, so that those interested in exploring options for open-access monographs can do so in an informed way. It has done this by grounding the analysis in the wider context of the current status, position and culture of the monograph within most disciplines in the arts, humanities and social sciences.

Methodology

The work for the project was supported by an Expert Reference Group drawn from academics, established publishers, open-access publishers, librarians and funders, together with a small panel of international experts. Together they contributed to the project indispensable advice and debate, but the report itself is that of its author, Professor Geoffrey Crossick, so that the breadth of opinion might be captured and articulated. The project also involved consultation with a wide range of individuals and organisations, a survey of academic opinion, data collection in an area where it is hard to come by, and commissioned work on some key topics.

The current status of the monograph

Monographs, and other longer research publications such as edited books, scholarly editions and exhibition catalogues, make a fundamental contribution to scholarly communication within many disciplines. They offer the space needed to set out arguments and evidence in disciplines where that is necessary, complementing the importance of articles in learned journals. Monographs are not, however, simply a means of communicating research findings. The process of constructing and writing a book is often a core way to shape the ideas, structure the argument, and work out the relationship between these and the evidence that has emerged from the research process. At their best, monographs provoke debate, can shift paradigms, and provide a focal point for research. It is not surprising, as the work for this

report has shown, that the authors of monographs feel a personal connection with the form and content of the works they publish, nor that monographs play a vital role in the careers of many scholars as key markers of esteem and quality.

The project asked whether talk of a crisis of the monograph was justified. The picture for the UK that has emerged does not suggest that there has been a decline in the position of the monograph in this country. The numbers of monographs being published continues to grow. There is evidence that libraries are feeling more constrained in their ability to purchase monographs, but they and academics remain the principal market for the growing number of monograph titles that are appearing. The perception that academic books are not being read, or even read in depth, does not appear to be sustained by the evidence. None of this means that monographs are not facing challenges, but the arguments for open access would appear to be for broader and more positive reasons than solving some supposed crisis.

Opportunities and challenges of open access

This report recognises that open access has a great deal to offer, not least in terms of increasing the reach and impact of research publications and improving both the extent and the character of scholarly communication within the academy. It is very clear, however, that extending open access to books is not easy. From licensing and copyright to business models and quality, the issues that must be tackled are thorny and numerous.

Open access must fit into the framework set by the importance of monographs, and other long research publications, in scholarly communications and academic identity and careers. While it is important that any moves towards open access should seek to replicate the desirable features and essential contributions of the monograph to the production and communication of knowledge, it is important also to identify the ways in which moves to open access might improve on the features, form and function of monographs, enhancing their contribution to the research process and securing their continued value to scholarship. Open access can solve important issues about accessibility, it can enhance the ways in which we publish, use and interact with books, and has the potential to revitalise the academic community's connection with the peer review, publication and dissemination of books.

Business models

There is a need for caution in a number of areas. One of them concerns who pays for open-access monographs. The business models for open-access monograph publishing are very new and many are not well-tested. Academics have legitimate concerns about some of these models, especially those that risk imposing on the academic community what is seen as a regime of paying for publication. Were such a regime to be extended from articles to books, the publication charges might be unaffordable for many arts, humanities and social science academics, not least because the great majority of research in these disciplines is not funded through project grants.

To better understand the advantages and drawbacks of the different models for open access monographs, an independent economic study of them was commissioned (Annex 4) with a view to providing a theoretical basis for evaluating, in economic terms, the various pilots and

programmes that are emerging. Models were assessed according to a set of performance criteria that relate to the strengths and weaknesses of the model itself (quality, sustainability and dissemination) and to the effects that each model has on the overall publishing system (diversity, innovation, and integrity). One conclusion of the analysis of these different models is that a settled system of open access should leave the fragmented business models in the background, invisible to the reader wherever that is possible. If open access is to deliver the benefits that are intended, then readers should not be deterred by the complexity of modes of access.

Moving towards digital books

The report stresses the role of the materiality of the book in ways that go beyond text alone, suggesting one reason why approaches to open access that rely on providing access to the author's accepted manuscript, or any other version that does not include all of the academically essential contents, layout and presentation of the published version of record, might turn out to be much less acceptable than they are for journal articles. It is important that the perceived strengths of the print monograph are recognised. They appear to researchers at the moment as much more evident than the benefits of electronic versions whose potential has had much less time to be explored for books than for articles. If open access is to depend on e-book technology, then technical and process difficulties associated with publishing, purchasing and reading e-books must be overcome. At the moment, e-books and e-readers are not a good replacement for the printed book, and concerns exist about how these might be acquired and preserved into the long term. This is not to argue that further development in the quality of e-books and other digital versions will not narrow the current substantial gap between the scholarly experiences of reading a print book and a digital one, but it seems improbable for cultural or economic reasons that the print monograph will disappear.

Licensing

The various forms of licence for open-access publishing are a major cause of concern for many academics. Beyond permission for basic copying and redistribution, there are substantial differences of opinion over precisely what permissions should be granted under open access. The more liberal licences have much to offer researchers in the arts, humanities and social sciences by giving the reader permission to do an almost unlimited variety of things with the works in question, including printing and distributing copies of papers for students, creating new editions and anthologies, making new versions and translations for new audiences, and much more. It is in this territory that we find the greatest differences of opinion, with some supporters of open access fully embracing these new forms of reuse while others express concern about what practices, including those they see as misuse, might arise if generous and broad permissions are granted. The report concludes that a consensus among academics about the preferred terms for licensing academic material in an open-access environment will be very hard to achieve, and argues that allowing more restrictive permissions may, over time, create the degree of reassurance that will allow a broader consensus to emerge in support of more liberal permissions.

Third-party rights

The inclusion of material in many monographs to which third parties own the rights emerged from this project as a major challenge if monographs are to successfully move into an open-access world. Third-party rights and payment for them are already costly to manage, even with print, and the report makes clear that this is likely to be exacerbated with open access. It is important to emphasise that a problem that has often been thought to apply quite narrowly (above all to the reproduction of images in art history) has emerged during the course of this work to be a significant challenge across a considerable number of disciplines. Resolving these problems will not be easy, and in relation to those for whom their rights are an important source of income it may be extremely difficult, but if progress is not made then research across a significant range of disciplines will face major difficulties in adapting to an open-access environment.

Implications for other stakeholders

While their views and practices are crucial to consider, academics are by no means the only stakeholders who will be affected by moves towards open access, and the report reflects upon the various players in the complex ecology of scholarly communications. Open access has particular implications for universities and their libraries, for publishers and for learned societies, and these implications must be taken fully into account as any practices and policies are developed.

International issues

Howsoever the UK decides to proceed towards open access for monographs, it is clear that it will not be able to act in isolation from developments in other countries, and nor should it do so. Research happens in a global context. Academics collaborate extensively through a wide range of international partnerships and, as individuals, they are highly mobile between countries. Nonetheless, the debate on open access and the ways of introducing it is itself international in scope and, while the UK is sometimes characterised as travelling alone on a journey towards open access for journals, this does not seem to match reality. Moves towards open access are taking place in many countries, in some places rapidly, though the variety of policies and mandates make co-ordination difficult even for journal articles, which has been the focus of most of these developments. Monographs do occasionally appear in the policies of institutions and funders, but they remain the exception. There is therefore an opportunity for policy in the UK, developed wherever possible in collaboration with international partners, to help shape debates and practice more widely.

Policy implications

Where appropriate to do so, this report offers suggestions for how policymakers might approach (and, where possible, start to address) the issues that have been identified. These do not, however, take the form of policy recommendations; instead the report recognises that research funders and others will wish to consult widely on this topic, to ensure that the issues identified by this project have been fully discussed. It is crucial that those involved in the authoring, publishing, acquiring and reading of monographs are fully engaged in the discussion. This is the soundest basis on which any journey towards open access for monographs should proceed. A list of these policy implications can be found in Section 5.

Any future policies for open-access monographs must ensure that, far from damaging the way that people produce and communicate research in the arts, humanities and social sciences, they sustain and enhance it. These are disciplines in which the UK has a very high international standing and one that greatly exceeds what the size of the country and investment levels in research might lead one to expect. The willingness of the arts, humanities and social science community to engage with the work for this report has been both impressive and reassuring. The report concludes that it is important that this engagement continues, because there is much to be gained by working with the grain, and much to be lost by not doing so.

Acknowledgements

One inevitably accumulates many debts of gratitude when working on a wide-ranging report such as this, and I want to acknowledge the very open way that so many people have engaged with the project and contributed to making it a great deal stronger than it would otherwise have been. The first thanks must be to HEFCE for having asked me to carry out the work and for encouraging the open and exploratory approach that I have taken, as well as to the Arts & Humanities Research Council (AHRC) and the Economic & Social Research Council (ESRC) for having given their support to the project. The Steering Group was drawn from these three organisations and the British Academy. I am grateful to its members for their engagement and advice: Steven Hill (HEFCE), Mark Llewellyn (AHRC), Michelle Dodson (ESRC) and Nigel Vincent (British Academy).

The Expert Reference Group, whose members were drawn from a wide range of stakeholders and with an equally wide range of opinions when we started our work, was a pleasure to work with. Its members are listed in Annex 1. Their willingness to engage in open and thoughtful discussion of the issues, and to contribute generously of their time in other ways, has been essential not only for the good atmosphere in which the work has taken place but also for the quality of the report itself. The report may be mine rather than that of the Expert Reference Group, but it would have been a greatly inferior report without their commitment and contribution. I am also grateful to the members of the international panel for their always helpful comments and advice, especially as the work got underway.

The large number of people and organisations listed in Annex 2 have contributed in many ways to the project and I hope that, when they read the report, they will feel that it was worthwhile. I am grateful to them all, as I am to the many organisations that asked me to address them, giving me an opportunity to try out the ideas that were emerging and also contributing to my thinking with their questions and discussion. Many people offered information and evidence on which I could draw, but I would like especially to thank Ellen Collins for allowing the project to shape some of the questions in this year's Open Access Publishing in European Networks-UK (OAPEN-UK) survey of academic opinion and for making her analysis and the underlying data available.

Tamsin Rott at HEFCE provided friendly and efficient administrative assistance for this project. Ben Johnson, Policy Adviser in the Research Team at HEFCE, worked closely with me at all stages of the work and contributed his expertise in ways essential for its success. I am very grateful for his considerable contribution to the project.

Geoffrey Crossick
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1. Introduction

1. This report examines, and seeks to clarify, the range of issues that emerge when we think about the relationship between open access and monographs (including under this latter term other long scholarly publications). It arises from the immediate need of the Higher Education Funding Council for England (HEFCE), and its sister funding councils in the UK, to examine the issues for open access in relation to books in a context where both funding and research councils in the UK have already established open-access requirements for publications in journals and conference proceedings, but the issues are much greater than those of defining the practicalities of mandates and the sustainability of open-access models. Furthermore, although the principal focus of the report is defined by the culture and policy preoccupations of higher education in this country, the international character of research, publishing, and academic careers has to be acknowledged. It is a dimension of the context that will be explicitly addressed in section 4.8 of the report, but it is one that has to be recognised at the outset.

2. If we are to understand the opportunities and challenges associated with open-access research monographs, we need first to understand why the monograph itself matters so much to academics in the arts, humanities and social sciences. We also need to understand what is happening in monograph publishing and whether this constitutes the ‘crisis’ to which many have long referred, a crisis which might be threatening the existence of the monograph and endangering effective research communication in the arts, humanities and social sciences. Only when these foundations have been examined might it be possible to think about the benefits of open-access publishing of monographs and the implications of the variety of business models that have emerged in recent years to facilitate their publication.

3. The motivations for open access to research publications have become very clear over the last two decades. As Suber (2012) reiterates in his widely read book on the topic, the twin developments of digital text and the internet create a huge opportunity for authors to distribute unlimited copies of their work at essentially no cost. The resulting principle that publicly-funded researchers should take advantage of this opportunity has proved a compelling one, and it is a principle that encounters very little opposition. Researchers – as authors who overwhelmingly write to have their research publications read and discussed rather than to earn royalties (Ferwerda et al, 2013, pp. 36-37) – are perhaps uniquely placed to take advantage of this opportunity, widely sharing the fruits of publicly-funded research.

4. Open-access developments have so far been focussed almost entirely on scholarly journals, where authors produce articles, most commonly containing only text and the presentation of data, and where electronic publication is now the norm, whether alongside or instead of print publication.¹ When the transition to open access started taking place, journals were very widely available in digital form, accessed online but normally behind paywalls. The transition to online publication had been a long one involving the development of

¹ Eve (2014a) appeared just as this report was going to press, and does devote a chapter to the question of monographs.

common standards. The subsequent move to open access built on these changes. Policies, practices and business models for providing open access to journal articles are now well-recognised, and have become increasingly well-established, particularly over the last few years in the UK where, in the wake of the Finch report (2012), research funders have placed new requirements on researchers to deliver open access to the outputs of the research that is directly or indirectly publicly-funded.² These requirements have not emerged without debate and, at times, expressions of concern but they now provide the framework within which articles in journals and conference proceedings are made publicly available.

5. While journals have led the way, monographs (and other types of research output) have moved more slowly towards open access. The imperatives for open-access monographs are broadly the same as those for journals, but, as Finch acknowledged, providing open access for monographs is thought to be much more complex and fraught with difficulties than for journals.³ Electronic publication of monographs has not become as widespread as it has for journals (Collins and Milloy, 2012). The monograph world is still dominated by expensive printed books, conventionally seen by many as an essential marker for demonstrating an author's research capacity, quality and achievements (Lee and Selfe, 2008). The monograph is felt by many to be such a crucial vehicle for communicating a sustained piece of research in the author's own scholarly voice that, even though the principle of open access has rarely been contested, debates over the exact parameters of open access have been fierce. Furthermore, the fact that monographs in a significant number of disciplines depend on reproducing, analysing and building upon existing material, such as images and musical quotations, that is covered by copyright means that the challenges to open-access publishing have for some seemed insuperable.⁴ In any case, and in contrast to journals, the place of e-books for academic publications might be growing, but the great majority of research books exist only in print format. The transition to open access is therefore a more challenging one for monographs than it was for journals – a transition to digital access and to open access at the same time. That has to be one dimension of any explanation of why this transition to open access appears to be more difficult for monographs.

6. It is the aim of this report to identify and explore these complexities in order to help those funders, academics, publishers and others who are interested in pursuing open access for monographs to do so in an informed and sensitive way. That will increase the likelihood of building a broad consensus for the way forward. Understanding the opportunities and barriers to delivering open access for monographs, and the merits and drawbacks of the various models that are emerging for doing so, will be a key dimension of this. Equally important will be to understand the place of the monograph within the academic culture of arts, humanities and social science disciplines, so that the important features of the scholarly monograph may successfully be replicated in any moves towards open access. Furthermore, while the UK is rightly seen to be a leading player, it is crucial to recognise that it will be

² Directly through Research Councils UK (RCUK) grants, indirectly through the research block-grant funding to institutions that follows submission to the Research Excellence Framework (REF).

³ The Finch Report recognised the complexities of open-access monograph publishing and called for further experimentation. For the brief consideration of monographs see pp. 44-46.

⁴ As described, for example, by the Association of Art Historians (2013) in its response to the UK Higher Education Funding Bodies' advice letter on open access.

difficult for the UK to successfully act alone. An understanding of the international context in which the UK operates will be essential.

7. While open access for monographs is a relatively recent development, it is hard to imagine that in ten years' time a significant proportion, in all likelihood the majority, of scholarly monographs will not be available in an electronic form, whether or not behind a paywall and whether or not alongside print editions. In that situation the pressure from policymakers, funders and institutions to see the benefits of open access extended to monographs will undoubtedly increase.⁵ It is essential that the arts, humanities and social science community takes a lead in shaping thinking about these issues to ensure that the models that emerge sustain and improve the communication of scholarly information rather than distorting it. It is not the intention of this report to resolve all the many issues but to identify and clarify them, to highlight significant differences of practice and opinion where these exist, and to provide a basis on which to move forward. It will therefore not make specific policy recommendations, but seek rather to establish the basis for a broader understanding of the many issues and challenges involved in introducing a system of open access for monographs. Wherever appropriate, a section on Policy Implications summarises the key conclusions for policymakers.

2. Scope and methodology

8. In developing a policy for open access in relation to the successor exercise to the 2014 Research Excellence Framework (REF), the advice which the UK higher education funding bodies received during their consultations was that the monograph publishing world was not yet at the stage where it could support an open-access requirement (HEFCE, 2014). Having decided to exclude monographs and other long-form publications from its open access policy on the basis of this advice, HEFCE concluded that there was now a need to examine the issues around open access for monographs in greater detail. While monographs would not be required to be open access for the next REF, they might have to be by the one after that (which one might assume would take place in the mid-2020s). In view of the lengthy timescale that is often associated with researching, writing and publishing a substantial monograph, HEFCE decided that it needed to review the issues now in order to be able to consult and move towards policy decisions in the next two or three years. In partnership with the Arts & Humanities Research Council (AHRC) and the Economic & Social Research Council (ESRC), HEFCE asked me to undertake this work.

9. In response to this invitation, I established a project, drawing on appropriate evidence where this was possible, with the following objectives:

- i. To develop an understanding of the scale and nature of the difficulties that are thought to be facing monograph publishing.
- ii. To develop an understanding of the place, purpose and appropriateness of the scholarly monograph within the overall ecology of scholarly communication in those

⁵ The Wellcome Trust in 2013 extended its open access policy to include monographs and book chapters published as a result of its grants, making available funding for publication fees. http://www.wellcome.ac.uk/stellent/groups/corporatesite/@policy_communications/documents/web_document/wtp052687.pdf

arts, humanities and social science disciplines where it plays a significant part. This should include, amongst other issues, the importance of the monograph to scholarly communication and to reputation and career progression.

- iii. To examine the role that innovation in publishing and access models can play in ensuring that the various benefits and attributes associated with the monograph can be sustained and, where possible, enhanced. This will involve examining a range of opportunities, risks, challenges and solutions, which should include an identification and examination of current and emerging models for monograph publishing, with particular reference to open-access models.

10. An expert reference group was established comprising individuals from a range of backgrounds to assist with developing the advice and evidence for this report: academics, established publishers, open-access publishers, research funders, librarians and information professionals, and others with experience in this area. (The membership of the Expert Reference Group can be found in Annex 1.) It met four times during the latter part of 2013 and 2014 to provide advice. The work was also supported by a small group of international experts who were able to provide more information on the international context for monograph publishing as well as advice on open-access issues more specifically.

11. In addition to taking advice from the Expert Reference Group and international experts, advice and evidence was sought from a wide range of stakeholders. These included senior academic managers responsible for chairing university appointment panels and promotion committees; early-career researchers from a range of arts, humanities and social science disciplines; academics from a variety of disciplines including those with specific dependence on research material that had third-party rights owners; learned societies and subject associations, including those with a book publishing role or a prominent interest or expertise in open-access issues; senior figures from the conventional, print monograph publishing world; and a number of librarians and library directors from the UK. (Further information on those consulted is given in Annex 2.)

12. An evaluation of the breadth of these discussions and consultations forms the basis for much of the understanding and conclusions that are presented in this report. A range of evidence gathering and analysis was undertaken to augment the advice received in these discussions and communications. Data and evidence were sought from libraries in the UK and overseas, from publishers of print monographs, and from UK research assessments. A review of the literature on patterns of scholarly communication within humanities and social science disciplines was undertaken (Annex 3) which has contributed significantly to relevant aspects of this report. An economic analysis of the emerging models for open-access monograph publishing was commissioned (Annex 4) whose conclusions underpin Section 4.9. In collaboration with Open Access Publishers in European Networks-UK (OAPEN-UK), a survey of humanities and social sciences academics was issued in early 2014 which, although primarily part of OAPEN-UK's own programme of work, was shaped to provide information of value to this project. The results of one part of this survey can be found in Annex 5, but other findings are drawn on elsewhere in the report.

For the purposes of this report, the term ‘monograph’ has been broadly defined. In the main, the report uses the term to refer to the long academic book on a single research topic, normally written by a single or, on occasions, two authors. The term is also used more broadly to include edited collections of research essays, critical editions of texts and other works, and other longer outputs of research such as scholarly exhibition catalogues, all of which fall within the scope of this report. Edited books, critical editions and catalogues have a character of their own and many of the issues raised in this report will be specific for each of these types of research publication; the report highlights these specificities wherever relevant. It is recognised that tighter definitions will be needed for policy purposes, and this is addressed in the relevant sections of this report.

3. The current status and position of the monograph

13. Academics across a wide range of arts, humanities and social science disciplines see monographs as central to the advancement and communication of knowledge, and they have done so for many generations. Across arts and humanities disciplines as well as law, good monographs are the equal of good journal articles in terms of the importance that is attached by academics to publishing in each category, although in most social sciences a larger percentage consider journal articles to be ‘important’ or ‘very important’ (OAPEN-UK survey Annex 5). When we think about the monograph it is therefore important to avoid the danger of seeing it as an awkward outlier in relation to a mainstream framework of research communication defined by the journals and refereed conference proceedings that dominate the sciences. For a significant part of the UK research community, by some calculations a majority of that community, the monograph and the research book more generally are central to their discipline. Any developing system – whether print or online, behind paywalls or open access – must take account of the strong position of the monograph and of the need to understand how this might be sustained and developed in a changing environment for research communication and publication.

14. It has been suggested, in a thoughtful and valuable report from OAPEN-NL (Ferwerda et al, 2013) in the Netherlands, that the growing interest in open access for monographs is less to do with the benefits of open access and more with the declining position of the conventional scholarly monograph. Other reports support such a conclusion (Steele, 2008; OAPEN-UK, n.d.; OAPEN-UK, 2013). The picture for the UK that has emerged from the work for this report, while not an entirely rosy one, does not suggest that there has been a decline in the position of the monograph in this country and, as a consequence, the arguments for open access would appear to be for broader and more positive reasons.

3.1. The importance of writing monographs

15. In many cases, the most effective way of communicating several years of sustained research on a single topic is to present it as a monograph. This does not preclude the publication of articles en route to the book itself, but the book has a special place in the culture of research publication. It provides the length and space needed to allow a full examination of a topic, with the objective of presenting complex and rich ideas, arguments

and insights supported by carefully contextualised analysis and evidence. The fact that the research data are of a specific character that, unlike in some other disciplines, cannot be replicated or modelled, means that there is a need to present thick description and more direct evidence. Writing a monograph allows the author to weave a complex and reflective narrative, tying together a body of research in a way that is not possible with journal articles or other shorter outputs. As a lecturer in contemporary literature explained to me, “where the journal article allows a scholar to make suggestions, provocations, and establish starting points for research, a monograph enables the scholar to go much further in terms of embedding their research in a larger scholarly, temporal and spatial network.” Equivalent, though not identical, formulations of that same argument can be made for other disciplines.

16. Although there appears to have been relatively little concrete research into this issue, it is widely recognised by scholars across a wide range of arts, humanities and social science disciplines that they are distinctively characterised by internal debate, whose theoretical and methodological approaches have often to be laid out fully in one’s writing in order to examine and critique the arguments and evidence afresh. Monographs are a natural home for this sort of exposition and debate, allowing the author to synthesise arguments and develop new insights in a way that is both embedded in evidence and engaged with wider perspectives. Although it would be a mistake to assume that all monographs remain of importance for many years, it is not uncommon for them to underpin and contribute to scholarship for a considerable period of time, sometimes even decades. Books, perhaps being more durable and long-lived than articles, have come to appear an ideal vehicle for long-term knowledge communication.

17. One of the reasons for the standing enjoyed by monographs is the way in which works of iconic importance have reshaped a field and resonated for decades. In my own discipline of history one has only to think back to EP Thompson’s *The Making of the English Working Class* (1963) or Keith Thomas’s *Religion and the Rise of Magic* (1971), while other works have similarly reshaped specific areas within disciplines and across them. Most humanities and social science disciplines can point to monographs that have led to real paradigm shifts, far more commonly than have journal articles. The ground-breaking, challenging role that monographs can play does make them a neat fit with disciplines that are comfortable with pluralist approaches and the debates that ensue as a way of driving forward understanding.⁶ Furthermore, monographs offer a powerful vehicle for the exploration and communication of multidisciplinary and interdisciplinary research that would not necessarily find a comfortable home in a journal article. In the project’s discussions about the role of the monograph, it was said that researchers tend to know about the contents of journals in their field or indeed sub-field, and awareness of the content of journals is for this reason often less well-known across sub-disciplines. As such, monographs might offer specific value to researchers keen to cross the bridges and explore the interstices between disciplines. It was also argued that journals’ themes, and the strict peer review that often goes with publishing in journals, can make them seem less welcoming of varied ideas or approaches; new themes and methods in scholarship, then, might find a more natural home in books where the author is

⁶ One might add in parenthesis that this also explains why citations are a much less effective measure of judgments of quality in the arts, humanities and social sciences.

freer to explore new territory. The Economic History Society told the project that monographs played an important part in building the evidence base and interest in emerging areas of research, stimulating new work in ways less commonly the case with journal articles. The example given was that of financial history.

18. The term ‘thinking through the book’ emerged through the consultations, and it is a powerful concept, effectively reintegrating the research into the writing process itself. Monographs should not be seen simply as the way in which research findings are communicated, because the act of constructing and writing a book is often a core way to shape the ideas, structure the argument, and work out the relationship between these and the evidence that has emerged from the research process. To illustrate, King et al (2006, p.21) cite an English-language literature interviewee who said that “the medium in which we, ourselves, construct our arguments is book-based”. Thinking through and writing a monograph can help the author to give structure to a body of research, to test out and analyse arguments, and to identify links to other areas of research and directions for future exploration.⁷ It would be wrong to claim that this process is unique to monographs, but it is a defining characteristic of them.

19. This is one reason why academics feel a strong sense of identity with the books they write. It may simply be because of the amount of time and effort that goes into researching and writing a monograph, but it is certainly the case that an academic author can also develop and articulate through writing a book what might be seen as a personal and distinctive voice. This is often presented as a defining feature of academic writing in the humanities and social sciences more generally (Blanpain, 2008); indeed it has been argued that non-English-speaking authors choose to publish in their native language because their “thinking may be deeply intertwined with their language expressions” (Huang and Chang, 2008, p.1824). The self-contained nature of the book may serve in some way as the physical embodiment of the deep patterns of thought and understanding that emerge from a sustained period of research on a single topic; in a very real sense, the book is a part of the author’s identity.

20. Disciplinary differences exist in the importance of the other types of long-form book publication that are covered by this report. Edited collections of original research essays are common across most arts, humanities and social science disciplines, though far more so in the arts and humanities than the social sciences. Chapters in edited collections constitute around 25 per cent of all outputs submitted to REF 2014 in Main Panel D as compared with just 10 per cent in Main Panel C.⁸ In the arts and humanities they were considerably less common in the creative and performing arts sub-panels, and particularly strong in classics and theology, but they were significant across most disciplines. Amongst respondents to the OAPEN-UK survey, more than 70 per cent of academics in anthropology and development studies, modern

⁷ As the Council of University Classical Departments told the project, “Responses to the most important monographs – in reviews, review articles and occasional conference panels – set the agenda for future research projects.”

⁸ This does not take into account double-weighting of books which will have affected the overall number of outputs. Main Panel D broadly comprises arts and humanities disciplines, and Panel C those in the social sciences including law and education.

languages and linguistics⁹, English language and literature, theology and religious studies, history, and music, drama, dance and performing arts said that it is important or very important to publish edited books in their discipline (Annex 5). In the social science sub-panels, book chapters were particularly strong in law and anthropology. Critical editions of texts are particularly strong amongst books submitted to REF 2014 in music, dance and drama; English; modern language and linguistics; and classics, a pattern underlined by the OAPEN-UK survey. Editions of texts are seen as of foundational importance in the relevant disciplines, with a longevity of use that may well exceed most monographs. Exhibition catalogues, containing both interpretive essays and close analysis of individual works, are an essential form of research output in art history for both academics and museum curators.

21. For a variety of reasons the academic rationale for writing monographs therefore remains as strong as it ever was. While the monograph might naturally rise and fall in popularity within and across disciplines, its overall importance is unlikely to be challenged as a result of academics deciding that monographs no longer matter. It is important to note, however, that one consequence of digital publishing of research is that the distinction between articles and books could blur insofar as they are distinguished by length. We are already seeing print experiments with short books¹⁰ but one can imagine a situation where very long articles will be easier to publish as will much shorter books in an environment where length may no longer determine expectations, format or market. McCormick (2013) paints a vivid picture of how such a situation might alter our very idea of what a monograph should be, while others see the attention to digital consumption diverting us from thinking about “what units of scholarly production are feasible and best suited to new forms of transmission” (Fyfe, 2013). Should we care about this? In many ways not, if the consequence is for authors to have greater freedom to settle on the appropriate length of publication for the purposes of communicating their research. Nonetheless, the arguments reported here about the importance of the monograph, both as a form of research process and expression and as a research output, mean that those concerned about the quality of research in the arts, humanities and social sciences should note the danger that the way that the digital environment is used might provide reasons for it to weaken; an outcome that would not in the long term be good for research and its communication.

Policy implications

- Monographs are a distinctive and important way for researchers in many disciplines to communicate their work and establish their academic identity. Policies that affect the scholarly communication system, including policies for open access, should recognise this importance and avoid putting it at risk.

⁹ As the data were gathered on the basis of REF units of assessment it is not possible to distinguish linguistics from languages in the responses. It should be noted that the monograph is thought to be much less important in linguistics than in languages.

¹⁰ The Palgrave Macmillan *Pivot* series of short books is the most prominent example.

3.2. The place of the monograph in individual careers

22. The sustained practice and importance of writing and publishing a monograph is taken to signal an individual's qualities as a researcher in many arts, humanities and social science disciplines. It is on that basis that they are seen to have played, and to continue to play, a significant role in academic appointments and promotions.¹¹ If this has in the past been an important factor reinforcing the place of the monograph in academic cultures, then we need to ask whether it remains important or whether other research outputs and other forms of academic achievement might be becoming more prominent when such decisions are made.

23. As can be seen in the analysis by disciplinary area of responses to the 2014 OAPEN-UK survey (Annex 5), monographs in the humanities are considered to be important in a similar measure to journal articles, though in many social science disciplines more rated the importance of journal articles a little more highly.¹² It has, however, become clear from the consultations undertaken during the course of this project that people feel a pressure to publish journal articles over other types of output, with time pressures and the effects of research assessments being two commonly cited reasons for this shift. If widespread, this would have damaging consequences for monograph production. If appointment panels and promotion committees were to view monographs as less important than journal articles, especially in the context of the arguably less time-consuming task of producing a set of good-quality journal articles for the REF, then one might conclude that the monograph was at risk of falling out of favour in the academy.¹³

24. In discussions with those responsible for chairing appointment panels and promotion committees about the practice of those committees, a good deal of variation emerged between disciplines and between institutions, often with differences in the same discipline across different institutions. In other words, there is no clear pattern and, although it is not unusual for promotions (and even more so appointments) to be made without one or more monographs in a candidate's portfolio, the monograph does appear to remain significant across the arts, humanities and social sciences. While institutions do not formally require monographs as a criterion for promotion, they were thought to be almost essential in certain disciplines, such as history or English. A candidate for appointment with a monograph published, or close to publication, was thought to look stronger in research terms than one without in those disciplines. In others, such as law or economics, monographs were not seen to be a normal expectation.

25. While many of the early-career researchers with whom these issues were discussed confirmed that monographs are an important vehicle for communicating their research (and they all had either published or were intending to publish a book), there was a considerable amount of variation across and within disciplines about how important for one's career it was

¹¹ As illustrated in the work of Estabrook and Warner (2008), whose conclusions, while US-based, will be familiar to many academics in the UK and elsewhere.

¹² It should be noted that respondents were not asked to rank their importance in relation to each other.

¹³ Although it did not specifically ask about form of publication, the findings of Renfrew and Green (2014) that early-career researchers feel the pressure to get a quantity of publications out if their careers are to progress, in the context of other intense demands on their time, might point in the same direction.

felt to be to publish monographs. In English departments, for instance, it was felt that publishing monographs was important for academics' careers within English literature, but the perception amongst early-career researchers was that they were not as important in linguistics. Likewise, in theology and religious studies, monographs would not be expected within some sub-disciplines (where one might reach professor without a book), but in other sub-disciplines writing a monograph was felt to be nothing less than mandatory. These variations provide interesting colour to the findings of the disciplinary analysis of the OAPEN-UK survey results given in Annex 5, which show some variation in the perceived importance of publishing monographs across broader disciplinary groupings. More broadly, the early-career researchers described quite compellingly some of the career-related benefits of writing monographs over other sorts of outputs: they help one to find one's niche, to break out of the constraints of journal themes, and in turn help with establishing the sort of career one wants. More than that, it seemed keenly felt that 'great minds write books', with all the resultant perceived benefits. The strong commitment to, and enthusiasm for, the monograph among early-career researchers was striking.

26. One research-intensive university made available to me in confidence statistics from recent years' promotions. These revealed that a monograph may have been the norm in many arts, humanities and social science subjects for promotion to senior lecturer but some promotions happened without it, and that they were not even always necessary for promotions to reader or professor. They were, nonetheless, broadly the norm across these disciplines, more so for promotions to reader or professor in arts, humanities and law than in social sciences. An interesting additional finding was that those promoted were no more likely to have published monographs than were unsuccessful candidates. Nor did supposed disciplinary differences show up as clearly in this case as one might have anticipated – it was possible to be promoted in history or English without a monograph in spite of the apparent strength of the book in those disciplines, and they were common in economics in spite of their supposedly lesser importance there. This is the picture from just one research-intensive university, but it underlines the need for care in generalising about the need for monographs to secure promotions, in contrast to reports of a growing two-book requirement for tenure in strong research universities in the USA (e.g. in Harley et al, 2010).¹⁴ There are, of course, implications for UK academics whose ambitions might involve posts in other countries.

27. While appointments panels and promotion committees might understand the role and value of monographs across many disciplines, one hears of senior academic managers encouraging early-career researchers to publish journal articles and to increase their research impact in other ways rather than focussing on a monograph. It is unclear how widespread this is and, although it might be too easy to look to REF as the principal driver of advice of this

¹⁴ The Association of American Universities and the Association of Research Libraries have concluded that problems over monograph publishing are endangering 'professional credentialing' in the USA. This is interpreted as market failure and has led the organisations to propose that universities give a first-book subvention of about \$20,000 for the peer-reviewed first books of their faculty members, with these made available freely as digital works by university presses, who would retain the right to sell print and value-added digital versions at their own risk and expense. See the prospectus at <http://www.arl.org/storage/documents/publications/aau-arl-prospectus-for-institutionally-funded-first-book-subvention-june2014.pdf>

kind, journal articles are felt to be favoured by REF managers in higher education institutions: four good journal articles might be seen as less time-consuming to produce than a monograph, and if published in journals of high reputation, might be considered a safer bet for inclusion in a REF submission. Whether this is borne out by the judgments of the REF 2014 panels is something that remains to be seen and might be worthy of investigation by the funding councils in due course. It would, in any case, be unwise for advice given within institutions in this area to ignore the established publication culture of a discipline. Lest this be interpreted as a plea for stasis, it is also important to say that one must guard against the sort of conservatism within disciplines that might inhibit innovation in publication practice. Rutner and Schonfeld (2012) have described in the USA how researchers who would prefer to use digital methods to communicate their research outputs nonetheless publish a printed book because it is necessary for career advancement.

28. Assessing the relative merit of a specific monograph when appointment or promotion decisions are being made is not easy to capture in formal or informal protocols. The value of metrics such as journal impact factors is not universally accepted as a means to identify the quality of a candidate's publication record, but bibliometric tools of this kind are available and are widely used. No such metrics currently exist for books and, in the current conceptualisation and practical use of bibliometrics, it is not easy to see how they might be constructed. Rapid judgements of quality are therefore harder to make, and a book takes longer to read and evaluate by committee members, external assessors or members of REF panels. If a book is published with a well-regarded press, whether a major university press or a high-reputation commercial publishing house, that would seem undoubtedly to help its cause, but the diversity of monograph publishers' records and reputations across different disciplines, as, for example, described by King et al (2006), still makes rapid judgements problematic. The issue of pre-publication peer review of monographs is one that will be dealt with later in this report, but it does raise further questions about whether the fact of publication, as opposed to book reviews and other established forms of post-publication peer judgment, can be taken as a sign of quality in the way that is often seen to be the case with respect to journal articles. There is an additional challenge with respect to any model of open access that did not also see the availability of print copies, which is the view that print monographs carry authority with members of appointments and promotions committees, whereas e-books (whether behind a paywall or not) are seen as in some way inferior. We might anticipate that such attitudes might arise from the vicious circle described by Harley et al (2010), whereby because nobody knows how to judge newer publication formats, nobody puts them forward, and therefore nobody ever learns how to judge them. On the other hand, Richard Fisher (quoted in Steele, 2008) noted, "putting the finished copy of [your book] in the hands of your Dean or Head of Department remains a tangible moment that no click can yet replicate, and one to which tenure and promotional committees in our worlds remain highly susceptible".

29. It is worth dwelling for a moment on the role that the REF process might play not only in shaping the culture and practice of publication but also in the factors that institutions use in making appointments and promotions. Early reports from REF 2014 suggest that books have not decreased in importance in submissions once the possibility of double-weighting is taken into account. The REF does not itself privilege particular outputs over others (although

some academics have argued that even double-weighting does not fully reflect the differential contribution to research made by monographs). But the REF does, in a different part of the framework, place emphasis on the ‘impact’ of research beyond the academic research community itself, and academic senior managers report that a good demonstration of impact, for example by being included in a REF impact case study, offers weight to an academic’s case for appointment or promotion. Research grant income, which is relevant to the REF assessment as well as being of value in itself, and leadership skills are other factors of increasing importance in promotion decisions. Though a good publication record is still considered essential, we might be seeing an increased emphasis on elements other than published outputs in making decisions relating to individual careers, and such a trend is bound to put particular pressure on those outputs that take the most time and effort to produce.

30. In sum, it appears that the members of appointment and promotion committees who are responsible for making decisions relating to individual careers, and those in senior positions who decide what outputs go into a REF submission, understand that different disciplines and sub-disciplines have different ways of assessing the value and quality of an academic’s contribution to research. This may in itself be reassuring, but it is also the case that institutional imperatives, allied with misconceptions about what is expected, might affect decisions by individuals as to whether or not to write a monograph. It is not clear how serious any trend in this direction might be, and the experiences of the early-career researchers to whom I spoke indicate that there is much variation across disciplines and institutions (though they also noted the problem that institutional pressures arising from the REF sometimes conflict with disciplinary practice). The new attention to the impact of research in the REF is a separate issue and one that I would not wish to question, but it must be recognised that the subsequent effects on institutions’ policies and practice might itself influence individual publication strategies in unintended ways. Funding councils need to remain alert to the possible unintended consequences of new elements or processes in the REF for established and successful patterns of research publication and communication in arts, humanities and social science disciplines in which the UK has achieved a very high global standing.

Policy Implications

- Monographs play an important and diverse role in shaping the careers of academics in many disciplines. There are signs that this role may be coming under pressure within institutions, as time constraints and perceptions around the REF come to affect publication choices. Institutions should be aware of the risk of deterring academics from writing monographs in disciplines where they are an important part of research communication, and those developing policy in this area should demonstrate that they have taken into account its possible impact on the ecology of scholarly communication.
- Perceptions that certain outputs are more likely to obtain high grades from REF panels than others might be leading institutions to conclude that monographs are a less secure part of a REF submission when compared with, say, journal articles. HEFCE should in due course publish a breakdown of REF 2014 results by output type at an appropriate level of aggregation, with a view to enabling institutions to develop their own policies on the basis of transparent information.

3.3. Trends in monograph supply and readership

31. The belief in something called ‘the crisis of the monograph’ is often voiced but not greatly examined.¹⁵ At its heart would appear to be a supposed decline in the number of monographs published, the size of print runs and levels of sales, combined with an increase in monograph prices, particularly outside the UK (Steele, 2008), alongside pressure on university library book budgets. The issue of whether monographs are being purchased and read is the demand side of the problem, but the supposed decline in the publishing of monographs is something that needs testing. The size of print runs is of much less relevance in an age of print on demand and the associated reluctance of publishers to incur the cost of large inventories, and is even less relevant in the context of electronic publishing and purchasing models. In any case, print runs in the 1970s and 1980s often bore only limited relationship to likely sales, as signalled by the flourishing of remainder bookshops. In contrast to print runs, the number of monographs published is a very relevant question. Data on new titles were provided for this review by the four largest publishers of monographs in the UK and, although no more than a significant indicator of larger publishing trends, the results for these four major publishers are revealing. They show very significant growth in the numbers of new monograph titles being published by them year-on-year: 2,523 new titles were published by these four publishing houses in 2004, rising to 5,023 new titles in 2013.¹⁶

32. As these data were organised using the subject categories specific to each publisher, precise comparisons of discipline aggregates are not possible. Furthermore, each publisher will have had its own subject priorities which explain significant growth in an area by one publisher but little movement in the same area by another. We can see, nonetheless, some clear overall patterns within the very substantial total growth indicated above. There was strong and above average growth in monographs published in politics, law, sociology, classics,¹⁷ media and communication studies, and geography and environmental studies; and real but more modest growth in English, history and philosophy. Areas of relative stagnation are rare, though for some publishers this included modern languages, while the limited publishing in anthropology probably reflects the importance of other publishing houses in this discipline. Domestic market demand is, of course, not the primary determinant of these publication patterns because the UK is overall and very substantially a net exporter of academic books.

¹⁵ John B. Thompson (2005) pp. 93-94 discussed this decline and shows that a crisis of the monograph became an established belief in the 1980s, but it is difficult to pin the decline down with anything other than anecdotal evidence and it would appear that many of the stories about falling print runs and sales are plausible but hard to back up with evidence. The change that has taken place is over a much longer period than the sense of a current or recent crisis would allow.

¹⁶ The four publishers were Cambridge University Press, Oxford University Press, Routledge (Taylor & Francis) and Palgrave Macmillan. New monograph titles were defined as including edited collections and scholarly editions, but not textbooks or ‘trade’ books intended for the general market. Reissues, new editions and new format versions of existing titles were excluded. This growth was wholly organic and not the result of takeovers. Indeed, recent years appear to have seen an expansion in small, monographic publishing houses.

¹⁷ The Council of University Classical Departments told the project that “monograph publishing is in excellent health in our disciplines... Production runs may be smaller, but the volume of new monographs published each year seems to be increasing. Talk of a crisis seems unjustified.”

33. None of this means that it is not difficult for many researchers to find a publisher for their monograph. Expanding student numbers over the last 15 years (concentrated in arts, humanities and social science subjects) have been accompanied by an expansion of academic staff, most of them on contracts that include research, and the gap between author supply and publisher demand may well have become larger in the same decade that has seen a major growth in monograph publishing. Publishers report that it is harder for what they see as niche books to get published, and the concept of a niche may be broadening as the global market becomes ever more important for large publishing houses. Publishing is itself going through a major transition whose outcome is very unclear, a transition that includes the globalisation of sales, the mixing of print and digital formats, and a recognition that major publishers have to develop a business model that is able to embrace open access.

34. If the decline in monograph publishing turns out to be something of a myth, then what about readership? It is often claimed that monographs lack an adequate level and quality of readership, and that researchers regard the writing of monographs as far more important for themselves and for the careers of others than they are willing to endorse in their own reading habits. It is felt by many that today's scholars lack the time to read books thoroughly, and it is feared that the academic skill of 'deep reading' may become, or have already become, devalued or lost. The emergence of new technologies for information production and retrieval, the ability readily to download book chapters and journal articles, and changing societal expectations around information being readily and instantaneously available, might be compounding these fears that the monograph, and the academic practices that surround it, are becoming an unloved relic of a bygone age.

35. In reality, the perception that academic books are no longer being read, or even read in depth, does not appear to be sustained by the evidence from the OAPEN-UK survey. Academics in the humanities and social sciences are certainly still reading books: nearly two-thirds of those responding to the survey had used a scholarly book for work purposes within the previous week, with 74 per cent of those reading it for research and writing purposes. While only a third of respondents reported that they had read the whole book, only 11 per cent of those surveyed had read one chapter or less, and only 4 per cent of those using the book in their research and writing said they skim-read the book. When considered alongside the finding of Tenopir et al (2012) that academics in UK universities spend around 37 hours per month on scholarly reading, these survey results undoubtedly show that in-depth reading of academic books is still a widespread practice within disciplines.

36. These broad headlines look clear for the readership of books across a wide range of disciplines, but they do not show what might be lying beneath the surface, in terms of how books might be increasingly accessed and read differently for different purposes. While academics might seek to read some books in a relaxed setting, away from the screen and often taking handwritten notes, other books are simply used for dipping into in order to obtain a specific piece of information or analysis, to check a reference or to consult a bibliography.¹⁸

¹⁸ On these different practices, an article by Cheshire (2014) provides a helpful and illustrative personal case study and some valuable reflections on the materiality of the book.

Indeed, researchers will even move between print and digital versions of the same text, using whichever is more appropriate to their research needs (Bulger et al, 2011). While the vast majority of surveyed academics prefer print (a preference that interestingly seems to apply across all age groups), there is no doubt that electronic and online resources like e-books and Google Books offer a useful alternative to scholars not wishing to spend time or effort in the library with physical books. Alongside this, recent years have seen significant rises in the numbers of e-books being acquired by libraries (as shown by data provided by the Society of College, National and University Libraries (SCONUL)). Total e-book expenditure by UK SCONUL member libraries more than doubled, from £8.2m to £16.9m, between 2009/10 and 2012/13.¹⁹ This reflects a notable rise in the use of e-books in education (Woodward, 2014). There are also reports of increased demand for e-books from publishers such as Oxford University Press through Oxford Scholarship Online (Jackson, 2014) and Springer (van der Velde and Ernst, 2009), as well as their increased acceptance more broadly across society as reported by Amazon (Miller and Bosman, 2011). A widespread view is nonetheless evident that e-book technology has not yet reached a point where e-books can entirely replicate, let alone supplant, the functions of print books. It is interesting that for one major UK academic publisher, the growing importance of e-books in its monograph sales is particularly located in those subjects where plain text presentation prevails – philosophy, law and economics.

37. These behaviours and trends represent a clear divergence from reading and publishing patterns for academic journals, with almost all journals now published electronically and with their academic readers comfortable with electronic access (Tenopir et al, 2012). The difference reflects the complex relationship between readers and books, which includes but is not limited to the time needed to read a book properly. While some studies have shown that academics are willing to engage with books electronically (Folb et al, 2011), one is repeatedly told of academic reluctance to engage with the whole of a book sitting in front of a computer or e-reader screen. The acceptability of electronic academic books, and the continuing preference of many for print, must therefore be taken into account when considering open-access models, rather than assuming that an enthusiasm for online journal articles implies a similarly positive response to online monographs. This is an area where there is little systematic evidence, but it must be recognised that if electronic books are a necessary condition of open-access monographs, they might still be insufficient for scholarly use in the current academic cultural environment and with the current technology for reading electronic books. These issues need to be addressed through accessibility and formats if acceptance by readers of open-access monograph publishing is to be secured.

38. While academics certainly continue to purchase monographs, the key customer would appear still to be the university library here and abroad. Its position may be declining relative to other purchasers – a study of the books published by the University of Chicago Press in 2012 showed that something like 47 per cent of sales were to libraries, with music, literary studies and history having the largest proportion of library (and therefore the smallest of individual) sales (Anderson and Blobaum 2014). Their conclusion from this study is that libraries don't have a monopoly on the monograph but are a vital piece of the dissemination

¹⁹ These are for e-books of all kinds and not just monographs. I'm grateful to Ann Rossiter, Executive Director of SCONUL, for supplying these figures.

of humanities scholarship.²⁰ Librarians do not report that academics are not borrowing and reading books, but they do seem increasingly to doubt whether a sufficient proportion of the books that they purchase (whether on academic recommendation or from other sources) are being read. A lack of demonstrable usage on an acceptable scale for the books they acquire undoubtedly puts librarians in an invidious position when facing difficult choices over budgets, especially in a context of rising journal prices and increasing student demand for multiple copies of textbooks. The emergence of a number of new models for so-called 'patron-driven acquisition' (PDA) partly or wholly removes the need for librarians to make predictive purchases of books that might not be needed. A number of libraries, for example that of Cornell University (2010), have undertaken studies that conclude that books as a whole are not being well used, especially compared with journal articles. The story that one university library reportedly ships a proportion of the monographs it buys straight to its offsite store may or may not be apocryphal, but its circulation suggests that it strikes a chord. Consultation with librarians indicates that they recognise the issue. While it is undeniably the case that the rising cost of science journals has put huge pressure on other parts of a university library's acquisitions budget, it has to be acknowledged that librarians seem to be more confident about the demonstrable use of those journals than they do of all the monographs that they acquire.

39. Alongside these reports, it is instructive to consider how university library purchasing patterns have changed over the last decade. The purchasing data provided by SCOUNL are based on a high level of aggregation of book purchases: monographs in the broadest sense cannot be broken down into edited books, critical editions, catalogues and the like, nor can they be disaggregated from textbooks, hard-copy special issues, and many other non-serial purchases. This makes it hard to make conclusive statements from available data about monograph purchasing patterns. It is, nonetheless, clear from the aggregated data that book purchases as a whole have remained stable in cash terms for the last decade, with purchasing moving increasingly towards electronic and patron-driven acquisitions. What is clear is that book budgets are being increasingly dwarfed by expenditure on journals. Expenditure on library resources is increasing, reflecting increasing demand and a growing research base. But, as data provided by SCOUNL show, this increasing expenditure is being almost entirely channelled into journals.

40. Further, it is clear both from the discussions for this review and from national data that library directors are allocating an increasing proportion of their book budgets to PDA in order to make what they see as more responsive, efficient and relevant purchases. For many university libraries this will allow them to satisfy student demand for core texts as well as research demand for more specialist titles, but this does appear to open up a strategic issue for libraries that want to maintain a credible and demonstrable research focus. It has to be assumed that research-intensive universities will be making decisions about how to prioritise book budgets that differ from those whose libraries are more directed at teaching functions, though it must be acknowledged that that distinction might not be as easy as it once was.

²⁰ It also appears to be the case that short-run digital print technology, combined with specific backlist reprinting, has led to the growth of individual over institutional purchases.

Nonetheless, the fact that library directors from Research Libraries UK report that book budgets are increasingly being moved to PDA is instructive.

41. In interpreting what we have been able to establish about usage of monographs held by university libraries and changing patterns of their acquisition, two points must be borne in mind. The first of these is that evidence of lack of usage of a monograph over a short timescale does not in itself indicate that it should not have been acquired. The usefulness of research publications in general and monographs in particular is very hard to measure but, even acknowledging this, the average usage half-lives for journals in humanities and social science disciplines can be as long as 56 months (Darley et al, 2014)²¹, while academics in these disciplines can readily point to books that have been cited decades after their initial publication, often disappearing from view before re-emerging many years later when their importance comes to be newly appreciated. As we have seen, the pace of knowledge development and production can be more measured in the arts, humanities and social sciences, and this means that books must be understood best as a vehicle for long-term knowledge communication, preservation and curation, rather than solely as an asset for short-term exploitation and with an associated short shelf-life.

42. The second point to bear in mind is that university libraries, while clearly a very important customer for monographs, are not their only customer. The OAPEN-UK survey reveals that many academics prefer to buy their own books: nearly half of those surveyed said they had bought their own copy of the last book they read. This echoes the earlier work of Tenopir et al (2012) that found that the library is not the main source of book reading, with a range of possible reasons given for this including, importantly, speed of access to and lack of availability of library books. Irrespective of library availability, it is clear from the consultations for this project that academics prefer to own books of which they expect to make use over a long period or which they intend to use intensively, highlighting passages, scribbling marginalia, turning down the corners of pages and inserting handwritten paper notes.²² Many doubtless also see a well-stocked personal library as an important part of their academic identity, thus reminding us that academics are not immune to the role of material culture and memory in the construction of identity. Academics remain an important market for research monographs in their print form.

43. University libraries are, nonetheless, undoubtedly a significant customer for academic monographs, and if libraries were no longer to buy monographs we might indeed face a crisis. But libraries are still buying books, even if their purchasing and access models are changing. The situation facing the monograph publishing ecology is in any case clearly more nuanced than might be thought by examining UK library purchasing trends alone, with personal purchases and global markets playing a significant role. Any move towards open-access monographs would take place within this context. Monographs continue to be highly valued

²¹ This is on the basis of downloads from journal publishers' websites. These results are subject to two qualifications. The first is that average half-lives do not capture the considerable variation within disciplines. The second is that older articles are often sought from archive sites such as JSTOR, and one might assume that including them would make average half-lives even longer.

²² A conclusion also reached for the Netherlands (Ferwerda et al, 2013).

by academics in most of the arts, humanities and social sciences, and to represent a real growth area for publishers. Nonetheless, as long as university librarians continue to face tough choices about what to buy, monographs will continue to be perceived as being at risk in one of their key markets.

Policy implications

- Monograph supply and production appear to be in reasonable health. Although library purchasing models are changing and budgets are under pressure, personal purchases and global markets are a significant driver of demand for monographs, and people are still reading them. In developing policies for open access it is important that it be seen not as a response to crisis but, rather, as a way to increase ease and range of access and thus to improve scholarly interaction and communication.

3.4. Assuring and demonstrating quality

44. A picture is emerging of important characteristics of the monograph which will have to be sustained or replicated in any moves towards open access. This requires us to understand how value and quality are currently attributed in the world of print monographs. The conclusion that emerges from the consultations is that very few academics think that it is enough simply to put one's book up on the Web and leave the reader to judge its quality. Certain standards need to be preserved in order to signal the value and quality of a monograph to potential readers, as well as to others with an interest in judging its quality.

45. Quality is currently attributed to a particular monograph through a number of primary mechanisms. There is the assurance given by pre-publication peer review for publishers, as well as the reputation of the imprimatur which may be either the press that publishes the book or the series that houses it, often both. As one academic in theatre studies put it to me, "as with stage productions, the venue is all-important". Post-publication peer review in its established forms is also of considerable importance for monographs, above all the long-established system of book reviews commissioned by journals whereby specialists provide an important further signal of relevance and quality to potential readers. The problematic delay in publishing these is receding with online access, and it must be recognised that in these disciplines an established system of post-publication peer review has supported evaluation of quality for monographs for many years without discomfort. The development of other forms of post-publication peer review through blogs and online forums is a more recent phenomenon. Pre-publication peer review may be the undoubted gold standard, as it is for journal articles, providing public assurance that the work has reached a quality threshold appropriate to the place where it is published. No disagreement has been found with the idea that rigorous peer review should be an integral part of any current and future monograph publishing model, including any open-access monograph publishing model. This is perhaps unsurprising, and partly lies behind the accepted role of learned societies and subject associations as publishing custodians within many disciplines. It also explains why all the major initiatives for open-access scholarly literature insist on the importance of peer review

(Suber, 2004), something emphasised by the first definition of open access itself (BOAI, 2002)²³ as well as by the Directory of Open Access Books (DOAB) which makes it a requirement for listing in the Directory that “Academic books in DOAB shall be subjected to independent and external peer review prior to publication.”

46. There are, nevertheless, doubts about the sustainability and indeed rigour of current peer review practices for print books.²⁴ A widespread view emerged during the project that peer review is not been undertaken as thoroughly for books as for journal articles, and that in many cases and for some publishers it is only the proposal, and perhaps a sample chapter, that is reviewed as a basis for contract rather than the final text. Publishers report that it is increasingly difficult to find academic experts willing to review manuscripts, with informal methods such as web searches having to be used to find those to approach. It would be difficult to know how widespread this decline and these practices are, but they signal a broader set of doubts about the rigour of peer review for books. A willingness to undertake peer review for publishers, which has never been well remunerated, has generally been undertaken by academics as a contribution to the collegiality of the research community in their discipline. Increasing pressures on academics may be one explanation for their apparent reluctance now to take on this role. In these circumstances, it is even more understandable that series with an established publisher and edited by respected researchers have a particularly strong role in demonstrating quality to potential readers.²⁵

47. Experimentation with new models of peer review for books has emerged over the last few years, including ‘open’ peer review (where the reviewer’s comments – and sometimes their identity – are made public, making the review process transparent), and a new version of post-publication peer review (where peer review is not a prior condition of publication and comments and improvements are made to the manuscript in the public forum of the Web). The most notable of these experiments is the 2009 pilot of open peer review undertaken by Kathleen Fitzpatrick for her book *Planned Obsolescence*, with the pre-publication draft openly presented and refined through CommentPress on the Web, where it remains today with all reviewers’ comments still visible (Fitzpatrick, 2011). The content of Fitzpatrick’s book itself provides a valuable commentary on this issue, concerned as it is to probe the limitations of existing publishing frameworks and the need to adjust to new possibilities that are as much intellectual as they are technological. More recently, traditional print publishers, such as Palgrave Macmillan in 2014, have begun experimenting with new forms of peer review for scholarly monographs, inspired to do so by the introduction of the open review process for a number of scholarly journals, especially in medical sciences. Palgrave

²³ <http://doabooks.org/doab?func=forPublishers&uiLanguage=en>

²⁴ These doubts are separate from any long-expressed concerns about the necessary subjectivity and inherent biases of peer review systems more generally, as described for example by Mahoney (1977), Weller (2001), and more recently Eyre-Walker and Stoletzki (2013).

²⁵ It is interesting to note that in discussions with early-career researchers on this topic, some felt that the less rigorous peer review of books might be an advantage for authors. It was felt to create a space for exploring new ideas and approaches that might not neatly fit into a journal theme (and if submitted to a journal might have to align itself with the journal’s specific theme and approach as a result of peer review).

Macmillan reported that surveys of their authors showed a wish for the peer review process to be broadened.²⁶

48. It is clear that peer review serves a very important role for the academic community in assuring the quality of monographs, notwithstanding some concerns with regard to current practice, and it must be sustained and developed in any open-access publishing environment if open access is to command respect and secure acceptance amongst researchers. There is no compelling reason why peer review should not be an integral part of any business model for open-access monographs, and any publisher interested in securing a lasting foothold in open-access monograph publishing is likely to be keenly interested in ensuring robust pre-publication peer review of the books they publish. In any future business models for open-access monographs it is clear that the research community would expect that peer review be effectively resourced, and any significant increases in peer review fees would be unlikely to be achieved unless built into their cost structures. Having said that, it is clear that open-access publishing offers opportunities for trialling more open forms of peer review, as the full power of the Web may be brought to bear on the review process. As Suber (2012) notes, “[open access] is compatible with every kind of peer review, from the most traditional and conservative to the most networked and innovative.” It would be unfortunate, therefore, if academic fears over the quality of open-access books served to discourage this kind of experimentation by both existing and new publishers, experimentation that might ultimately reinvigorate the culture of peer review for monographs by rebuilding the community commitment that has in the past sustained it.

49. In considering the relative qualities of the various models for peer review, one feature that distinguishes traditional, ‘blind’ peer review from some of its newer cousins is its reliance on anonymity to guarantee the impartiality and integrity of the review process.²⁷ Anonymous processes require trusted intermediaries, and this intermediary role is currently, on the whole, carried out by publishers and their book or book series editors who act, via the process of peer review, as ‘gatekeepers’.²⁸ The reputation of the publisher or series that houses a given monograph often becomes a disproportionately important factor in signalling the strength of the work, and more: the brand value is felt by many academics to be a useful proxy for the quality of the published work. In this way, brand may have come to serve as a loose guarantee of academic quality and a shortcut for readers: buying and reading a book is costly, and potential readers may have come to trust certain imprimaturs and book series as producing monographs worth their time and money. Whether or not this confidence is justified is another matter, and it may be susceptible to the same criticisms as those being levelled at big brand journals (see, for example, Shekman, 2013).

²⁶ See the report while the experiment was still underway at <http://blogs.lse.ac.uk/impactofsocialsciences/2014/02/28/palgrave-macmillan-open-peer-review-for-book-proposals/>

²⁷ For a critique of anonymous evaluation in relation to journal articles see Kriegeskorte, Walther and Deca (2012).

²⁸ A term notably featuring in Coser et al’s 1982 description of the book trade. Thompson (2013) argues that ‘gatekeeper’ is a problematic term when applied to publishers as it implies a passivity that does not reflect today’s proactive practice. It is nevertheless a widely-used shorthand term.

50. Brand has an important but complex place in the monograph ecosystem. The most obvious complexity arises from the fact that publisher decisions about whether to accept a book proposal or manuscript for publication are based not only on a judgement of its quality but also on judgements of economic risk and opportunity. Factors such as the author's reputation and track record, the book's timeliness, and the lack of competition in the marketplace all play a part in this decision, as does capacity within the publishing operation to organise and market the book's publication. While publishers will operate in terms of their own thresholds of academic quality, it should be obvious that these other factors complicate the ways in which brand might serve as a proxy for that quality and with it the reputation of the books published within that brand. As Meredith Morris-Babb, director of University of Florida Press has commented, "no-one's promotion should depend on our business model" (Morris-Babb, 2011).

51. Whatever the other functions that a publisher plays in the production and circulation of monographs,²⁹ it must be accepted that the proxy of brand value plays a significant role in communicating the quality of monographs to potential readers. As long as this situation pertains, widespread moves towards open access for monographs will be highly dependent on the behaviour of large, well-established and well-regarded publishers as well as of their series editors and of the learned societies and subject associations whose book series they often publish.³⁰ As far as these latter are concerned, the symbiotic relationship between the generally major academic publishers and the learned society, with the latter's own standing and practices providing a key editorial guarantor of quality, need not be threatened by a transition to open access.

52. This discussion of brand value and peer review is intended to provide the context for understanding a key part of the landscape within which the monograph sits. It should not be taken in itself to define the role of publishers, whose contribution to the research dissemination process is necessarily much wider in ways that are recognised in later sections of the report. It is a recurrent feature of debates around open access that the role and contribution of publishers are questioned, and a view is sometimes put forward that the only meaningful role of academic publishers in future will be to manage the peer review process (Harnad, 2003). This view is associated with arguments for the wholesale upheaval of the conventional publishing model, with a number of solutions proposed (which for peer-reviewed monographs might include the publishing of books and book series by university presses or society operations)³¹. The feasibility and sustainability of such solutions is considered in section 4.9 of this report concerned with business models.

²⁹ These functions are well-enumerated elsewhere – Anderson (2014) lists some 82 of them in the context of academic journal publishing – but the main ones are considered in a later section of this report which looks at the various business models for open-access monograph publishing.

³⁰ A similar dependency has arisen in open-access journal publishing where major publishers have taken significant steps to introduce open access options, and have as a result been the main beneficiaries of article processing payments granted by The Wellcome Trust (Brook, 2014).

³¹ Such proposals are not new, and date back to the earliest incarnations of open access envisioned by, among others, Stevan Harnad.

Policy implications

- Peer review is a necessary part of academic publishing, and the development of open access should be on a basis that supports rather than undermines it. Open access offers an opportunity for more diverse models of peer review to be trialled. Policymakers should monitor these developments as part of monitoring the developing business models for open access books.
- Publisher brand is seen by academics as a proxy measure for quality. Although this is not necessarily unproblematic, for as long as publisher brand plays this role, the development of open access for monographs will require the contribution of reputable and well-established publishers. Policymakers should establish a dialogue with publishers to facilitate their continued engagement.

3.5. Limitations of the print monograph

53. The monograph has a distinguished history and there are few who doubt that it has a significant future in most disciplines in the arts, humanities and social sciences. We know the monograph through its print version and, as we have seen, those features bound up with the materiality of the print book are a fundamental aspect of its success and of the importance that researchers and other readers attach to it. Yet the print monograph inevitably has its limitations, as does any form of scholarly communication. While it is important that any moves towards open access should seek to replicate the desirable features and essential contributions of the monograph to the production and communication of knowledge, we should also identify the ways in which moves to open access might improve on the features, form and function of monographs, enhancing their contribution to the research process and securing their continued value to scholarship. This means reflecting on some of the limitations of the print monograph that have been identified in the course of this project.

54. It is hardly surprising that the single most important issue is that of access. Copies of an individual print monograph are necessarily finite in number, and this in reality limits readership which requires a physical copy of the book to be within a potential reader's reach. In a context where people have come increasingly to expect near-instant retrieval of an extensive range of electronic information in a way that is independent of location, the print book has obvious limitations in terms of both discoverability and access. It is noticeable that an increasing proportion of researchers seem to see a journey to a physical library as an exceptional part of the research process when, even a decade ago, it was the norm. Conversely, it is true that there are circumstances in which print books could be not only more desirable to read but in some circumstances more accessible – for example for readers without an internet connection, those unable or unwilling to use e-books, and readers who might stumble across the print book in a bookshop or indeed through serendipitous discovery in the open-stacks of a library, though these may be less common than they once were. In circumstances such as these, print publishing is at an advantage over electronic publishing. However, this advantage will inevitably reduce over the next decade as high-speed internet access gets closer to becoming universal in the UK and as e-readers become more reader-friendly. While print publishing will, for many, continue to play an important role in accessing both historic and newly-published books, electronic publishing can only enhance the accessibility of books, even if it does not wholly replace print.

55. Another characteristic of the print monograph that might also be seen as a limitation is its fixed, physical, inflexible form. An academic monograph is often a heavy hardback book, printed in a fixed typeface, with a fixed size and layout. These material aspects of the book are often its attraction, with the author having a degree of control over the layout and other aspects of the book's physicality in the belief that the aesthetic and other presentational attributes of their book can affect how its content is viewed by their peers and by other readers. This appears to be a much more serious issue for books than it is for journals, where electronic publishing is normal and where text and image placement, along with other aspects of visual grammar, are not generally felt to be either within one's control or a matter for significant concern. An implication of this emphasis on the materiality of the book in ways that go beyond text alone suggests one reason why approaches to open access that rely on providing access to the author's accepted manuscript, or any other version that does not include all of the academically essential contents, layout and presentation of the published version of record, might turn out to be much less acceptable than they are for journal articles.³² This potential problem might also be extended to the 'freemium' models of open access which will be considered in section 4.9. If we accept that these book-specific attitudes and behaviours are rather more than mere affectation, then clearly print books will continue to be strongly favoured by authors. Any system of electronic publication, whether through open access or behind a paywall, will need to take account of these strengths of the print book. Yet this very materiality can itself present problems, including serious difficulties for people with visual impairment or other disabilities. They also present a logistical challenge to anyone needing to work on the move while dealing with several books at a time. Above all, as far as this report is concerned, they stand as a possible reason for hesitancy in the face of electronic open access. It is important that these perceived strengths are recognised because, at the moment, they appear to researchers as so much more evident than the benefits of electronic versions whose potential has had much less time to be explored for books than for articles.

56. The print book nevertheless has further functional limitations, and these will appear again when we turn in the next section to consider the opportunities offered by electronic and open-access publication. Publishers cannot embed video, audio, interactive graphs and databases and so on into a print book – separate media are needed for this. Publishers cannot 'push' updates, addenda or other minor corrections to a print book – for these a new edition must be produced and purchased. Readers cannot make extensive notes directly into the book – separate media are needed. Readers cannot be transported seamlessly to different sections of the book or to external sources – page numbers and other references must be tracked down manually. Brief searches for keywords are possible, via an index, but are slow and sometimes not successful or exhaustive, especially as the character and rigour of indexes change.³³ Detailed textual and semantic searches, text-mining and other analytics of print are largely

³² Fyfe describes this challenge in these terms: "... 'reading' a paper book was never really just reading, but a complex mixture of nonlinear information uptake, manual annotation, on-the-fly mnemonic indexing, ocular collation, and ambient findability. To describe reading with such techno-jargon is to defamiliarize the book as itself a technology – and one whose complex feature sets have been ignored in favour of its apparent 'text'." (Fyfe, 2013)

³³ Earlier surveys of academic readers reveal in-text searching as a core advantage of e-books (Chu, 2003; Jamali et al, 2008).

impractical if not impossible. Multi-work reference searches and bibliographic comparisons must be done manually, making initial literature searches time-consuming. It must be recognised that many of these activities and functions are not yet as widely available in electronic media as they might be, but electronic books offer the potential for this kind of enhanced engagement to become easier over time.

57. The print book is in reality, and in a variety of ways, costly. Monographs are resource-intensive to produce, transport and store, and are generally expensive to buy. They also bring with them environmental challenges, though it is arguable whether these are more serious than those involved in the resources needed to produce and acquire the technology and equipment to provide fixed and mobile electronic access to texts. Books also require physical storage space, which is an increasing problem for libraries and the universities that often house them and one which is in urgent need of solution.³⁴ As far as library space is concerned, the UK Research Reserve success with respect to print journals is proving more difficult to replicate for books. In any case, this would only address legacy collections which means that digital monographs, whether through open access or paid-for e-books, are seen as one way forward.

58. While the evidence is hard to come by, it is frequently said that the price of monographs has risen significantly, explained in part by the reduced print runs and sales over which first-copy costs have to be spread. Print on demand may reduce the resources tied up in inventories of unsold books but they will not eliminate the overall cost pressures. In any case, book prices are based on a variety of factors of which the costs of production are only one. It is illuminating that some have viewed electronic books as the obvious solution to these cost issues: in this perspective electronic publishing will serve primarily to make books the equal of journals that have, largely, superseded them on grounds of cost-effectiveness (see, for example, Dunleavy, 2012).

59. Print books clearly have limitations, some of which might be solved by a combination of e-books and open access. Print books do, nonetheless, seem to enjoy several distinct advantages over e-books, not least the fact that 87 per cent of academics clearly prefer to read print (OAPEN-UK, 2014). This section has dealt with the limitations of print, but e-books have their own challenges to overcome, not just cultural but also around reliability, versioning, ease-of-use and preservation. These challenges will be examined further as we turn to the complexities of delivering open access for monographs.

60. Before doing that, it is important to underline the fact that the print book is likely to continue to be published within or alongside any future system of online open access. It seems to be clear not only that open access must not replace print, but that there is no reason for it to do so because open access can achieve its goal of increasing accessibility without eliminating the print books that academics and others continue to value. In examining the significance attached to the print book we have identified both cultural and scholarly reasons for it currently to be seen as superior to digital versions. Although some of the cultural

³⁴ For the space challenges that university libraries are facing, see CHEMS (2005), and Matthews and Walton (2013). For the US see Payne (2007).

dimensions will inhibit academics' willingness to accept digital open access these concerns might be expected to reduce over time, albeit slowly. It is the scholarly reasons that are more powerful, bound up with the academically important features of the print book that have been identified in this report. Insofar as digital versions are able to replicate the academically important aspects of the materiality of definitive print editions - aspects such as layout, content and presentation - they will be able to serve their scholarly purpose. The fact that this is seen as a greater challenge for monographs than for journal articles does not mean that it cannot be achieved.

61. It is, nonetheless, not the case that the print book is likely to disappear in this environment because academics and others will continue to wish to acquire or in other ways access it.³⁵ What is known as 'freemium' open access may be the most likely way for this to be achieved, with the costs of open access being supported by the sale of printed (often print-on-demand) versions of the book. The key issue is that the digital version must itself meet the core scholarly requirements flowing from what has been called here the materiality of the book to ensure that it is not a significantly inferior product for the purposes of effective scholarly communication. The open access version must be sufficient for the academic requirements identified in this report, so that the print version will be for those who want, for whatever reason, the physical object.³⁶

Policy implications

- Notwithstanding the limitations of print books, limitations that electronic publishing will be able to address in the long-term, they currently have clear advantages over electronic ones for academics and non-academics alike. These advantages are likely to remain for a considerable period of time. In these circumstances the continued availability of print monographs will be necessary, and policymakers should recognise that the availability of print books will be a necessary part of an evolving open-access publishing environment.
- There are material characteristics associated with the printed book, its layout, design and non-verbal content that often make it significantly more than the text alone, and these characteristics are part of its ability to communicate and shape what it is that is communicated. It will be important for systems of open access to acknowledge these key aspects of the book. This means that approaches which make available a version other than the published version (e.g. the author's accepted manuscript) will be less acceptable and, in all likelihood, less successful than they are with respect to open access for journal articles.

4. Open-access monographs: opportunities and challenges

62. One often encounters the view among academics that open access for monographs is a laudable aim in principle, but that the practicalities of delivering it make it not only difficult but for some undesirable. This may emerge from an anxiety born out of the mandates and

³⁵ It should be noted that a similar conclusion was reached in the study carried out for the Netherlands (Ferwerda et al, 2013).

³⁶ Or, indeed, an enhanced and paid-for e-book.

methods developed for open access in journals in the UK, but it must be recognised that there are specific problems that are thought to be associated with monographs. I should add that the work for this project has not found the degree of hostility to open-access monographs that has been voiced by some in the arts, humanities and social sciences with regard to open access for journals, and there appears to be an openness and willingness to resolve the problems. This is encouraging and this appears to be in part rooted in the decision to commission this preliminary report as a prelude to further consultation. The aim of this section of the report is to set out the current issues and challenges that must be faced by anyone considering how open access might work for monographs, in order that they might be addressed in an informed way as practice and policy develop.

4.1. Opportunities of open access

63. Before getting into the challenges, it will be important to reflect on the practical advantages and opportunities offered by open-access monographs, not just because these help us to form a sense of what we might stand to gain from any move in this direction, but also because they help us better to understand the wider set of drivers behind open access for monographs. This section will, inevitably, draw on some of the issues raised when looking at the limitations of print monographs in the last section.

64. Many of the benefits of open access more generally have been well described by others (Willinsky, 2009; Suber, 2012; Finch et al, 2012) and do not need to be set out in great detail here. A number of particular advantages jump out with respect to monographs, of which access to research is the most obvious. Open-access books, freely distributed across the Web, can provide a way for academics and non-academics alike to engage with scholarly material without the obstacles presented by price, location or copyright (other than the limitations imposed by chosen licenses); as a consequence, their wider use, readership and non-academic impact can be increased. Academic books, giving a more comprehensive and rounded view of an issue or research area, are arguably often more approachable to non-academics than articles in scholarly journals. As such, there is potential for books to reach a wider audience beyond the academy, and open access can help to deliver that potential. Through open access, the reach and impact of monographs can be substantially increased. This includes making them widely available in less economically developed countries, although it should not be assumed that online open access would be as beneficial in all such regions as is often assumed. Discussions of these issues in relation to Africa, for example, have concluded that (with the exception of South Africa) a variety of forces in African universities and society may continue to favour print circulation for some time.³⁷

65. Open-access books are more portable than print books, able to be accessed anywhere from a computer to a mobile phone to an e-reader, and they cost very little to store and transport. They also have this advantage over proprietary e-books that often require a

³⁷ Factors including library IT expertise, internet download times, systems for sharing print publications and the cultural attachment to the authority of print all contribute to a more complex environment that might for some time limit the impact of open access. I am grateful to Stephanie Kitchen for reporting on the African Studies Association of the UK's stream on publishing at its 2014 conference.

dedicated e-reader. While to some extent dependent on e-book technology, open-access monographs in many if not all respects have the potential to be more user-friendly than print books, and even than some proprietary e-book formats. Their openness allows them to be adapted for a range of viewing and screen-reading preferences, allowing them to be tailored to fit people's specific requirements, and to be done so independently of publication venue and format. An open-access book need not be restricted permanently by the limitations of today's e-book technologies: versions stored in standardised, machine-readable BITS-XML can in theory be converted to any future format.

66. Open access can also solve some more basic academic issues with print, for example, the time-consuming manual cross-referencing and comparing of bibliographies that a literature search requires. Open access books might instead be passed through software that can identify common sources and regular references, and compile a prioritised reading list in seconds.³⁸ Text-mining would become readily available. Open access to monographs might also address concerns associated with other forms of electronic publication: there are fears that the practice of selling individual chapters of e-books (often with their own keywords and search terms to aid discovery) might lead to the dissolution of the monograph as understood within the culture of the monograph explored throughout section 3 of this report. It may be likened to the impact of iTunes in shifting the music industry from the album to the song. In this way, the long-form publication might survive only notionally, with increased incentives to read it only as a sub-set composed of one or more individual chapters. If the whole book is available through open access, then some key drivers behind this chapter-by-chapter approach will be removed. However, it has been noted by Bunz (2014) that the Web searchability of digital books leads readers to stop perceiving books as 'something with a beginning and an end', with publishers looking to increase the number of 'entry points' into a book to draw in readers. If reader attitudes and behaviours are moving more broadly in this direction, this has implications that reach beyond open access. It might be that open access to books can help remove one driver towards the supply of books in a more fragmented form, but it is unlikely to remove the numerous other drivers towards fragmented consumption.

67. There are clear advantages to the online publication of scholarly editions of texts, in literature, classics and other disciplines where such editions are a fundamental research output.³⁹ Technology has made possible new forms of publication, such as hypertext variorum editions, that have been seen as expanding the definition of scholarly editing. In works of this kind, the version to which open access is provided will be of particular importance. This is because the final presentation of the text and paratextual materials in a precise form is central to the value of the work. The broad benefits of making scholarly editions available electronically are clear. And at a time when students and others can currently access online what are often inaccurate versions of a text, making high-quality scholarly editions freely

³⁸ For thoughts on this issue, see <https://www.martineve.com/2014/06/03/a-research-tool-i-want-but-probably-wont-get-cross-referenceintersect-bibliographies-of-books-and-articles/>. These are the kind of activities for which UK academics surveyed in 2012 preferred online monographs, whereas for in-depth reading they preferred print versions. (Housewright et al, 2013)

³⁹ This paragraph draws on advice received from University English (formerly CCUE).

available might help eliminate the danger that Gresham's Law, articulated in the 16th century for coinage⁴⁰, might need to be extended to texts.

68. In higher education, open access allows for the creation and distribution of course materials from multiple sources quickly, easily and lawfully (Suber, 2012, p. 99). With the permissions provided by some open-access licences, multiple book chapters might be combined into a single resource to be distributed to students on a course. A reading list (or at least those parts available electronically) might be compiled into a single .pdf or .zip file and uploaded to a web-page or emailed to students. Books and book chapters can even be filled with digital notes, comments and hyperlinks from the lecturer, before being distributed to students or packaged into a new reference tool.

69. More ambitiously, open access also allows authors, readers and reviewers to make direct revisions to the monograph, or to offer comments and proposed additions, with the Web facilitating the book as an open-ended 'living' document. In this way, open access offers opportunities to reinvigorate the peer review of books through more transparent processes of feedback and improvement conducted in the medium of the Web. But more than that, open-access monographs, as an integral part of the Web, can allow communities of academics to come together in discussion of a monograph in an online space, sharing notes and insights with the open-access version always present, comparing interpretations of particular passages or chapters freely copied and dissected, and linking new evidence and thinking directly to the book text. In these ways, open access can foster and enhance engagement and collaboration between researchers, authors and others, allowing the book to take new forms, find new audiences and attain a vibrant fluidity not possible in print. In recognising the potential here, it must be recognised that hardly any of these ideas and innovations are yet proven, either in technological or cultural terms, not even for journals. These many potential benefits remain that: potential benefits yet to be tested on a significant and system-wide scale, and it must not be assumed that they will emerge as a natural corollary of open access. It will be important to bear that in mind when considering the broader merits and drivers of open access, especially when open access offers us the less ambitious yet important benefits outlined in the previous paragraphs.

Policy implications

- A clear articulation of the opportunities and benefits of open access for monographs will be an essential component of policymaking in this area. Policymakers should be mindful that in terms of research practice, collaboration and wider engagement there are important potential benefits associated with extending open access to monographs that reach beyond the fact of access alone. Policies should be developed that will encourage rather than inhibit the securing of those benefits.
- Outside the framework of any policies, funders should play a role in facilitating through pilots and the formulation of standards those developments that will help digital open access realise its potential for innovation in research communication, collaboration and practice.

⁴⁰ In its simplest formulation Gresham's Law argued that bad money drives out good.

4.2. Academic incentives and challenges

70. In turning to the challenges associated with any move to open access for monographs, we must return to the needs and wishes of academics, both as authors and as readers of monographs. Readers appear to have a strong preference for print books when it comes to engaging with whole books, especially when doing so closely and in depth, but e-books are found to be useful for checking and cross-referencing. In this latter context, academics as readers might be expected to welcome open access for books for its increased convenience,⁴¹ if not yet for its opportunities to enhance research communication, interaction and collaboration. The importance of peer review and publisher brand to academics means that, if these wider benefits are to be achieved, open-access books need to be trusted which means their being accompanied by the quality controls with which readers are familiar and if they come from publishers and series they know to be credible. New entrants to monograph publishing, on which various piloted models rest, will need to secure that credibility whether they are publishing electronically or in print, through open access or behind paywalls. The need for credibility presents a challenge for open access, requiring either that publishers of all kinds engage seriously with open access or that the academic community changes the way in which it obtains signs of quality. This does not have to be as a result of funder policy decisions with respect to mandates – open access will best be achieved if it is driven by engagement from researchers and publishers alongside any mandates, and the responses that have been received to this project provide early signs that this might be the case.

71. For authors of monographs, on the other hand, open access brings with it a whole set of concerns. One such relates to a key aim of most academic authors to publish their monograph with a reputable publisher that can conduct high-quality peer review and get their book read by the widest possible audience. Given that open access is often seen (albeit increasingly incorrectly) as something with which only new publishers are engaging, many of whom will not yet have built up a strong reputation, open-access publishing is not a normal or well-trusted option for many authors of monographs. The setting up of prestigious editorial boards and panels of peer reviewers is one emerging response to this problem.⁴² Until this is effectively addressed, it makes sense that authors might not be familiar with, or feel positively about, their options for publishing their books open-access.

72. Where open-access publishing options are available, whether through established publishers or through new open-access entrants, these might appear unattractive to academic authors. Many authors will be familiar with the recent moves in the UK towards ‘gold’ open access for journal articles, where in many instances the author is required to pay a fee to publish their work open-access. In reality, it is normally the author’s funder or university which would pay, but the term ‘author payment’ is the one conventionally used. They may well be aware that the equivalent model exists for books and that the publication charges can run to many thousands of pounds. For many arts, humanities and social sciences academics

⁴¹ It is interesting to note that in the OAPEN-UK survey 67 per cent of respondents found access to monographs ‘easy’ or ‘very easy’.

⁴² Two examples are the Open Library of Humanities and the Language Science Press.

these publication charges would be unaffordable, not least because the great majority of research in these disciplines is not funded through project grants. Further, some academics might disagree with the ‘author pays’ model on principle, whether because of unfortunate associations with ‘predatory’ or ‘vanity’ publishing or because the model is felt unfairly to freeze out those authors unable to obtain publishing fees.

73. Moving away from author-funded models (the term conventionally used, though see the qualification above) there are others that require a contribution from universities themselves, either as publisher (via the university press) or some other means (e.g. contribution to a community subsidy scheme). Authors who are concerned about the freedom to publish work of their choice in outlets of their choice being restricted by managerial control of the research publication process within their institutions might be cautious about embracing these models. They may also be concerned about models that place the decision about whether and how their work should be made open-access in the hands of institutions⁴³. In addition, models that depend on documents other than the published version of record being freely available in other venues (as is common in so-called ‘green’ open access for journals) may lead some authors to feel concerned about what might be missing in the free version from the intended form, function and content of their work.

74. Whereas authors of articles in peer-review journals do not expect to earn from their publication, books constitute an area where income through royalties is sometimes relevant and very occasionally significant. There are three kinds of case here, each of which might make authors reluctant to accept open-access publication. There are some authors for whom royalties from research-based book sales are a significant source of income. It has to be said that this is true of no more than a very small proportion of authors, but can be found in some humanities disciplines of which history is the most common. The motivation for these authors to publish monographs might be just as much about dissemination and reach as any other monograph author, but in these cases the promise of royalties will be an important consideration. It is unusual for a publisher to be taken by surprise by a monograph selling exceptionally well to a non-academic readership, and publishers report that they generally know this likelihood well before publication and take the steps necessary to make it happen. Nonetheless, in policy terms it is likely to be difficult to separate monographs and these wider ‘trade’ books: a degree of overlap is inevitable when a research book has broader appeal (Vincent, 2013). Open-access models that require the author to forego royalties are bound to be less acceptable to these authors and others hoping for similar success. There is a very precise but important subset of this problem that would be relevant to research council mandates and, although it has been raised in the course of this project by Independent Research Organisations (IROs), it has broader relevance to any grant where research outputs include an exhibition. Exhibition catalogues constitute a significant part of the business model for a museum exhibition, and it could be seen as a serious problem were these required to be available as open-access.⁴⁴

⁴³ Here it should be noted that 78 per cent of those responding to the survey said that they had already published with their university press or would consider doing so in future (OAPEN-UK, 2014).

⁴⁴ It is my understanding that the relevant IROs are considering how to address this potential problem and it is hoped that in due course discussions with the AHRC will find a way forward.

75. The second type of case is that of creative writing practitioners whose outputs may constitute research and, indeed, be submitted to the REF, but for whom income is expected from the novel, poems, plays or whatever. The existence of backlist sales or performances would make it unlikely that embargo periods or other ‘green’ open-access options would resolve the problem. Yet to expect any other form of publication would risk undermining a significant area of teaching and research in English in UK universities. The fact that these are likely to be published by commercial and trade rather than academic publishers simply complicates the matter further.

76. The third type of case is that of part-time academics for whom writing is a source of income, notionally achieved through the other part of their working time, but whose work may well be seen as research and therefore subject to any relevant mandates or institutional expectations. For each of these three situations the fear of losing significant potential income may serve as a disincentive to supporting open access, and will need to be taken into account as any policies are developed.⁴⁵

77. The acceptability of e-books has not been sufficiently tested to see whether they are treated by peers, promotion panels and students as of equal standing to print books, but there are undoubtedly fears among many that this might not be the case. If the fear is well-founded, or at least widespread, it might impede any author-driven moves away from print books towards electronic books in the short run, which might in turn impede the uptake of any open-access models that do not envisage print copies remaining available alongside the electronic. In the long run, if e-books (and then open access) become more widely accepted by the academic community as the equivalent of print books, these impediments might disappear, but it might at the moment constitute a source of hesitation about open access.

78. If a significant author problem over the standing of open-access articles in journals has not arisen, why should there be one for monographs? This takes us back to the various issues raised so far in this report of which one that is both important and hard to measure is the materiality of the monographs that researchers publish. As we have seen, academics feel a strong personal identification with their books, often seeing them as an embodiment or articulation of their own academic identity. The materiality, integrity and aesthetics of the book form are important to academic authors. This might be about the physical form, it might be about the design but it could easily invite resistance to open access publishing and all of the other opportunities it brings, if open access is deemed to be an inferior replacement for print books. This is one reason for establishing how effectively electronic publication can replicate many of the features of the print book. It also offers a compelling explanation for why current open-access publishing models do not preclude the parallel production and sale of print versions.

⁴⁵ One suggestion is that the current exception criterion for article publishing that refers to the concept of ‘the most appropriate publication’ might offer a basis for addressing this problem in future policies; another would be to allow a small percentage of a higher education institution’s submission to be non-compliant with an open-access mandate.

Policy implications

- The success of open-access publishing models and pilots will require that they are acceptable to academics, both as authors and as users of monographs. The contribution of the research community to the development of proposed policy initiatives should be secured through thorough consultation.
- A relatively small number of academic authors have strong reasons for not wishing to see their work made available as open-access on the grounds that it may threaten significant income from royalties on recent and, for example in the case of creative writers, backlist publications. Policymakers should consider an appropriate basis for exemptions for these works from open-access policies that might pose a threat to that income. It is recognised that clear definitions and boundaries will be required, and these will need to be developed in consultation with the academic community and publishers.

4.3. Technical and process challenges

79. In considering the mechanics of how open-access books are produced, discovered, disseminated, read and stored, a variety of technical and process questions emerge that need satisfactorily to be addressed. Many of these relate to e-books in general, rather than open access in particular, as e-books are seen as a necessary technology for delivering open-access monographs. Among them, however, are some that relate specifically to the processes for providing open access for e-books. This section identifies some of these issues as they are currently seen, but the world of e-book technology is a fast-moving one. Given the rapid pace of change, this section should be seen as providing no more than a brief overview of issues that are undergoing exploration by those investigating the practical feasibility of open-access monograph publishing.

80. Existing publishers already face the challenge of introducing new workflows for producing e-books, including dealing with new formats as well as new licences and sales structures. In an open-access world, these workflows will be affected by changes to the character of publishers' relationships with their authors and editors, especially as expectations change with shifts in funding, licensing and publication mechanisms. If open access is policy-driven, publishers must also interpret funder and institutional policies and adapt to them to ensure they are producing 'compliant' books, requirements which will add a further layer of complexity to their workflows.

81. Publishers also already deal with evolving demands and restrictions placed on them by e-book vendors, some of whom require that e-books are supplied in a particular format to match proprietary requirements, and some of whom have contractual pricing and marketing arrangements for e-books that might not be sensitive to open access.⁴⁶ This introduces a broader set of questions relating to the discoverability of open-access monographs: where will they be marketed and made available, what lists will they appear on, and what incentives are in place for vendors, publishers and others to promote open-access works to their potential audiences? Those currently operating open-access book publishing, aggregation and

⁴⁶ Amazon, for example, has a zero-price-matching policy for Kindle sales that might undermine any 'freemium' model of open-access monograph distribution (Eve, 2014b).

distribution schemes will recognise that those questions are not susceptible to standard or straightforward answers. Uncertainty in this area fits within a context of deeper uncertainty and change in the relationships between publishers and vendors of e-books, a context that is rapidly changing as the market for e-book sales and delivery becomes more established. Much of this uncertainty is passed on to the end users of e-books, who are currently faced with a range of device options from competing vendors and a suite of proprietary and potentially incompatible e-book formats.

82. A connected issue relates to how digital rights management (DRM) restrictions might affect the preservation, redistribution and future use of e-books. E-books might be made freely available by retailers in particular formats, but if DRM restrictions prevented their being used or adapted for use on alternative devices, then questions arise about how reliable these books were as a means to preserve knowledge in the longer term. Furthermore, if DRM restrictions prevented sharing of e-books between users, then what is seen as a key benefit of open access (the freedom to redistribute copies of a work) would be lost.

83. There are other issues relating to open-access books that concern the functionality and usability of e-readers themselves. Academics do not appear to be confident as yet that e-readers have reached the point where they are as user-friendly as print books. One study has shown that reading comprehension is significantly lower for screen-reading than for print-reading (Mangen et al, 2012). Almost all e-readers that employ electrophoretic ink technology can currently display images only in greyscale. E-readers which support colour images must employ LCD or LED screens, which are less comfortable for extended reading than electrophoretic ink, cannot be read in bright environments, and place a much greater drain on the device's battery. Indeed, the fact that e-readers require battery power at all puts them at an obvious and permanent disadvantage over print books (though some e-readers have impressively long battery lives that may be thought to substantially reduce this disadvantage).

84. Academic users of e-books have expressed significant concerns about their technological limitations. Some complain of difficulties using many of the common e-book resources for teaching, where access is often limited to two users. Some researchers report frustration with current e-book interfaces, which differ widely between publishers and offer little in the way of consistency of access and use. For some specific uses, such as dual-language critical editions where the original is provided on the *verso* and the English version or commentary is provided on the *recto*, single-page reading on a screen is useless. A similar point must be made in relation to critical editions in theology, classics and literature which have to use a combination of marginal and footnoted annotations due to the nature of the text being edited. The academics consulted in this project appear to agree that for serious extended work, it is at the moment necessary (or at least highly desirable) to use a print copy of the book.

85. For libraries, e-books produced in a variety of standards and formats create issues for cataloguing and access. The absence of common metadata standards for open-access books by publishers presents further challenges. As with the issues identified above with respect to DRM, proprietary formats create long-term preservation concerns for libraries and academics alike, with particular concern that closed formats will become obsolete and inaccessible in the

long run. Format concerns can be addressed with the adoption of agreed standards for e-book storage and mark-up, but getting to the point where all open-access books are available as standards-compliant XML files is going to be very difficult to achieve. A further issue for libraries and academics is the long-term availability of open-access books: the recent introduction of legal deposit for e-books and the growing adoption of LOCKSS approaches offer some comfort here,⁴⁷ but the long-term picture remains untested. We know that print books last for a century or more, but there are significant doubts about whether the same can be said for e-books.

86. There is, therefore, a significant range of technical as well as process issues that will need to be resolved with the various stakeholders involved, and at this stage there is little reason to believe that this will be easy. Many of these issues will be familiar to those grappling with the technical challenges of delivering sustainable open-access journals and they may be solved in that forum first, with helpful consequences for open-access books. However, the distinctive character of the monograph makes issues around the supply chain, the e-reading experience and long-term preservation more pressing.

Policy implications

- Open access for monographs will depend, to a large extent and at least in the short- to medium-term, on e-book technology and publishing systems that are not currently seen as being sufficiently fit-for-purpose. Insofar as these constitute a significant obstacle to online open access, policymakers should consider taking initiatives with industry and other parties to identify and implement solutions.

4.4. Open licensing

87. One of the most highly contested areas in the open-access debate is the question of how to define ‘open access’, above all how far it requires defined freedoms to use as well as to read the text itself.⁴⁸ Is it reasonable to allow open access to mean something fairly basic: the freedom to read but not to use and reuse in other ways? Or should open access be exclusively defined as allowing the publication in question to be used, reused, translated, text- and data-mined, adapted, modified and redistributed in innumerable forms without explicit permission needing to be sought? And what might be an acceptable level of access between these two extremes that allows users enough leeway to make copies and to do interesting and useful things with a work while still offering appropriate comfort to those in the academic community who might be more nervous of liberal licensing of academic material as well as the capacity to deliver an appropriate degree of private benefit to the publisher? These are questions that have invited sometimes quite fierce debate among open-access experts over the last two decades, and they have come to the fore in the UK in the last few years as national

⁴⁷ LOCKSS refers to the idea that ‘lots of copies keep stuff safe’: multiple copies of a work are distributed and stored widely, effectively eliminating technological single points of failure. This in many respects emulates the preserving effect of traditional print book distribution, only with greater discoverability of ‘backup’ copies.

⁴⁸ Peter Suber has helpfully applied the terms ‘gratis’ and ‘libre’ to distinguish between two dimensions of open access. ‘One removes price barriers alone and the other removes at least some permission barriers. The former is *gratis* OA and the latter *libre* OA.’ (Suber, 2012 p. 65).

policy has gravitated towards requiring (by research councils) or encouraging (by the four UK higher education funding bodies) reuse beyond the minimum allowed under most copyright laws' fair use or fair dealing exceptions.

88. Giving the freedom to read the scholarly literature does not require open licensing: presentation of fully copyrighted material on the Web for free reading or fair use is highly commonplace in the non-academic world. Technical restrictions might be imposed to prevent copying, printing or downloading but, while these might offer comfort to rights holders, freedom to read can be allowed without these excessive restrictions, as it is for most of the Web today. By removing price barriers, the freedom to read scholarly literature would deliver an important and much-needed component of open access. But given that most stakeholders assert that open access will also include the removal of at least some basic permission barriers to downloading and making copies of works, then freedom to read alone would not deliver open access.

89. In moving beyond freedom to read and the fair use rights given in copyright law or practice, we find that the rights automatically granted by the copyright laws in many jurisdictions do not themselves allow most forms of open access because copyright forbids readers from making copies of work for redistribution without the explicit permission of the rights owner. Before the emergence of special licences for sharing work through open access, authors would be limited to a stark choice between traditional copyright ('all rights reserved') and giving over their work entirely to the public domain ('no rights reserved'), with conventional publishing requiring the former, often via the transfer of copyright from the author.

90. This has created a situation where new licences are needed for works available through open access, licences that can provide authors wishing to give permission for redistribution and reuse while retaining some of the rights granted under copyright law with the means of doing so. Open licences, notably those offered by the Creative Commons organisation, have emerged as a solution here.⁴⁹ Creative Commons (CC) licences were primarily designed for those wishing to share digital artworks freely, but have since become seen and widely adopted as the standard for open access. This is due to their portability, degree of legal robustness, and complementarity with the rest of the open Web. CC licences come in many varieties, but each of them allows authors to give permission for unlimited copies of the work to which the license has been applied to be redistributed without permission. For this reason, the CC licences have become widely adopted as an appropriate mechanism for delivering open access to scholarly literature and for defining the precise permissions that have been allowed.

91. Beyond permission for basic copying and redistribution, there are substantial differences of opinion over precisely what permissions should be granted under open access. The more liberal licences have much to offer researchers in the arts, humanities and social

⁴⁹ A description of the various CC licences, along with further information about the Creative Commons organisation itself, may be found at their website: <http://creativecommons.org/licenses/>, and the OAPEN-UK project has produced a guide for researchers: <http://oapen-uk.jiscebooks.org/ccguide/>

sciences by giving the reader permission to do an almost unlimited variety of things with the works in question, including printing and distributing copies of papers for students, creating new editions and anthologies, making new versions and translations for new audiences, quoting long extracts in new works and incorporating the literature into study books and other publications for commercial gain. It is in this territory that the greatest differences of opinion exist, with some supporters of open access fully embracing these new forms of reuse (Murray-Rust, 2012), while others express concern about what practices, including those they see as misuse, might arise if such generous and broad permissions are granted (Institute of Historical Research, 2012).

92. While even the most liberal of the CC licences ('Attribution' or 'CC BY' for short) requires that source material be named and attributed to the author, it does not require that the new work show exactly how the original material has been used. As such, CC BY has come under criticism from prominent academic voices who are concerned that it permits (and maybe even encourages) the kind of copying and repurposing without specific citation that the academic community commonly thinks of as plagiarism. It is early days, of course, to be drawing any confident conclusions, but it should be observed that there is no evidence of which I am aware that the CC BY license has so far been an enabler of academic malpractice. The view has been expressed to me that, irrespective of any formal malpractice, this kind of reuse would constitute a violation of long-established 'moral right' to the integrity of the work. It may be true, others argue, that academic practices and norms can themselves entirely overcome such risks of malpractice as exist in this area and that open access itself might reduce the risk of academic malpractice (PLOS Advocacy, 2014). Nonetheless, the potential for misuse may well exist, and the degree of confidence we might have in the appropriateness to scholarly publishing of the CC BY licence therefore rests on our confidence in the extent to which existing academic norms and practices can be maintained in a more open environment.

93. In recognising that CC BY is seen as problematic by many authors (and not just academics), Creative Commons also introduced a range of more restrictive versions of their flagship licence to allow authors to limit certain types of reuse. By adding a 'non-commercial' (NC) clause to the CC BY licence, for instance, authors may prevent commercial reuse of their work. This clause allows the reader to redistribute the document freely, and to fashion new resources using the published material, so long as any new copies are not sold or otherwise used for commercial purposes. This licence appeals to those in the academic community who might wish for the fruits of publicly-funded research not to be exploited by commercial entities, including private education providers. It also appeals to those authors who feel that work given away freely should in all cases also be passed on freely.⁵⁰ But the term 'non-commercial' is an ambiguous one, and is sometimes

⁵⁰ For those users who wish to license their work under more liberal terms but are concerned about derivative works being used for commercial purposes, Creative Commons offer a 'Share Alike' (SA) clause, which requires that any new work itself be licensed under the same terms. This offers an alternative to the NC clause in particular, where 'non-commercial' reuse might also prove difficult to define. The SA clause has its own limitations: derivatives of CC BY-SA work, for instance, cannot include material licensed with an NC clause, because the new work would necessarily contravene either the NC clause or the SA clause.

misinterpreted as covering the reuse of the ideas, knowledge and insights described by the material, which would instead be governed by broader aspects of intellectual property law.

94. By adding a ‘no derivatives’ (ND) clause to the CC BY licence authors can prevent derivative works that incorporate part or all of their work from being created and shared without permission. Such derivative works could potentially include anthologies, edited volumes, critical versions and translations, and any versions in a new medium (e.g. spoken word versions). Much debate surrounds the use of the ND clause: it is felt by some to adequately prevent the creation of new works that the author might find undesirable, such as poor translations, as well as to explicitly prevent the sort of academic malpractice that it is feared might arise from the CC BY licence. In specific cases such as ethnography, where the basis of trust is founded on the researcher’s guarantee to informants that they will not be represented unfairly, there is a concern that anything but a ND license to prevent the reuse of material would undermine the ethical basis of research. On the other hand, others feel about the ND clause more generally that it prevents desirable reuse of the work, including the creation of critical versions for scholarship, unauthorised but nonetheless useful translations, and basic online course materials. It has also been claimed, but not universally accepted, that the ND licence prevents the material from being passed through text-mining software.⁵¹

95. Suber (2004) acknowledges that, in an open-access world, there is flexibility about which of these two ‘permissions barriers’ is removed. However, the NC and ND clauses can be combined to form the CC BY-NC-ND licence: the most restrictive of the CC licences, which prevents both commercial reuse and the publication of derivative works. Open-access advocates argue that by restricting all reuse rights, CC BY-NC-ND prevents open access entirely, and the major public definitions of open access are in agreement (Suber, 2004). This licence is not favoured by those interested in the widest possible reuse of published research, which includes librarians, information professionals and some research funders. However, it must be noted that the CC BY-NC-ND licence does appear to have reached a level of acceptance within the academic community that the other CC licences have not: a survey by Taylor and Francis of their authors in 2014 revealed CC BY-NC-ND as the most preferred licence for publishing academic work (Taylor & Francis, 2014).

96. The issue is further complicated by the international picture for licensing which encompasses a wide range of different legal and jurisdictional interpretations of both national and international law. While copyright laws across the globe share a number of key common features, and the CC licences are also noted for their international reach and portability, local interpretations of the licensing terms of published material can vary widely, with potentially far-reaching ramifications. The most notable example is a recent ruling by a German court that works licensed with a ‘non-commercial’ restriction are permitted purely for personal use (Moody, 2014). The implications are that any German university hoping to repurpose, or even to redistribute, material licensed with an NC clause would potentially fall foul of German copyright law. It is not yet clear how this ruling, and its implications, might be typical of future interpretations of open licences within different jurisdictions, but it is clearly a

⁵¹ See, for example, <http://www.elsevier.com/connect/what-changes-when-publishing-open-access-understanding-the-fine-print>

worrying sign for anyone hoping that open licences might provide the means to overcome ambiguities across the globe. It is likely that such ambiguities and differences of interpretation will continue to surface over the coming years, with as yet uncertain implications for the development and uptake of open licences.⁵²

97. In the current state of debate it is not appropriate or desirable to offer advice in this report on how scholarly communication should evolve to meet the imperatives of greater openness; there is too much disagreement both within and between stakeholder groups over the desirability of key issues such as open reuse, let alone their parameters. It does seem clear, however, that consensus among academics about the preferred terms for licensing academic material in an open-access environment will be very hard to achieve. One key factor that has become clear is that the various existing licences being adopted for open access appear to fit imperfectly with scholarly culture, both as it exists now and as we might want to see it in the future. For books in particular where authors feel a much more complex sense of ownership of the published material, it is likely that resistance to the creation of derivative works without specific authorisation, and to the facilitation of commercial redistribution and reuse, will be more keenly articulated than it might be for journal articles. Arts, humanities and social science academics' attachment to their books, the length of time that they have worked on them, and the ways in which they are felt to express their personality and voice, together serve to create a distinctive environment. It is interesting to see that of the 1,941 books listed in the Directory of Open Access Books (DOAB) only 5 per cent carried a CC-BY or CC-BY-SA licence, the most liberal of licences; at the other end of restrictions, 60 per cent were made available under CC-BY-NC-ND licences.⁵³ It is, in my view, highly likely that a significant part of the academic community will, at least in the medium term and perhaps longer, want to see greater restrictions on the licensing terms for open-access monographs than are offered by CC BY.

98. In sum, a single definition of open access that incorporates clear and widely-accepted licensing terms might be highly desirable, but would appear to be currently unattainable. There is no clear agreement, either within or between stakeholder groups, on how to define open access, in terms of either its desired aim or its non-negotiable minimum. Nonetheless, while permissive open access offers much in the way of opportunities for improving scholarly communication, the very real nervousness felt by some about these more permissive forms cannot be ignored. Research funders, academics and institutions will not wish to lose sight of the benefits promised by less restrictive licensing. It is, nonetheless, my considered conclusion that single-minded pursuit of these benefits at the expense of all else is highly likely to retard rather than advance progress towards more achievable forms of open access in the short- to medium-term. It may well be that allowing more restrictive permissions will,

⁵² Separately, but importantly, the UK government introduced a range of new exceptions to UK copyright law in 2014. These cover, among other things, the right for researchers to use copyrighted material for text- and data-mining applications. This change has implications for the licensing environment in the UK, in that work need not be published under a CC licence for UK-based researchers to text-mine it. Clearly, though, this situation only pertains to UK researchers, putting them in a distinctively favourable position yet not removing the need for CC licences for work to be used in this way outside of UK academia.

⁵³ Calculated from <http://www.doabooks.org/doab?func=about&uiLanguage=en>

over time, create the degree of reassurance that will allow a broader consensus to emerge about more liberal permissions.

Policy implications

- While most stakeholders agree that freedom to access and read books is desirable in principle, significant disagreement exists around the desired parameters of more open licensing for monographs. Policy approaches should not seek to impose licences regarded by many as controversial on an academic community that does not in broad terms appear to be ready to accept them. This advice rests on the recognition that such opposition might militate against the successful transition to open access. Allowing academics to choose to publish with more restrictive licences in the short- to medium-term is likely to deliver significantly greater support for open-access mandates than the requirement for more liberal licences.

4.5. Third-party rights

99. A major issue for the implementation of open-access monographs is one that will already be very familiar to many researchers in the arts and humanities: the issue of securing clearance rights for any third-party material used in the work. Where an academic work includes material by others, be it as evidence for criticism, for scholarly analysis and illumination or simply for illustration, the author is restricted to reproduction under the ‘fair use’ or ‘fair dealing’ limitations of copyright law, which generally limit reproduction to short excerpts or details of the source material. For anything beyond that, the author must seek permission from whoever owns the rights to that material in order to reproduce it in the publication. This applies, of course, equally to journal and monograph publication. Where permission is not granted, the work itself may often not be worth publishing at all, let alone in an open-access form, because without the images or text the analysis would not be sustainable. Where it is granted, it is very common for rights owners, often through intermediary clearance organisations, to charge a fee for this sort of reuse. Fees are commonly charged even where the purpose might be generally accepted to be ‘academic’ and non-commercial.

100. Examples can be drawn from many disciplines. One is research in drama, where third-party permissions for the use of text or image have become significantly more costly in recent years, and publishers’ editors are said to be less willing to accept fair use and are requiring authors to get explicit permission for print and electronic edition and for all territories.⁵⁴ This discipline is not alone in experiencing greater challenges even before open access has been introduced. Research publications in dance are very dependent on images from dance companies or from specialist picture libraries and the costs can be considerable even for half-page black and white reproduction. There are real interests at stake here other than those of academic research – for dancers, composers, choreographers and photographers

⁵⁴ I am grateful to the Standing Conference of University Drama Departments (SCUDD) for their advice on third-party rights, as I am to University English (CCUE), the Association of Art Historians, and Conservatoires UK. Professor Theresa Buckland provided helpful advice with respect to dance research.

these images, as well as reproductions of parts of music scores and dance notation, can be an important element in their income. The same considerations will apply across much research in contemporary art practice.⁵⁵

101. Third-party rights cover a wide range of disciplines of which the most commonly cited, art history, is therefore only one. They are an important issue for any system of open access for two reasons. The first relates to the question of who pays for open access, and whether open-access models can be sustained in the context of rights clearance fees, something that will be touched upon in section 4.5. The second, and much more important, reason is that rights holders, and the organisations that represent them, are typically either more resistant to electronic reproductions than for print, or charge higher fees for electronic reproduction. For print and electronic reproduction, fees normally increase in line with the number of copies being produced. In an open-access world, potentially unlimited copies can be reproduced, each of which would in theory exist in perpetuity. The very concept of an 'individual copy' itself becomes an unhelpful one in an open-access electronic environment. It is widely feared that rights holders would react to open access either by refusing reproduction rights or by charging considerably higher fees.

102. A further problem is that rights are often granted only for a fixed period, conventionally three to five years for art images, for example. This might be practical to implement in a print world, where print runs can be organised within that fixed period, and even in an e-book world, where sales can, in theory, automatically cease after a given period. But copies of open-access works may be distributed freely by all, leaving future reproduction of open-access books completely outside anyone's control. An open-access publisher could, of course, remove the images or quotations when the permission had expired, but that would impose considerable costs to track very large numbers of such permissions over the full range of publications, and it would also be irrelevant given the ability to copy and pass on open-access works under even the most restrictive of current licenses. Reproduction rights granted for a fixed period are therefore, in practice, incompatible with open access.

103. These issues have different implications across disciplines, depending on the degree to which works depend on third-party content. It is important to emphasise that a problem that has often been thought to apply quite narrowly (above all to the reproduction of images in art history) has emerged in the course of this work to be a significant challenge across a considerable number of disciplines. Permission has to be sought, and payments frequently have to be made, to rights owners even for academic publications. Art history is the familiar case, where both books and journal articles depend incontrovertibly on the reproduction of photographs of artworks. Rights to the photograph of an artwork will often be owned by a different party from that which owns the artwork itself, and sometimes both rights owners will have to give their permission.

⁵⁵ This not limited to visual elements alone. In modern languages and literatures, permissions would need to be sought to cite text in the original language: a commercially-published volume of poetry in Catalan or Portuguese, for instance, where the author may not want to open up translations to be made without permission, which generic CC BY license would enable users to do by deriving the original text from the monograph in which it is cited..

104. Art history is far from alone here; major issues already exist right across the range of arts, humanities and even social science disciplines. There are serious complexities in music, for instance, where the melodies, the lyrics or libretto, the orchestration or arrangement, any handwritten annotations by a conductor or performer, and the image of the musical score could all have different owners. When researching musical performances, there are performer's rights, venue rights and audience rights that must be taken into account.⁵⁶ The same is true of dance, theatre and other performing arts: where photographs of performances, dancers and actors are used, these images also have multiple rights holders, which again extend to the rights of the performers, the audience and the venue. Photographs of contemporary performance taken by a company may well have been expensive in the first place, because of the quality of photography that is needed for both publicity and the record, and the rights to reproduce them often reflect that. In dance, there are rights issues for both choreography notation and photographs of dancers; in literature, rights issues arise for reproducing text from poems, novels, unpublished material and the like; equivalent issues can be faced by authors in visual anthropology, material culture, history, classics, design, architecture, and innumerable others. It should be noted, however, that film studies seems largely to have escaped these problems. The practice has built up of frame enlargements being incorporated freely into research publications under fair use provisions and without journals or publishers requiring that the permission of the rights holder be obtained.

105. One of the attractions of digital online publication of monographs is, as we have seen, the ability to add a variety of additional resources not available to print editions. This will inevitably include moving images and it will be interesting to see how the owners of rights in them respond to requests for their use in an open-access environment. The citation of links to YouTube and to online public access film libraries is common across various disciplines, but long-term access cannot be assured. The preferred way to address this in dance research, a field where the inclusion of moving images constitutes a significant step forward for dance analysis, is to purchase the rights to download clips where these are available. Only negotiations with rights holders and their organisations will identify the costs and legal challenges involved in this, but it will become an increasingly important question to add to the longer-established issues over third-party rights.⁵⁷

106. Though these issues are not unique to monographs, they are certainly more serious for books than for journal articles as a result of the scale of the work being produced. A short journal article might only incorporate a handful of images, but a monograph on a painter, choreographer or theatre director could include dozens of images, maybe even more. Each additional image incurs a cost, or invites refusal; the exclusion of any single image might damage the work as a whole. These are problems that face authors already because of the fees for print editions and toll-access electronic versions and researchers feel compelled to limit

⁵⁶ A particularly thorny example might be an analysis of audience reaction to a performance of a conductor's marked-up scores, where permission could potentially be needed from the composer, arranger, librettist, publisher, conductor, performers, venue and audience members.

⁵⁷ It is understood that ITN currently charges £1,506 per 60 seconds for worldwide reuse in perpetuity, and in this case the link is to an organisation and archive likely to be stable. It would be less certain, and could be more costly, with respect to smaller and less well-financed archives.

the number of images or extracts used. In general it is the author rather than the publisher who is responsible for obtaining, and paying for, permissions. It is very likely, for the reasons set out above, that this will get significantly worse under electronic open access. Critical editions (of literary texts, of musical compositions and so on) also face major problems here because the primary source under analysis is often owned by one or more third parties.

107. It is important to acknowledge that not all rights holders have the same attitude towards reproduction of the work they own. It is common, though by no means universal, for museums and galleries to allow reproduction rights for their images without charge if for academic purposes, though the definitions of the latter vary and can be quite restrictive, with some regarding a scholarly exhibition catalogue as a commercial work. Similarly, academic publications might be narrowly defined as those published by university presses, excluding commercial monograph publishers. In the UK, the British Museum, the National Portrait Gallery and the Victoria and Albert Museum are examples of museums allowing free use for academic purposes, as is the Rijksmuseum in Amsterdam amongst others elsewhere in Europe. In the USA there is a trend towards making all images of a museum's collection freely available and without restricting this to academic purposes,⁵⁸ for example by the National Gallery of Art, the Metropolitan Museum of Art and the Yale Center for British Art.⁵⁹ In a different kind of experiment, the British Library towards the end of 2013 released over a million images onto Flickr Commons for anyone to use, remix and repurpose, to see how open access to images might spark research and creativity (British Library, 2013). In Austria, the Arnold Schönberg Centre allows free reproduction within scholarly works, and it is understood that the Bach Archive in Leipzig may soon be following suit. This is not a universal pattern by any means, and the situation is even more varied when it comes to private rights owners. Some art collectors are said to be very generous over the use of images, while the commercial owners of music rights are often much less so and see their rights as a significant source of income.

108. The motivation for these differences in practice have never been fully explored, and they're not entirely explicable in terms of commercial interest though that is obviously one part of the answer, but it seems that the rights owners who make their work readily available for use without charge see it as a means of ensuring that the works in their collections are widely researched. Many public, but also private, rights owners see this as not only a public responsibility but also a way of encouraging the research and publications that will enhance both the understanding and value of the works that they hold. Some of the most acute problems exist with quotations from literary texts and archives, with literary estates often jealously guarding permissions.

109. In all cases where charges are made or restrictions imposed with respect even to academic use, there is an understandable anxiety amongst researchers that problems will

⁵⁸ Except for works where there are separate copyright holders who do not agree to their being made freely available.

⁵⁹ As an example, the Yale Center for British Art announces: "Building on Yale's commitment to open access, if a work is believed to be in the public domain and free of other restrictions, the Center's digital images of the work in its online collection catalogue are made freely available." <http://britishart.yale.edu/collections/using-collections/image-use>

become greater in an open-access environment with rights owners being more protective or more demanding. In this context, the tendency for research to be steered in some directions rather than others (certain artists, composers and writers rather than others depending on the ease with which relevant materials can be used and reproduced) could be exacerbated. Few rights owners have had to develop clear policies with respect to open-access publication and it will be important to engage in discussions with key players as part of formulating policies for open access. Existing terms for electronic publications (for example the Victoria and Albert Museum's limiting reproduction rights to the use of low resolution images and a five-year time limit,⁶⁰ and their approach is by no means uncommon) could pose significant challenges to open access.

110. The presence of intermediary rights licensing bodies is a familiar one to many scholars, and the attitude of the licensing body to scholarly reuse can in some areas be as important, or even more important, than that of the rights owner. In contemporary art, the rights to use works in copyright is often handled by DACS (the Design and Artists Copyright Society), and the fee is directly related to print runs or sales. The use of professional image management companies has been cited as leading to a significant increase in fees in certain fields. In some cases, rights holders may not be involved at all with the licensing of their work, or be unaware that it is under discussion until a payment is received. In these cases, the negotiating options for academic authors are still more limited. Similar agencies exist for music, text and many other media.

111. Discussions will be needed with major public rights owners and significant private rights owners to seek an acceptable way forward. It may well be helpful to see this process as having a series of stages: the first being to get rights holders to agree to free or inexpensive use of their work when used for scholarly purposes and the second being getting them comfortable with electronic use, with open access only becoming relevant after progress has been achieved in those first two stages. The problems cannot be wholly resolved, but if it were possible to engage a significant number of major players in an agreed set of policies, protocols and definitions these might constitute the incentive needed for others to follow. Representative organisations such as the National Museum Directors' Council in this country might be able to help the process. This will be made more difficult by the need to create an international body of support for the way forward. Agreement would need to cover high-level issues (e.g. whether to charge for academic use and the time limits on permissions) as well as more technical issues concerning the kind of reproduction (e.g. the resolution for images) and the kind of reuse (e.g. NC-ND) that are permitted. None of this will be easy, and for those for whom their rights are a significant source of income it may be extremely difficult, but if progress is not made then research across a significant range of disciplines will face major difficulties in adapting to an open-access environment.

⁶⁰ The Victoria and Albert Museum Website Terms of Use can be found at the following link: <http://www.vam.ac.uk/content/articles/t/terms-and-conditions/>

Policy implications

- Third-party material plays a critical role in the writing of monographs in the arts, humanities and social sciences, and the likely existing difficulties in securing these rights are likely to be exacerbated for open-access monographs and will constitute a significant barrier to open access for many. Policymakers should discuss this issue with major rights holders and their representatives to seek a way forward for licensing of third-party works. This should ideally include working towards an international consensus.
- Any policy initiatives for open access will need to take account of the challenges that might be involved for disciplines where research books require significant use of material where the rights lie with third parties. These discussions should include the potential for more restrictive licenses to be attached to those elements in monographs which contain material where the rights are the property of third parties.

4.6. Implications for other stakeholders

112. While their views and practices are crucial to consider, academics are by no means the only stakeholders who will be affected by moves towards open access. Open access has particularly striking implications for universities and their libraries, for publishers and learned societies, and these implications must be taken fully into account. These other players have been consulted and referenced throughout this report, which has been developed with and enhanced by their considerable input. What is set out here should not therefore be taken as the sum of these stakeholders' views of what the implications for them might be of any move towards open access, nor should it be taken to paint a complete picture of the variety of ways that these stakeholders contribute to scholarly communications. Instead, this section attempts to characterise the general effects of any moves towards open access on the functions, strategies and business models employed by these different players.

4.6.1. Universities

113. Amongst the various stakeholders likely to be affected by open access for monographs, it is the university that is particularly prominent but often overlooked in discourses that focus above all on researchers, publishers and funders. Universities have much to gain from open-access monographs, not least the increased dissemination and impact of the work published by their researchers. Universities are nonetheless anxious about the financial and management risks associated with certain payment models for open-access monographs, especially those models that rely on the payment of a publication fee. Research grant income is in general no more than 20 per cent of total public research funding for the arts, humanities and social sciences, with the rest coming from other sources including funding councils' block grant to institutions. In these circumstances, the pressure of publication fees could be significant not only in budgetary terms but also because of the inevitable managerial responsibilities involved in deciding which work to support and with which publishers, responsibilities that could lead to internal tensions. It has also been suggested that an author-side payment model for monographs could lead institutions to discourage staff, especially early-career researchers, from attempting to publish long-form works and directing them instead to journal articles.⁶¹

⁶¹ Response from the Economic History Society.

114. It is perhaps in response to the above drivers that universities and their librarians, in the UK and other countries, are showing an increased interest in curating and disseminating the outputs of the research that their academics undertake. Here is a possible role for both libraries and university presses, and it is interesting to note that in the USA there are early signs that the latter are beginning to be moved into the former (Fyfe, 2013), something already emerging in Australia (Chant, 2013). University presses are a prominent feature of research systems in the USA and Australia in particular, as well as in some parts of continental Europe.⁶² They are, of course, present in the UK although sparser and disproportionately concentrated in a handful of very large presses. There are signs that many university presses are being revitalised and, in the case of UCL Press, are being established to respond to a growing interest in disseminating research outputs as open-access.⁶³ For university presses to work as open-access presses, however, will require strong and sustainable business models, which in most cases would involve some form of subvention from the university, and for some existing university presses this might represent an increased subvention. They would also need to be acceptable as publication venues for academics. Some are asking whether university presses will be as rigorous over the peer review of their own academics' books and, outside some of the global high-reputation presses, there is a fear that publication by one's own university press might be regarded very much as second best.

115. The development of models for open access has seen other initiatives that rely on the support of universities, above all through their libraries. One such is the community subsidy model, where the direct costs of open-access publishing are distributed throughout the network of universities subscribing to the scheme. The most well-known example of this model being put to the test was the 2013/14 pilot by Knowledge Unlatched, where university libraries worldwide that signed up for the pilot collectively contributed towards the publication fees for a fixed list of open-access books published by established print publishers (albeit often those with an existing interest in electronic publication).⁶⁴

116. Universities are not only important players in models of open access: they are also likely to be wary of the ways in which open-access policies for monographs are introduced by funders. Universities have had to manage the introduction of multiple new mandates from funders requiring that articles in journals and conference proceedings be available open-access, and each of these mandates is associated with the need for detailed implementation and monitoring of compliance at the institutional level. It is, after all, the institution that is generally the recipient of the funding that has invoked the mandate. In the more unfamiliar world of open-access monographs, implementation and monitoring are likely to be less straightforward, not least if many of the complexities identified in this report lead to differentiated requirements or forms of exemption. In that context, universities will be

⁶² Attention was drawn by Steele in 2008 to the potential of university presses for the delivery of open access, with particular reference to the case of Australia (Steele, 2008).

⁶³ www.ucl.ac.uk/library/ucl-press; Ayris (2014). UCL Press is part of the Library.

⁶⁴ Section 4.9 on business models looks at this model in more detail. The first report on the pilot may be read at <http://www.knowledgeunlatched.org/2014/05/knowledge-unlatched-pilot-summary-report/>

concerned that moves towards open-access policies for monographs might present them with considerable managerial and logistical challenges.

117. Universities will therefore be an important stakeholder in open access for monographs, whatever form it takes. Universities support the principle of open access as part of their mission to increase the dissemination and impact of research, they are a key funder and delivery agent for many forms of open access, they are a key agent in implementing open access policies, and through their management of the careers of their academic staff they will help the development of a research culture that supports electronic and open-access publication. It is essential that universities are comfortable with the character of moves towards open access, and this means their being closely consulted and involved in its development.

4.6.2. University libraries

118. In considering universities much has been said about their libraries (e.g. in Section 3.3) that does not need to be repeated here, and the report has already considered how library purchasing practices for monographs might be changing and how pressure on book budgets might be creating perceptions of an imperative towards open-access monographs. We have also considered the range of technical and process challenges that open-access monographs bring, many of which relate directly to university library processes and practices. In addition to these, open-access monographs pose university teaching and research libraries with some key strategic questions. One often finds the strongest advocates for open access within libraries. Librarianship and open access have the common goal of removing barriers to accessing knowledge. Furthermore, digital publication offers the prospect of significant savings on space for future acquisitions, a significant part of libraries' cost base. Nevertheless, one cannot avoid wondering what the future holds for libraries when all publications are just a Web search away. One can see the appeal of Frances Pinter's formulation of the changing role of libraries: to connect, not collect (Montgomery, 2013).

119. It is not the place of this report to consider the future of university libraries, but it is clear that they will occupy a very important place in any successful open-access framework. This is because of their key role in any process of adaptation and transition, because they are likely to remain important players in knowledge dissemination and the expertise associated with it in the future, and because they are already fully engaged with issues of digital dissemination. A strong case has been made for the role that library catalogues and associated resources can continue to play in enabling discovery at scale in a networked world (Dempsey, 2012). The recent Commission on the Future of the UC Berkeley Library (2013) asked itself "What value will a research library add in the digital age?" and it came up with a three-fold answer: "1) human expertise; 2) enabling infrastructure; and 3) preservation and dissemination of knowledge for future generations." (p. 3). It also concluded that "Libraries – as both places and services – will be more, rather than less, critical to University research and teaching in the next twenty years." (p. 9).

4.6.3. Publishers

120. This report has already considered the various ways that publishers add value to the processes of monograph production (for example through editorial activities, the design of the

book and the management of peer review) and consumption (for example through building confidence in their brand, marketing and other distribution activities), and how any moves towards open access need not threaten these important functions. Whether non-profit or commercial, there are various financial implications for monograph publishers of any move towards open access. The conventional monograph publishing model relies on the economic exploitation of copyright through book sales, with the resultant financial incentives driving dissemination; many forms of open access would seem to be at odds with this arrangement.

121. It is the expressed view of many monograph publishers, including learned societies, that monograph publishing is generally not in itself profitable. It is instead characterised as being maintained as a service to the academic community as well as shaping the intellectual environment and infrastructure that allow for their other profitable activities, above all their journals, to succeed. This service includes quality control, branding, marketing and dissemination. That open access can increase the potential reach of research is not in doubt: by removing price barriers, open-access publications have an automatic advantage over toll-access ones. Many publishers recognise this, and seem quite positive about a transition to open access for books, providing the right business model(s) can be developed. It is not, however, the case that open-access publications are always disseminated more widely than toll-access ones, and it must be a source of worry for conventional publishers that people appear to believe that they are. If poorly disseminated open-access publications are preferred to well-disseminated toll-access ones in all cases then the activity of dissemination itself is at risk of devaluation.

122. Irrespective of the merits and drawbacks of conventional, toll-access publishing, it is clear that merely posting things on the Web does not guarantee their discovery let alone their use. Increased reach and use of research are the ultimate public benefits of open access, and it has become clear that for many the established dissemination routes and practices of conventional publishers makes them best placed to deliver this benefit, even if the underlying economic model needs to change. Meeting the challenge of dissemination will be essential if the benefits of open access are to be secured, and one of the ways forward will be for established publishers to adopt new business models and ensure that they are sustainable in the long run. As with peer review and brand, the behaviour of well-established publishers becomes one key element in any move towards well-disseminated open access. As they move from commodity provider to service provider, the various activities currently undertaken by print publishers will be reconfigured rather than removed. Whether driven by commercial or charitable goals, they support the academic community in important ways and any system of open access that is introduced will need to recognise that, even if other forms of open-access publishing develop and flourish alongside them. It has, nonetheless, to be recognised that new and smaller publishers have been increasingly able to operate on a level playing field with established publishers as a result of changes to practices in publishing, dissemination and discovery. It remains that whether well-established publishers are willing and able to make the transition to open access will depend on their appetite to try out new business models as well as on the emergence of policy requirements.⁶⁵

⁶⁵ For an interesting Oxford University Press perspective, see Jackson (2014).

4.6.4. Learned societies

123. Another group of stakeholders which would be affected by moves towards open access for monographs are learned societies and subject associations.⁶⁶ This report has already discussed how learned societies provide an important quality and reputational dimension to the publishing process for many monograph series: by acting as a custodian of knowledge production in their disciplines, learned societies can signal the authoritative character or quality of certain books or book series. Learned societies display a wide variety of forms, sizes and functions, as well as a variety of stances on open access itself. It is therefore not possible or desirable to make statements or draw conclusions about open access that will apply universally. Nonetheless, certain themes have emerged from consultations with them over the course of this project. By identifying a common context within which most learned societies operate, we can start to map out the broad areas that need to be taken into account in any moves towards open access.

124. Similarly to publishers more generally, learned societies wish the books they publish to have the greatest reach. To this end, open access is, at least in principle, a promising development for them. For many learned societies, book publishing is not profitable; books and book series are published primarily for the benefit of the discipline, fostering effective knowledge development, exchange and debate within the academic community and generating interest and impact among those outside it. The extent to which open access would advance this is something on which learned societies have varying views, and much would depend on the circumstances of knowledge production and dissemination activities for individual societies. However, given that some societies have stated that exclusively online, open-access publication of their books and book series would decrease their dissemination and reach, it might seem necessary for them to continue to produce print books, even if open access were to complement this in a hybrid model.

125. Most learned societies publish their monographs through an external publishing house, and it is the impact of open access on those series and on the overall business model of the society that has to be considered. The Economic History Society, for example, has recently launched a series with Boydell & Brewer that will publish monographs and edited collections of essays on the theme of 'People, societies and goods'. The Society uses its resources to subsidise the series to enable it to be published in paperback at reasonable prices. The Modern Humanities Research Association (MHRA) has found a significant decline over time in the sales of its critical editions of literary texts, and sees a move to digital, on-demand printing as having the potential to make academic monograph publishing more sustainable. They partner with Maney Publishing for their *Legenda* monograph series, and it is likely that Maney's move to e-books will lead the MHRA to consider moving to open-access monographs at some point. The International African Institute (IAI) is part of a more complex ecology for the monograph series that is published on its behalf by Cambridge University Press and which publishes each year a handful of high-quality monographs, most commonly

⁶⁶ I am grateful to the various learned societies, which are listed in Annex 2, that made contributions to the project in writing or in discussion. Gardner (2013) is a valuable overview of the issues with respect to open access for journal articles as they affect learned societies.

by early-career researchers without permanent posts, which generate modest sales. They are part of a package whereby Cambridge University Press also publishes the IAI's major journal, *Africa*, as well as *African Bibliography*, its annual reference work. It is the package as a whole that is economically viable for both the publisher and the learned society. Learned societies in these ways play a nuanced role in maintaining the publication of important monographs in their field, and it has been described as a 'fragile ecology', one which could be easily disturbed.

126. A subset of humanities learned societies exists solely to produce scholarly critical editions of texts, describing themselves as 'learned publishing societies'. They conduct none of the adjunct activities one commonly associates with more broad-based societies, such as scholarships, advocacy or the maintenance of journals; publishing is their *raison d'être*. Despite these societies' significant reliance on volunteers, their publishing activities incur necessary costs, and open access is perceived as a threat to the sole mechanism for recouping these.⁶⁷ While it has been said that learned societies should subsidise open-access publishing from membership subscriptions, for instance, this option would be less realistic (though not impossible) for these more specific text publishing organisations. A key concern for these societies, as with all others, is exactly what business model might be adopted to support open-access book publishing, and how suitable this is for implementation in what are often societies with an international reach.

Policy implications

- Open access policies have the potential to deeply affect a wide group of stakeholders beyond academic authors and readers. As they develop approaches to open-access monographs, policymakers should engage with the key players, with a specific focus on universities, libraries, publishers, and learned societies, taking into account some of the main issues for each that are raised in this report. The aim must be to fully understand the risks and opportunities associated with different approaches and to facilitate transition and adaptation where appropriate.

4.7. Open access for theses

127. The role of the PhD thesis surfaces in various ways in discussions about open access and monographs. In the UK, it is common practice for PhD graduates looking to start an academic career in the humanities and social sciences to seek to publish their doctoral dissertation as a book.⁶⁸ This does not mean that most doctoral theses become books, but it does signal the importance of the thesis for those who embark on academic careers. It is, therefore, a key element in many disciplines in situating the monograph as an important part of an academic's portfolio when seeking appointments and, indeed, promotion. There is, however, a second relevant dimension and that concerns the trend towards open access for

⁶⁷ The Early English Text Society, writing on behalf of four such societies, reported that 'the combination of subscriptions and sales from backlists (often as around 2/3 to 1/3 split) is what funds...the production of the texts.'

⁶⁸ The relationship between thesis and publication is closer in some other European countries. In Germany, for example, it is a requirement for one's thesis to be published as a book, while in France it is commonly the case that the thesis itself is rapidly put into the public domain by the university press.

UK theses, something facilitated and encouraged (though not required) by the British Library's EThOS system. EThOS exists to provide a record of all doctoral theses awarded by UK higher education institutions, as well as to provide free access to as many theses as possible for use by all researchers.⁶⁹

128. Will moves towards open-access publication for theses have an effect on the common, but not universal, practice of an academic turning their thesis into a first monograph? One might assume that publishers would not be interested to publish any book that is based on a thesis that is freely available to read on the Web. A study carried out for the UK Council for Graduate Education in 2012 found that there was some concern amongst academics, hard to substantiate with evidence, that the publication of books (but not articles) would be problematic were the thesis to be available through open access. There was no clear position from the publishers who were surveyed, with some showing no real concern while others stated that they would want the online thesis to be taken down from the institutional repository (Barnes et al 2012). There are various reasons why publishers might be reasonably sanguine. They recognise that a thesis should undergo significant development to transform it into a monograph: the two outputs are different and have different objectives, especially now that theses are completed in a shorter period of time than in the past.⁷⁰ Some publishers wish nevertheless to avoid any mention of the PhD thesis in the book text or acknowledgements, in order not to send out what they see as a negative signal to potential readers.⁷¹ Is this because they fear that origins in a thesis will deter readers (few academics would doubt that origin and one can often detect it from a quick glance at the contents), or is it because readers might choose to ignore the published book and access the online thesis? There is, for the present, no evidence that either is the case.

129. How successful, in any case, are the moves towards open access for theses? While Research Council-funded PhD students are expected to make their thesis open access within 12 months, and services such as EThOS facilitate this, an analysis of the thesis deposit policies of Russell Group universities show more variation and sensitivity at a local level. While almost all Russell Group universities require open-access deposit of theses, those that do also permit students to apply an embargo on it. While some of them require there to be a justification in terms of commercial exploitation, patents or plans for book publication, others are less specific about the criteria for approving the application. Embargo lengths vary from 18 months to an indefinite period, with what would appear to be an understanding across universities that open access for theses can have negative implications for authors seeking to publish the thesis in other ways. Oxford appears to be the only one of these universities to impose a blanket embargo (of three years) on all theses, with application required only for a period longer than that. As long as universities allow embargos for open access to theses, there should be no reason why it should create difficulties for authors seeking to publish their thesis as a monograph.

⁶⁹ The service can be found at: <http://ethos.bl.uk/About.do>

⁷⁰ The Economic History Society informed the project that "some [publishers] are requesting a proportion of demonstrably new material (as high as 30 per cent), others that authors meet production costs by, for example, producing camera-ready copy."

⁷¹ Boydell & Brewer are explicit on the issue:

http://www.boydellandbrewer.com/content/docs/BB_Author_Guidelines_U.pdf

130. These issues relate entirely to open access for theses rather than for monographs. Importantly, however, any business models for open-access monograph publishing that derive an income after publication (e.g. through advertising) are likely to be just as affected by moves towards open access for theses as the traditional publishing model. On the other hand, business models that derive an income before publication (e.g. through publication fees) would be unaffected. In a scenario where the majority of theses were available as open-access and without an embargo, authors seeking to publish a book on the basis of their thesis would potentially be more dependent on these unaffected models, a dependency that carries risks for the author and for scholarship as a whole. Longer-term trends seem to show no increase in the numbers of theses requested to be made confidential (Barnes, 2010); it will be interesting to see how this changes over the coming years.

Policy implications

- Although the practice of UK authors turning their PhD theses into published monographs is well-established, open access for theses is not a material issue for policymakers investigating open access for monographs. Concerns about whether the publishing options of PhD candidates will be limited by open access for theses depend to a large extent on misunderstandings about the extent to which the thesis in the UK differs from the final book.

4.8. The international dimension

131. Howsoever the UK might decide to proceed towards open access for monographs, it is clear that it does not act in isolation. Research happens in a global context. Academics collaborate extensively through a wide range of international partnerships. As individuals, academics are highly internationally mobile. And humanities academics are more likely than others to publish in languages other than English, in venues likely to be both unaware of UK open access policy and beyond its reach. There is a view that the UK, as a relatively small producer of the world's research, cannot and should not be a prime mover. While there is a counterargument to be made about the UK acting as a global leader in this agenda, it is clear that the right approach must be to find a balance between achieving meaningful progress towards open access and fitting harmoniously into an evolving international context. This is particularly important if we are to avoid an introspective autarkic position in which international collaboration, in which the UK is particularly strong, publishing in the most prestigious place irrespective of geographical location, and the international movement of academics into and out of the UK, are all adversely affected.⁷² For these reasons, we need better to understand the wider international context for open access policy and practice.

132. In public policy terms, while the UK is justifiably seen as a prominent agency of global moves towards open access, one should not mischaracterise the global position as

⁷² An example was provided by the International African Institute which pointed to specialist fields in which the most prestigious publishers are outside the UK, in the case of African studies some key university presses in the USA. The ability to publish with those presses while remaining compliant with UK mandates was regarded as essential for the flourishing of research in its field within the UK.

being one of stasis. Moves towards open access for journal articles are happening right across the globe, and have been doing so for a number of years. In the USA, the seminal open access policies of the National Institutes of Health and of prominent institutions such as Harvard have been notable in moving open access forward in the American academic community. In 2013, the White House Office for Science and Technology Policy issued a memorandum to all federal funders of research to deliver public access to publications arising out of research they fund, based on a recommended 12-month embargo rather than payment models for immediate access.⁷³ The memorandum is focussed on public access to journal articles, and says little about the wider range of research outputs of which monographs are one. It is clearly a significant intervention, though probably one that should be seen as incremental rather than transformational. I understand that the National Endowment for the Humanities, for example, is still at an early stage in discussing open access, and that it intends to consult with the field before developing a policy. It has to be noted that, in the more complex institutional, funding and publishing environment in the US, the debate over open access is a lively one. There are differing views on the extent to which a consensus is emerging, but there are clear signs that the agenda is being taken forward, albeit without the clear sense of direction that one finds in Europe.

133. In other parts of Europe, many research funders and their institutions have introduced open access policies for journal articles arising from funded research.⁷⁴ Prominently, the DFG in Germany and the Austrian Science Fund (FWF) require open-access publication of articles, but these are by no means the only agencies with such policies. Institutions such as Université de Liège and the University of Zurich (to name just two) also require open access, through depositing journal articles in their repositories. French universities are also beginning to establish their own open-access repositories for staff publications to be available either at the moment of publication or after an embargo. Angers were pioneers when introducing this requirement in 2013, and they have more recently been joined by the two Alsace universities of Strasbourg and Mulhouse.⁷⁵ In Italy, the national research evaluation agency, ANVUR, has recently launched a series of small research projects on issues relating to open access in the domain of book publishing. At a cross-European level, the new Horizon2020 programme introduces similar requirements for open-access depositing of journal articles that arise from projects funded by the scheme. Equivalent requirements for books have yet to take hold across Europe although examples such as the Austrian FWF, the Research Foundation Flanders (FWO) and the European Research Council show the spread of monographs appearing in open access policies. In addition, through the OAPEN Foundation, pilots are underway.⁷⁶

⁷³ <http://news.sciencemag.org/2013/02/white-house-unveils-long-awaited-public-access-policy>

⁷⁴ For an overview of the situation with regard to mandates across Europe in 2012, see Schmidt and Kuchma (2013)

⁷⁵ <http://www.letudiant.fr/educpros/actualite/recherche-en-alsace-les-universites-sur-la-voie-de-l-open-access.html>. Also in the French context, l'Académie des sciences has recently announced its backing for an open-access model based on payment to publish and is pressing for a model of centralised negotiations with publishers to establish contracts for open-access publication of articles. It insists that this approach will only work if it is applied internationally, at least on the wider European scale. Académie des sciences (2014).

⁷⁶ <https://www.fwf.ac.at/en/research-funding/open-access-policy/>
http://erc.europa.eu/sites/default/files/document/file/open_access_policy_researchers_funded_ERC.pdf

134. In Australia, the Australian Research Council and the NHMRC require open access to the fruits of funded research (the former requires this for books and book chapters, but the latter does not). Prominently in Australia, a number of universities have monograph presses that operate on an open-access basis. Australian National University Press is the most well-established of these, operating since 2003 and having now published more than 500 open-access titles across a range of fields.

135. In the Portuguese and Spanish-speaking countries, open access is arguably embedded in practice to a much greater degree than elsewhere. The international service SciELO is a highly prominent and widely-used repository for articles published in these countries, housing over half a million articles. A newer service was launched for books and book chapters in 2012; at the time of writing, SciELO Books contains over 300 books and 4,500 book chapters, achieving over 25 million downloads.

136. Elsewhere in the world, open access continues to develop rapidly, with both practical initiatives and policies being put in place. The ROARMAP registry currently identifies 90 funder mandates, for instance, most but not all of which are from funders in science and medicine, and many more at institutional level.⁷⁷ While it is clear that these are currently very focussed on journal articles, and mandates and initiatives for books are much fewer in number and more local in scope, there is a clear trend towards more widespread open access across the globe.

137. There is an important special case here and that is the USA, where academic book publishing inhabits a highly differentiated landscape. On the one hand, many monographs are published through small university presses that are heavily subsidised by their institution and offer an outlet for the work of humanities and social sciences academics both within and outside the institution. These presses are characterised as having very fragile publishing operations with limited resources. There are also major university presses such as Harvard, Yale and Chicago, as well as large commercial publishers such as Rowan & Littlefield. With very few exceptions, such as University of California Press, neither the smaller university presses nor the larger publishers have shown any significant signs of moving towards open-access book publishing. If they were to do so they would in all likelihood be challenged quite forcefully by US learned societies who, with the important exception of the Modern Languages Association, are broadly opposed to open access. Nonetheless, the self-declaration of Yale as an open-access institution and the institutional open access policies of Harvard, California MIT and others following the Harvard model are perhaps a sign of things to come.⁷⁸

138. In sum, the UK would be unwise to go it alone towards open access for monographs; the risks to the publishing practices of UK arts, humanities and social sciences academics as

⁷⁷ <http://roarmap.eprints.org/>

⁷⁸ For examples of these policies, which apply only to articles, see: <https://osc.hul.harvard.edu/policies;>
[http://osc.universityofcalifornia.edu/open-access-policy/policy-text/;](http://osc.universityofcalifornia.edu/open-access-policy/policy-text/)
<http://libraries.mit.edu/scholarly/mit-open-access/open-access-at-mit/mit-open-access-policy/>

well as to the inward and outward mobility of researchers are potentially very serious. But the global trend towards open access is clear, however uneven in its practice and varied in the forms that it takes. The development of policy in the UK must take account of both the direction of travel and its unevenness, because without greater international co-ordination of policy and practice it will be hard for open access to achieve its goals.

Policy implications

- The wider international context appears to be one of significant momentum in the direction of open access with respect to both policy and practice. This momentum has focussed to a large extent on journals, but there are also developments towards open access for monographs. In this context there is potential for the UK to take further steps towards open access for monographs, and perhaps even to take a leadership role, but it must do so with full knowledge of the global position and with full awareness of any risks to authors' collaboration, publishing and career options in doing so.

4.9. Economic and business models

139. Any serious discussion of how to deliver open access must answer the fundamental question: who pays? There are costs involved in publishing and distributing books; if open access is to be sustainable, these must be met. A number of models for supporting open-access book publishing have emerged in recent years. As with journals, some of these depend on authors, or more commonly the author's funder or institution, as the source of funds, and there are others that will continue to depend in some way on reader purchases. To better understand the advantages and drawbacks of each of these models, independent advice was sought, and with the support of HEFCE, a study was undertaken of the economics of these various models. A report from this study is attached at Annex 4. Its focus is on the business model, that it to say 'to qualify as a business model the operation has to be a serious attempt to produce books on an ongoing basis for a sizeable readership.' (Annex 4 p. 5)

140. This study is intended to provide a theoretical basis for evaluating, in economic terms, the various pilots and programmes that are emerging. It does not offer hard quantitative data to support its analysis. This is not possible given the constraints described by the report: the pilots are too few, too new and too diverse for any analysis to be sufficiently rigorous or fair and, even if it were useful, commercially-sensitive financial data is not accessible. What is provided instead is a rich and methodical qualitative analysis of the economic mechanisms that underpin each model and an assessment, in economic terms, of the performance of each.

141. The five broad open-access publishing models that were identified by the study were: 'new university press', which has a variety of possible configurations but is embedded within the university and defined by author-side funding being provided by the institution in some form of a subsidy; 'mission-oriented open access', defined as open access publishing projects that are animated by a sense of idealistic or disruptive purpose; 'freemium open access' through which open-access versions sit alongside premium versions that offer better services and functionality, which might include a print edition; 'aggregator/distributor', which are not defined as publishers but by their focus on the distribution interface between books and users, defining the latter as both readers and libraries; and 'author payment', whereby cost recovery

is not on the reader side but on that of authors, generally through their sponsors. A sixth model was added for the purpose of comparison, that of the traditional print publisher; while not open-access, this provides a useful baseline against which the various models might be compared. The characteristics of each model are described fully as part of the study, which also acknowledges that some pilots and approaches might combine features of two or more models.⁷⁹

142. Models were assessed according to six performance criteria (these are explained in Annex 4 pp. 5-7). Three of these relate to the strengths and weaknesses of the model itself: quality, sustainability and dissemination. The others relate to the effects that each model has on the overall publishing system: diversity, innovation, and integrity. As such, it is possible to draw some very general conclusions about which of the models offers the most promise to academics, publishers and funders by considering their performance against each of these criteria, recognising that the expectations of these different players will not be entirely the same.

143. In terms of quality, it is very clear from this analysis that open access publishers take quality very seriously, with an underlying need to be credible to academics as a route for publishing and as an alternative to traditional publishers (where this applies). The study notes that some models, including those that demand a payment from authors, create incentives to trade quality for quantity and, while institutional factors hold this in check at the moment, this is a concern which is echoed by some prominent correspondents, potentially reflecting a more widespread nervousness around these models among academics. The success of open-access models will depend on overcoming this concern by dealing with these incentives in an appropriate and trusted way. For publishers, though, being perceived as high-quality is crucial for long-term survival, which provides a powerful antidote to any incentives in the opposite direction. Where quality control incurs significant costs, however, some smaller operations might run into difficulties, and the report notes that the wish for universities to publish their own output through an open-access press might encourage perceptions of vanity publishing.

144. As far as sustainability is concerned, the challenges are more striking. Open access is, in economic terms, the rejection of a valuable revenue stream.⁸⁰ Whether this can be replaced by other streams, including doing so at scale, depends on how reliable these other streams are. For new university presses and some mission-oriented presses, income provided by institutions or through in-kind voluntary labour might be difficult to secure for the longer term, and they will inhibit growth as the income stream does not scale with the operation. Author payments are inherently scalable as each new title brings in guaranteed revenue, but there are wider systemic challenges here that must be acknowledged: not all authors will have access to publication funds, and without additional constraints this would inevitably prevent some good work from being published by presses that adopt this model. Freemium models

⁷⁹ A good example of this is the Knowledge Unlatched pilot, which combined features of the aggregator/distributor model with those of the author payment model, with the important difference being that the library community (i.e. universities) pays the publication fee.

⁸⁰ Although the very limited pilots that have taken place seem to show that open access availability has little effect on the sales of print editions of a book, the scale and robustness of these pilots do not permit any broader conclusions to be drawn.

are scalable too, in that they continue to depend on income from reader-side payments to fund the more basic open-access offering. Freemium models appear to be at an advantage, then, but this advantage depends on the continued wish of academics and others to want something more than basic open access, be it a print book or a more fully featured e-book. If reader expectations of e-books change, freemium publishers will need to innovate to continue to attract revenue. This may have resultant positive effects on the reader experience in the longer term but, if publishers find it difficult to respond, could affect the sustainability of this freemium model.

145. Looking at dissemination, the study identifies some complex effects. There appears to be disagreement about whether providing open access to a book without active measures to disseminate it is sufficient. As this report has already indicated, if open access is to offer an advantage over print books, books will have to reach those that want them and discover them through traditional routes, but who currently cannot or will not purchase them. More established publishers are likely to be more successful in this regard than newer, smaller ones, so the author payment model being adopted by major publishers is likely to have the greatest dissemination impact. On the other hand, the rise of aggregation and distribution services for open-access books, as well as increasing sophistication in search engine technology and an ever-greater reliance among academics and others on the Web as a discovery tool, might help smaller operations to challenge the larger publishers in this regard. For policymakers this is a critical area of concern: a key benefit of open access is surely increased dissemination; if particular models are likely to fail in this regard, then the benefit could be lost.

146. More widely, this study does not conclude that the rise of open-access models and operations will have a negative effect on the diversity of the publishing landscape, but at the current stage of open-access book publishing there is not the empirical evidence available to test that conclusion. Some models can promote innovation in publishing, which is felt to be necessary given the conservative nature of the market: author payment models promote innovation in author-facing services, freemium models promote innovation in the form of ‘the book’, mission-oriented operations are often highly innovative (and the study cites PLOS ONE as a notable example of successful innovation arising from a mission-oriented approach in the journal world).

147. In terms of integrity, the study concludes that none of these models is likely to damage the integrity of the publishing system as a whole. This is perhaps because the balance of their strengths and weaknesses is likely to create a diverse landscape. But the functions of aggregator/distributor services might also help in important ways to tie together this diversity into a meaningful whole. The study makes a more general point about open access, though, which is that open access to some (but not all) literature is likely to drive attention to publications on grounds of availability, and not necessarily that of quality. The important implication is that anything other than total delivery of open access could have serious implications for the system of scholarly communication as a whole. Researchers have already reported that some high-quality work is simply not cited because it is more difficult to access; one might imagine this situation becoming more widespread should open access become the norm.

148. One final point about this variety of business models is that they should ideally be of interest to analysts and funders rather than to readers. There is a plethora of business models in print publishing today, but they are invisible to readers. It is important that a settled system of open access should leave the fragmented business models in the background, invisible to the reader wherever that is possible. If open access is to deliver the benefits that are intended, then readers should not be deterred by the complexity of modes of access.

Policy implications

- Although there is a reasonably settled model for open-access journal articles, one in which ‘gold’ tends to be associated with author payment systems and ‘green’ with accepted manuscripts in repositories, there is no such settled model for open-access monographs. Furthermore, neither of these would seem to represent the future in a straightforward way. Author payment models appear to be viewed in monograph publishing as no more than transitional, and this report has noted the problems with adopting the accepted manuscript as the open-access version when it comes to monographs. This has significant implications for the speed with which policy can be developed, taking account of the complexity of the open-access publishing landscape.
- The various business models for open-access publishing of monographs are at an early stage of implementation, but are well-developed enough in many cases to allow for a qualitative economic analysis to show that a diverse range of models and approaches are likely to co-exist for the foreseeable future. Policy will have to be developed in a context where it is unlikely that any one model for open access will emerge as dominant, and one in which an attempt to impose a single model through policy is unlikely to be feasible, let alone acceptable. There will in the future, as there is now, be a variety of ways of making open access work for monographs. This has important implications for any introduction of mandates and it is important that policymakers allow a variety of models to evolve.
- It may be of value for policymakers to collaborate to monitor and evaluate, and perhaps facilitate, the development and implementation of business models for open access as a preliminary to introducing mandates. In so doing, it will be important to give priority to the performance criteria for successful business models identified for this report.

5. Policy implications

149. This report describes an evolving world for monographs, one in which open access is becoming increasingly debated, and in which practical approaches are being proposed and piloted. It should be added that in the course of the consultations for this report I have been impressed by the cautiously positive approach towards open access for monographs that I have encountered amongst academics: the caution is because of the many challenges of the kind identified in this report, but the positive approach is there because the many potential benefits are broadly (if not wholly) appreciated. Although there are very clear opportunities and benefits associated with open access for monographs, there are also significant challenges that must be addressed if moves in that direction are to be sustainable and, even more important, capable of commanding the respect and support of the research community in the arts, humanities and social sciences.

150. Although it is important that a wide range of players in the monographs world engage with these moves – researchers and authors themselves, publishers, universities, librarians and others – policymakers have a very specific role to play. By policymakers I mean, above all, those who fund research and those in government who make policy in relation to research. This section gathers together some of the core issues that have emerged from the preceding sections which must be tackled when developing policy, and offers some suggestions for potential ways forward. It is important to remember that this project was not established in order to produce direct policy recommendations, such as had been the intention of the Finch Report. In recognition of the much earlier stage of thinking as well as practice with respect to open-access monographs, my aim in this report has been to identify the key issues involved in considering the monograph in an open access environment, with a view to helping those funders, academics, publishers and others who are interested in pursuing open access for monographs to do so in an informed and sensitive way.

151. There is always the danger that a report treats the subject being studied in a degree of isolation and, although what has been written here has repeatedly sought to position the question of monographs and open access within its wider contexts, it cannot entirely avoid that danger. It is therefore important to set it in its place to avoid seeing open access (whether for journal articles or, here, for research books of all kinds) as a disruptive force in an otherwise stable system of research dissemination and engagement. Seeing open access as a threat to the quality and integrity of UK research, or regarding it as a liberating force that will transform it for the better, would each myopically miss the key context in which all of this debate is going on.

152. Far from being stable, the research communication system and the context in which it sits have undergone dynamic changes over the last couple of decades. In my practice as a historian, I have generally been wary of the supposed power of transforming conjunctural events or innovations, preferring to look to the longer-term structural changes underway and within which that event or innovation is merely one element. The system of scholarly research and communication was being disrupted by major changes long before open access for monographs became a serious issue. These changes include the character of monograph publishing and its profitability; library financial pressures and their impact on acquisition strategies and the deployment of space, this latter also influenced by changing approaches to students learning; increasingly competitive global markets for higher education and for research; assessment of the quality and impact of research; digital technologies, new forms of research communication and online discoverability; new forms of reading alongside changing user expectations in terms of location and speed of retrieval of content. This report has drawn on these developments where immediately relevant to the theme of the report, but they are the broader context rather than the core theme. The main point is that the introduction of open access for monographs should not be seen as a disruptive force in an otherwise stable system but rather as one part of a much larger and longer-term dynamic process of change.⁸¹

⁸¹ In August 2014 the AHRC and the British Library announced a new two-year project on ‘Communities of practice: the academic book of the future’, led by Dr Samantha Rayner, Director of the Centre for Publishing at University College London, with the goal of exploring the way in which the academic book might develop in the years to come.

This report has considered the implications for policymakers at each stage; the various conclusions are drawn together below for ease of reference.

- Monographs are a distinctive and important way for researchers in many disciplines to communicate their work and establish their academic identity. Policies that affect the scholarly communication system, including policies for open access, should recognise this importance and avoid putting it at risk
- Monographs play an important and diverse role in shaping the careers of academics in many disciplines. There are signs that this role may be coming under pressure within institutions, as time constraints and perceptions around the REF come to affect publication choices. Institutions should be aware of the risk of deterring academics from writing monographs in disciplines where they are an important part of research communication, and those developing policy in this area should demonstrate that they have taken into account its possible impact on the ecology of scholarly communication.
- Perceptions that certain outputs are more likely to obtain high grades from REF panels than others might be leading institutions to conclude that monographs are a less secure part of a REF submission when compared with, say, journal articles. HEFCE should in due course publish a breakdown of REF 2014 results by output type at an appropriate level of aggregation, with a view to enabling institutions to develop their own policies on the basis of transparent information.
- Monograph supply and production appear to be in reasonable health. Although library purchasing models are changing and budgets are under pressure, personal purchases and global markets are a significant driver of demand for monographs, and people are still reading them. In developing policies for open access it is important that it be seen not as a response to crisis but, rather, as a way to increase ease and range of access and thus to improve scholarly interaction and communication.
- Peer review is a necessary part of academic publishing, and the development of open access should be on a basis that supports rather than undermines it. Open access offers an opportunity for more diverse models of peer review to be trialled. Policymakers should monitor these developments as part of monitoring the developing business models for open-access books.
- Publisher brand is seen by academics as a proxy measure for quality. Although this is not necessarily unproblematic, for as long as publisher brand is a signalling mechanism for quality, the development of open access for monographs will require the contribution of reputable and well-established publishers. Policymakers should establish a dialogue with publishers to facilitate their continued engagement.

- Notwithstanding the limitations of print books, limitations that electronic publishing will be able to address in the long-term, they currently have clear advantages over electronic ones for academics and non-academics alike. These advantages are likely to remain for a considerable period of time. In these circumstances the continued availability of print monographs will be necessary, and policymakers should recognise that the availability of print books will be a necessary part of an evolving open-access publishing environment. There are material characteristics associated with the printed book, its layout, design and non-verbal content that often make it significantly more than the text alone, and these characteristics are part of its ability to communicate and shape what it is that is communicated. It will be important for systems of open access to acknowledge these key aspects of the book. This means that approaches which require the depositing in a repository of an earlier version to that of the published version (e.g. the author's accepted manuscript) will be less acceptable and, in all likelihood, less successful than they are with respect to open access for journal articles.
- A clear articulation of the opportunities and benefits of open access for monographs will be an essential component of policymaking in this area. Policymakers should be mindful that in terms of research practice, collaboration and wider engagement there are important potential benefits associated with extending open access to monographs that reach beyond the fact of access alone. Policies should be developed that will encourage rather than inhibit the securing of those benefits.
- Outside the framework of any policies, funders should play a role in facilitating through pilots and the formulation of standards those developments that will help digital open access realise its potential for innovation in research communication, collaboration and practice.
- The success of open-access publishing models and pilots will require that they are acceptable to academics, both as authors and as users of monographs. The contribution of the research community to the development of proposed policy initiatives should be secured through thorough consultation.
- A relatively small number of academic authors have strong reasons for not wishing to see their work made available as open access on the grounds that it may threaten significant income from royalties on recent and, for example in the case of creative writers, backlist publications. Policymakers should consider an appropriate basis for exemptions for these works from open access policies that might pose a threat to that income. It is recognised that clear definitions and boundaries will be required, and these will need to be developed in consultation with the academic community and publishers.
- Open access for monographs will depend, to a large extent and at least in the short- to medium-term, on e-book technology and publishing systems that are not currently seen as being sufficiently fit-for-purpose. Insofar as these constitute a significant obstacle to online open access, policymakers should consider taking initiatives with industry and other parties to identify and implement solutions.

- While most stakeholders agree that freedom to access and read books is desirable in principle, significant disagreement exists around the desired parameters of more open licensing for monographs. Policy approaches should not seek to impose licences regarded by many as controversial on an academic community that does not in broad terms appear to be ready to accept them. This advice rests on the recognition that such opposition might militate against the successful transition to open access. Allowing academics to choose to publish with more restrictive licences in the short- to medium-term is likely to deliver significantly greater support for open access mandates than the requirement for more liberal licences.
- Third-party material plays a critical role in the writing of monographs in the arts, humanities and social sciences, and the existing difficulties in securing these rights are likely to be exacerbated for open-access monographs, and will constitute a significant barrier to open access for many. Policymakers should discuss this issue with major rights holders and their representatives to seek a way forward for licensing of third-party works. This should ideally include working towards an international consensus.
- Any policy initiatives for open access will need to take account of the challenges that might be involved for disciplines where research books require significant use of material where the rights lie with third parties. These discussions should include the potential for more restrictive licenses to be attached to those elements in monographs which contain material where the rights are the property of third parties.
- Open access policies have the potential to deeply affect a wide group of stakeholders beyond academic authors and readers. As they develop approaches to open-access monographs, policymakers should engage with the key players, with a specific focus on universities, libraries, publishers, and learned societies, taking into account some of the main issues for each that are raised in this report. The aim must be to fully understand the risks and opportunities associated with different approaches and to facilitate transition and adaptation where appropriate.
- Although the practice of UK authors turning their PhD theses into published monographs is well-established, open access for theses is not a material issue for policymakers investigating open access for monographs. Concerns about whether the publishing options of PhD candidates will be limited by open access for theses depend to a large extent on misunderstandings about the extent to which the thesis in the UK differs from the final book.
- The wider international context appears to be one of significant momentum in the direction of open access with respect to both policy and practice. This momentum has focussed to a large extent on journals, but there are also developments towards open access for monographs. In this context there is potential for the UK to take further steps towards open access for monographs, and perhaps even to take a leadership role, but it must do so with full knowledge of the global position and with full awareness of any risks to authors' collaboration, publishing and career options in doing so.

- Although there is a reasonably settled model for open-access journal articles, one in which ‘gold’ tends to be associated with author payment systems and ‘green’ with accepted manuscripts in repositories, there is no such settled model for open-access monographs. Furthermore, neither of these would seem to represent the future in a straightforward way. Author payment models appear to be viewed in monograph publishing as no more than transitional, and this report has noted the problems with adopting the accepted manuscript as the open-access version when it comes to monographs. This has significant implications for the speed with which policy can be developed, taking account of the complexity of the open-access publishing landscape.
- The various business models for open-access publishing of monographs are at an early stage of implementation, but are well-developed enough in many cases to allow for a qualitative economic analysis to show that a diverse range of models and approaches are likely to co-exist for the foreseeable future. Policy will have to be developed in a context where it is unlikely that any one model for open access will emerge as dominant, and one in which an attempt to impose a single model through policy is unlikely to be feasible, let alone acceptable. There will in the future, as there is now, be a variety of ways of making open access work for monographs. This has important implications for any introduction of mandates and it is important that policymakers allow a variety of models to evolve.
- It may be of value for policymakers to collaborate to monitor and evaluate, and perhaps facilitate, the development and implementation of business models for open access as a preliminary to introducing mandates. In so doing, it will be important to give priority to the performance criteria for successful business models identified for this report.

153. In undertaking the work to develop this report, I have been struck by the strength of feeling about monographs within much of the arts, humanities and social sciences: monographs and other research books are vitally important to authors, to readers, to learned societies, to publishers, librarians and institutional managers. It is very apparent that this wide community is not opposed to the principle of open access for monographs, but is concerned that moves towards open access should be sensitive to the need to protect what is important about the monograph as it exists today and as it has developed over a century or more of research activity and writing. Any future policies for open-access monographs will therefore need to be careful to ensure that, far from damaging the way that people produce and communicate research in the arts, humanities and social sciences, they sustain and enhance it. These are disciplines in which the UK has a very high international standing and one that greatly exceeds what the size of the country and investment levels in research might lead one to expect. In the course of the work for this report I have been impressed by the willingness of the arts, humanities and social science community to engage with me. It is important that this engagement continues, because there is much to be gained by working with the grain, and much to be lost by not doing so.

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List of Abbreviations and Glossary

AHRC	Arts & Humanities Research Council
ANVUR	National Agency for the Evaluation of the University and Research Systems (Italy)
BOAI	Budapest Open Access Initiative
CC	Creative Commons
DACS	Design and Artists Copyrights Society
DFG	German Research Foundation
DOAB	Directory of Open Access Books
DRM	Digital rights management
ESRC	Economic & Social Research Council
ETHOS	E-Theses Online Service (British Library)
FWF	Austrian Science Fund
FWO	Research Foundation Flanders
HEFCE	Higher Education Funding Council for England
IRO	Independent research organisations
JSTOR	A digital library of academic journals, books, and primary sources
LOCKSS	'Lots of copies keeps stuff safe'
MHRA	Modern Humanities Research Association
NHMRC	National Health and Medical Research Council (Australia)
OA	Open Access
OAPEN	Open Access Publishers in European Networks
PDA	Patron-driven acquisition
PLOS	Public Library of Science
RCUK	Research Councils UK
REF	Research Excellence Framework
ROARMAP	Registry of Open Access Repositories Mandatory Archiving Policies
SciELO	The Scientific Electronic Library Online
SCONUL	The Society of College, National and University Libraries
SCUDD	Standing Conference of University Drama Departments

Annex 1: Membership of Expert Reference Group and international experts

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African Studies Association of the UK

Anglo-Norman Text Society

Arts and Humanities Research Council Advisory Board

Association of Art Historians

British Academy

Canterbury and York Society

Council of University Classical Departments

Conservatoires UK Research Committee

Early English Text Society

Economic History Society

EThOS Advisory Board

Jisc Collections

The Malone Society

Modern Humanities Research Association

OAPEN-UK

Publishers Association

Research Libraries UK

School of Advanced Study Research Committee, University of London

Scottish Text Society

Society for French Studies

Society for the Social History of Medicine

Society of College, National and University Libraries (SCONUL)

Standing Conference of University Drama Departments

University Council for Modern Languages

University English

University of Leeds, Faculty of Arts and Faculty of Performance and Visual Culture

Patterns of scholarly communication in the humanities and social sciences: a literature review by the Research Information Network

Annex 3 to the Report of the HEFCE Monographs and Open Access Project

The shape of the literature

1. The questions posed by this review sit at the confluence of a number of different bodies of literature, each with its own priorities, methods, assumptions, strengths and weaknesses. In order to keep a tight focus on the primary issue of importance – namely, evidence about the way in which humanities and social science (HSS) researchers use monographs – we have been relatively selective about the studies that are considered in the body of this review. But this initial section provides an overview of the various streams of work that might be considered part of the broader questions about researcher behaviour and scholarly communication priorities.

2. One important body of literature, and the main one that we have drawn on for this study, is based upon what might broadly be termed social research methodologies. Studies in this area range from large-scale surveys of academics to qualitative studies involving just a handful of subjects. Survey researchers select their respondents depending upon the question of interest, and might focus upon a particular discipline (Andersen, 2000), set of institutions (Tenopir et al, 2012; Estabrook and Warner, 2003), set of roles within an institution (Cronin and La Barre, 2004), members of an organisation (British Academy, 2005) or some other framework that makes sense for the research question. Surveys often struggle to achieve high response rates and many studies do not attempt statistical analysis of the findings, preferring to focus on descriptive reporting. But they offer a useful overview of behaviours, attitudes and perceptions among their target populations. Many of these studies are funded by external bodies and result in a published report instead of or in addition to articles in peer-reviewed journals. We have included these grey literature outputs within the review.

3. Qualitative studies are usually designed to offer a more in-depth insight into the behaviour of small groups of participants. Most researchers using this methodology rightly warn about the dangers of extending findings to wider populations. Nonetheless, their findings are often thought-provoking and worth consideration, as long as the limitations are borne in mind. These studies are bounded in some way, by considering a specific discipline (Bulger et al, 2011; Rutner and Schonfeld, 2012), a department within an institution (Harley et al, 2010; Bulger et al, 2011; King et al, 2006), an institution itself (Buchanan et al, 2005), or a particular role or career stage (Estabrook and Warner, 2003). Often, researchers use a mixed-methods approach, combining interviews or focus groups

with surveys in order to triangulate findings. Again, many of these studies are not published as peer-reviewed journal articles, but we have included them within the review.

4. Another important body of literature is based upon bibliometrics and citation studies. These use, as their raw data, information drawn from databases, samples of research outputs or other collections of published academic work to understand the networks of influence and reuse between scholars. There are many well-known problems with citation studies which seem to be particularly magnified in HSS. Some of the critiques focus on practical issues. For example, standard citation databases such as Web of Science, often used as a basis for data collection, do not have good coverage of HSS outputs (Engels et al, 2012; Nederhof et al, 2010). Hicks (2004) adds that such databases rarely achieve good coverage of non-English-language outputs which are often important in HSS literatures. Patterns of monograph citations are different from journal citation patterns routinely used as a basis for these studies (Tang, 2008) and the reliance on old monographs as primary sources in certain humanities fields may affect the average age of citations (Thompson, 2002). In other fields, research outputs such as novels, music performances, or conference outputs not published in formal proceedings, do not include citations at all, meaning that the network of influence around them cannot be understood by looking at whom they cite (Creaser et al, 2010). Andersen (2000) discusses the 'obliteration by incorporation effect' – that is to say, work that informs the cited work is not itself cited.

5. Other critiques relate more to the theory that underpins citation studies. As Fry et al (2009b) argue, bibliometrics tends to treat citation decisions as though they have a rational, empirical explanation; the reality is that a researcher's decision to cite something can be influenced by a number of what they call 'human decisions' which cannot be captured in a simple numerical analysis. Larivière et al (2013) explore the large literature on why people make citation decisions, highlighting in particular that motivations can change throughout a researcher's career. Hargens (2000) suggests citation context analysis as a methodology to understand the point that researchers are trying to make with a particular citation. Even given these limitations, citation studies provide a useful insight into how researchers use material within their disciplines, and they are therefore important to include within this review. Those studies which focus on HSS disciplines tend to recognise and attempt to compensate for practical problems such as gaps in databases.

6. A further set of literature might, broadly speaking, be considered as coming from a more humanities-based tradition of analysis. The approach is based upon argument or theory, and tends to be more narrative than the social science-type research mentioned earlier. References tend to be to previous studies rather than to original data collected from surveys, interviews or bibliometric analysis. As the approach is so different, we have not included these within our work. A final set of literature might broadly be termed opinion pieces or personal reflections on trends in scholarly communications. These are often found in conference papers, editorials or professional journals and do not draw upon original evidence, beyond the author's own experience or perceptions. These could form an extremely interesting corpus for original analysis of attitudes and perceptions, but do not fit neatly within this literature review, which focuses upon the findings of other researchers' studies.

Main priorities for HSS researchers in communicating research findings

Communicating with peers and developing scholarship

7. Sharing knowledge with peers to build a scholarly literature is a crucial aim of scholarly communications. Core to that is ensuring work appears in a place where peers are likely to see it, and indeed this does seem to be an important motivation for scholars. Harley et al (2010) identify this behaviour in case studies in three HSS subjects, finding in relation to journal articles that scholars prefer a combination of high-impact publications in flagship publications with smaller, niche ones designed to target particular audiences. The appropriate outlet depends upon the audience for the content. Huang and Chang (2008) argue that HSS researchers choose the language in which they publish their work in order to reach their target audience through the publication outlet where they think they will get most feedback from their peers. In their case studies, King et al (2006) found similar results for English-language literature researchers publishing books, who would choose a press that was well known and respected in their particular sub-field, rather than one which might have the 'glossiest' appeal. There is overlap, here, between the drive to communicate with peers and the desire to achieve maximum credit and prestige for work; the two issues are closely connected.

8. Identifying these outlets is not always easy, however, as they are different within subdisciplinary fields and seem liable to change over time. Garand (2005), in a survey of political scientists, found that researchers from different methodological areas and different disciplinary backgrounds rate the same journals differently. This can mean that research areas become disconnected and self-referential: 'one scholar's specialisation is another scholar's insularity' (Garand, 2005, p. 1002). Ellison (2007), using data from US economics departments, found that Harvard economists are increasingly getting citations to unpublished research, and therefore receive little benefit from publishing in what are widely-considered to be high-impact journals within the field.

9. Quality assurance and peer review appear in many studies. A number of interview-based case studies find peer review to be absolutely central to publication, and new forms of scholarship must be seen as undergoing rigorous peer review in order to be accepted (Bulger et al, 2011; Harley et al, 2010; King et al, 2006). But scholars also make frequent criticisms of the peer review process and of editorial power (Harley et al, 2010). The data from Ellison (2007) suggest that in some economics departments – and it is probably not coincidental that economists have a strong tradition of sharing online pre-prints – researchers are obtaining high numbers of citations to unpublished research, and that publication through peer-reviewed outlets is no longer the only, or even primary, way of disseminating work. And Engels et al (2012) mention, almost in passing, that when selecting a sample for their study of changing patterns in HSS publishing they struggled to identify peer-reviewed books because most publishers do not submit all of their books to peer review. More data on this would be helpful – it is possible that the authors are referring to edited volumes or books that are peer-reviewed at different stages in the writing process. Overwhelmingly, researchers remain in favour of the *principle* of peer review, feeling that it helps them as authors to improve their work and as readers to select the most appropriate content – but the *practice* of peer review is not accepted as an unquestioned good and researchers have other, often discipline-specific, ways of identifying important information.

10. There are many other drivers to publish, beyond communicating with one's peers, and some studies suggest that these may be in tension with the desire to build a scholarly literature and share research findings, particularly in relation to books. For example, Harley et al (2010) found some concern in their interviews with humanities researchers that the growing two-book requirement for tenure in history and classics might affect the quality of output – that researchers are writing in order to be promoted rather than because they have original ideas which deserve to be communicated. They also found that archaeologists have reservations about traditional publication outlets such as journals and monographs, which may restrict the amount of supplemental materials that are needed to communicate research findings effectively. Rutner and Schonfeld (2012), in a case study of US historians, find some researchers who would prefer to use digital methods to communicate their research outputs nonetheless publish a book because it is necessary for career advancement. King et al (2006) cite an English-language literature interviewee who considers the reliance on books to be 'stultifying' (p. 23), preventing researchers from communicating in the format best suited to their material – for example, digital media or a series of journal articles.

Reputation and reward

11. Publications are core to many systems of recognition and reward in academia. Many studies focus on the United States, as the tenure system creates a clear process of evaluation throughout the initial stages of a researcher's career which does not have a precise parallel in, for example, the UK. Cronin and La Barre (2004) surveyed a number of language and literature departments and, looking at their tenure and promotion guidelines, found that academic excellence and a contribution to scholarship are at the heart of many. In a cross-disciplinary case study, Harley et al (2010) found that tenure and promotion are linked to service and teaching, but that these count for little without an outstanding publication record. Andersen (2000) agrees, finding that although more relativistic approaches in the social sciences recognise 'pluralities of prestige hierarchies' (p. 675), the scholarly communications system continues to play an important role. Although speaking at conferences and maintaining networks are important to career advancement, the publication aspect is in most cases non-negotiable (King et al, 2006; Harley et al, 2010). In other territories, researchers look at institutional reward systems such as the Research Assessment Exercise (RAE)/Research Excellence Framework (REF) in the UK, many of which focus very heavily upon published research outputs although these tend to measure a slightly different thing and, in some cases, the best interests of an institution may not be the same as the best interests of their researchers (Huang and Chang, 2008).

12. Despite this high-level agreement on the importance of publications for career advancement, it is clear that there are several factors which might influence what is considered to be a 'significant' publication for the purposes of promotion or tenure. Field is probably one of the most important, and disciplinary cultures play an important role (Fry et al, 2009b). This can vary even within a field: King et al (2006) in their interviews with anthropologists find that books are, in general, expected for promotion, but that anthropologists working from a more biological background feel that journal articles are as important. Across all economics disciplines, authors of articles appear in alphabetical order in 89% of cases, while in the sub-field of agricultural economics alphabetical order is used in only 44% of cases, suggesting that the author lists are being used to assign credit in some way within the sub-field (Fry et al, 2009b). Understanding these nuances is important, where they exist: in other disciplines the question may not even arise – in language and literature departments, for example, sole authorship is expected for both books and journal articles (Cronin and La Barre, 2004). Formal guidelines often refer obliquely to the kinds of scholarship and

publication that are expected in different disciplines, especially if they are generalised and not tailored to a specific department, which leaves those appointing with a measure of discretion (Cronin and La Barre, 2004).

13. Institutions also play an important role in setting tenure and promotions criteria for their researchers and, as Cronin and La Barre (2004) find, these are by no means consistent. Between and within institutions, expectations for language and literature departments vary and can be set out at a very local level, shared between several departments or captured in a single institution-wide handbook. Harley et al's 2010 interviews with HSS researchers find an impression that 'second-tier' institutions have different performance standards for their researchers than the most competitive, and that this is to be welcomed, but that problems arise when teaching-focused institutions adopt the standards of research-focused ones.

14. The role of books, and specifically monographs, within tenure and promotion decisions is particularly marked in some sections of the humanities. Estabrook and Warner's 2003 survey of university faculty in anthropology, history and English in Committee on Institutional Cooperation (CIC) institutions found a strong emphasis on books among historians: 82.9% agreed that a book should be required for tenure. English faculty were less convinced, with 46.6% of respondents agreeing with the statement, and only a minority of anthropologists (17.9%) believed that a published book was a necessary precondition of tenure. The interviews with department chairs which accompanied this survey showed a clear expectation that faculty should have a book published or in-press before being considered for tenure. And this expectation seemed to have increased in recent years: 89.2% of faculty in these disciplines tenured since 2000 had published a book at the time of tenure, but only 64.2% of those tenured before 1980 (Estabrook and Warner, 2003). A later survey of modern language departments found that 88.9% of departments in Carnegie Doctorate-granting institutions ranked publication of a monograph as important or very important for tenure. There is a marked distinction between these top-ranking institutions and Masters and Baccalaureate universities, where 44.4% and 48.0% respectively find monographs important or very important; this rather supports Harley et al's findings about the different expectations of different levels of institution (Stanton et al, 2007; Harley et al, 2010).

15. This expectation about books is not always formalised in universities' written statements about tenure and promotion: Cronin and La Barre's study found it was quite uncommon to see a book mentioned explicitly in the tenure and promotion criteria, although this may have been because the department was using general university-wide criteria which are not discipline-specific. A handful of institutions attempted to draw some kind of equivalence between a certain number of journal articles and a book - the norm appears to be somewhere between five and seven, which rather puts the RAE and REF's two to one ratio to shame (Cronin and La Barre, 2004). Similarly, King et al (2006) find that it is unusual to see a book explicitly mentioned in English-language literature contracts, but that an assumption exists nonetheless that one should have been written.

16. The literature suggests that social scientists place less emphasis on publishing books for career development than humanists. Andersen (2000) found that Danish social scientists rank books and journals almost equally for career development, and Fry et al (2009a) in the UK found that social scientists rank journals slightly higher than books for personal career advancement and for meeting funder requirements – although they do also value books for the former purpose. King et al (2006), looking at the emerging interdisciplinary field of law and economics, found that a large number of

high-quality outputs around an original research idea or area is the most important factor for career advancement; where and how these outputs are published seems less important.

17. Other, less traditional, types of output were more problematic for tenure and promotion committees. Some humanistic disciplines are already used to judging non-textual output such as music or works of art (Harley et al, 2010). In general, however, studies seem to find that both individual and organisational assessment systems do not give enough weight to non-traditional outputs (Harley et al, 2010; Bulger et al, 2011). Part of the problem is the vicious cycle described by Harley et al, whereby because nobody knows how to judge them, nobody puts them forward, and therefore nobody ever learns how to judge them. Cronin and La Barre (2004) describe a resistance to change among senior faculty, and this can mean change even from print to electronic versions of traditional outputs. King et al (2006) find younger scholars reluctant to publish electronically because they fear it may prejudice their chances of tenure: this may be a reasonable perception as Stanton et al's 2007 survey of doctorate-awarding institutions found that 65.7% of English and foreign language departments had no experience of evaluating monographs in electronic format. Although Estabrook and Warner (2003) find that heads of department are beginning to consider outputs such as critical editions, memoirs and creative materials in promotion decisions, monographs remain a standard.

Public engagement

18. Public engagement and outreach have become increasingly important for researcher across disciplines, but evidence about such activity in the humanities and social sciences is somewhat mixed. Humanities and social science researchers appear to be relatively good at public engagement. Huang and Chang (2008) cite a rather old 1989 study which found that HSS departments in the Netherlands published a relatively large number of non-scholarly outputs - magazine articles or trade books - compared to their science, technology and medicine (STM) counterparts. A newer study by Kyvik (2003) looking at Norwegian faculty found that 64% of humanities and 60% of social science researchers had published what they termed a 'popular science' article, compared to 38-44% of researchers in STM disciplines.

19. This said, case studies by both Harley et al (2010) and Bulger et al (2011) find that many disciplines do not feel that non-academic audiences would be particularly interested in their research. The level of interest was seen by some interviewees as being on a sliding scale, with - for example - music theory less likely to be of interest to the general public than history. Only archaeologists saw public engagement as important to the success of their research: in other disciplines interviewees highlighted the risk of being perceived as a 'public intellectual' (rather than a serious scholar) if publications that are primarily public-facing outweighed a strong scholarly record (Harley et al, 2010).

Writing as thinking

20. Some of the more in-depth qualitative studies found that researchers consider the discipline of writing a book to be very important. Palmer and Neumann (2002, p.100) argue that 'the act of writing is formative', and ideas emerge and mature through the process of writing at length. King et al (2006, p.21) cite an English-language literature interviewee who says that 'the medium in which we, ourselves, construct our arguments is book-based'. Huang and Chang (2008, p.1824) argue that many researchers choose to publish in their native language (where this is not English) because their

‘thinking may be deeply intertwined with their language expressions’, again indicating the very close relationship between thinking and the writing process. On a more practical level, Rutner and Schonfeld (2012) find evidence of historians using potential chapters to organise their notes and sources before they have even begun to start writing the book, showing yet another way that research and writing are intertwined.

21. Interviewees in many of these studies were also concerned about the way that external pressures might affect the process of writing a book, and the development of intellectual ideas. Harley et al (2010) found some – though not universal – concern about the growing pressure for a two-book requirement for tenure in history and classics, leading young researchers to waste time on second books that are not, in fact, very good, rather than developing new ideas through a slower writing process. Looking at pressures from the other direction, Cronin and La Barre (2004) quote a director of graduate studies in Harvard’s English department who is concerned that commercial pressures might prevent young researchers from experiencing the training of writing a book, if they cannot subsequently get it published – although, as the authors note, if the benefit is in writing the book, perhaps it is not necessary to publish it in order to achieve the positive outcome.

How do monographs fit into the wider scholarly communications activities in the humanities and social sciences, and what are their strengths and weaknesses?

What to share, when and with whom?

22. The most important formal outputs from research in the humanities and social sciences are books and journal articles. In comparison with other disciplines, HSS researchers seem less reliant upon journals. An Australian study found 85% of natural science outputs were published in journals, while the equivalent figure for HSS was 61%; a Spanish study found 81% for natural sciences and 54% for HSS (Fry et al, 2009b; Hicks, 2004). The general perception is that humanists are more reliant on books and social scientists tend more towards journals as the primary formal published outlet for their work (Creaser et al, 2010; Fry et al, 2009a; Huang and Chang, 2008; Engels et al, 2012).

23. Indeed, discipline plays an important role in the decision about whether to publish in a book or a journal, reflecting both the scope of the research and the expectations of one’s peers (Fry et al, 2009b). But there can be variation even at a subdisciplinary level. Archaeologists, for example, work within a broad discipline: those at the more humanistic end publish monographs, while those working with more scientific or technical aspects prefer to share their findings through journal articles (Harley et al, 2010). A separate study has similar findings for anthropology: biology-focused anthropologists publish in journals while socio-cultural anthropologists use books (King et al, 2006). A rather old study from 1983 found that, within English literature, scholars working on contemporary writers tend to write in journals, but as their subject becomes older, they ‘turn to the monograph as the form in which to offer more extensive critiques’ (Watson-Boone, 1994, p.204). Becher and Trowler (2001) find that economists behave more like biologists than historians or modern linguists when it comes to speed of publication and the nature of research outputs. And even within book-focused humanities disciplines, ‘journals play an important role in disseminating

short arguments, book reviews and other discipline-specific communication' (Harley et al, 2010, p.24).

24. Books are seen as giving an opportunity to develop ideas fully, in a way which is not possible through a series of journal articles, for example (Cronin and La Barre, 2004). In Estabrook and Warner's study, 46.8% of humanities researchers felt that a book was needed in order fully to develop their argument and ideas; a further 25.4% felt that while their work could be published as a series of articles, they would rather present it in a single book. Again, disciplinary differences are evident here: 65.6% of historians felt that their ideas needed a book, compared to 38.7% of English researchers and 30.5% of anthropologists (Estabrook and Warner, 2003). Becher and Trowler (2001) make a close link between the nature of an academic's research and their preferred output type, describing researchers as either 'urban' – focused on a narrow area of study – or 'rural' – ranging across a number of themes or topics – with the former more likely to publish journal articles and the latter more likely to publish books.

25. Once the medium of publication is decided, researchers must choose where to place their book or article. Prestige is important here, and university presses seem to be considered the most prestigious outlets for humanities books according to two US-based case studies (King et al, 2006; Thompson, 2002). However, other, very practical, factors may also come into play when deciding where to publish. For example, Harley et al find that permissions to reproduce content can be very expensive in subjects such as music, history or art history, and that subventions do not always cover costs. Estabrook and Warner (2003) find that 24.5% of faculty surveyed have been asked for a subvention for one or more of their books, and that in 90% of cases the cost was more than \$1,000. A focus group within the same study identified a concern that large subventions may begin to look like paying to publish, and an impression that books with lots of pictures are best published with European presses.

26. Researchers may have other types of output that they wish to share formally. Fry et al (2009a) find that more than half of humanists consider datasets to be 'not applicable' as a research output; social scientists found them slightly more relevant but unimportant nonetheless in relation to other types of research output. Harley et al (2010) find some evidence that economics and political science journals increasingly expect datasets to be published alongside articles, and that many archaeologists (who produce an unusual amount of data for a humanities field) expect that data to be shared as a public-good 'commons' (Harley et al, 2010). On the whole, however, most disciplines do not seem to expect that data will be shared as a matter of course, possibly reflecting difficulties in defining what 'data' might be in some disciplines.

27. Other types of published output may be more field-specific. For example, Oppenheim and Summers (2008) found that only 38% of outputs from music researchers for the 2003 RAE exercise were written research, while 52% were practice-based research and 12% fell within the catch-all 'other' category. In the 2008 RAE, the written outputs rose to 49% of the total, perhaps indicating an increased conservatism on the part of researchers at least in what they choose to submit to the panels, if not what they are actually publishing. Social scientists are particularly likely, compared to researchers in other fields, to see reports and working papers as important outputs from their research (Fry et al, 2009a), perhaps reflecting the impact that they might like their work to have on government and other public bodies.

28. Of course, most scholars do not restrict communication with their peers to formal publications, and there are a number of more informal channels that they may use to test and share early-stage ideas. Conferences are perhaps the most common of these. Compared to other disciplines, researchers in the humanities are least likely to see conference presentations or posters as a very important research output, followed by social scientists (Fry et al, 2009a). It is interesting that conferences are rated highly, in other studies, as a way for researchers to develop and maintain the networks which will help them to achieve career advancement (King et al, 2006; Harley et al, 2010). Harley et al (2010) find in their case studies that conference proceedings allow humanists to disseminate early findings, something which may be particularly important in fields with 'long lags to monograph publication' (p.22). King et al (2006) observe some English-language literature researchers beginning to use listservs and emails as a replacement or addition to in-person conversations at conferences, as a way of sharing early ideas. Two studies note that working paper repositories such as the Social Science Research Network (SSRN) may be providing a similar service for social science researchers, particularly now that citations to the archived version of the manuscript are perceived as legitimate, removing some fears about having work 'poached' through early but uncitable publication. Bulger et al (2011) find similar behaviour among philosophers, who use the PhilPapers website to share their work in progress. However, formal archival publication remains very important, and pre-publication repositories have in no way replaced traditional journals (Harley et al, 2010; King et al, 2006; Bulger et al, 2011).

What to use, and for what?

29. Researchers in the humanities and social sciences build their research upon a very broad range of resources. One study describes humanities researchers as dealing with a 'complexity deluge, dealing with a multiplicity of types of information, much of it highly dispersed, difficult to find and complex to use' (Anderson et al, 2010, p.3781). While humanities researchers may have their own 'core' collection of resources – primary sources, archives, secondary texts – this is supplemented by additional information as a project progresses (Palmer and Neumann, 2002). A survey of Danish researchers found that fewer than 25% of respondents from the social sciences named the same journal as one of their top three within their discipline – by contrast, 60% of physicists who responded named *Physical Review* as one of their top three journals (Andersen, 2000).

30. The interdisciplinary nature of much research in the humanities and social sciences can make it particularly difficult to identify a 'core' literature in many research areas (Palmer and Neumann, 2002; Hicks, 2004). A 1987 survey of inter-library loan requests by humanities researchers over a two-year period found that more than 50% of scholars had asked for material from five discrete areas of knowledge – general, humanities, history, social science and science (Watson-Boone, 1994). A 2000 survey of Danish political science authors found that 'respected authors' are likely to be from disciplines other than political science (Andersen, 2000). A 1971 citation study suggests that books are particularly transdisciplinary – in sociology, a book received a higher percentage of citations from work outside the discipline of sociology than a journal article (Hicks, 2004). HSS researchers' willingness to publish in several languages can also mean that a core literature might look different in different countries. For example, in Denmark, most economists and business administration researchers rated Anglo-American journals as the most influential in their discipline, but in political science and sociology most of the top-rated journals are published in Danish (Andersen, 2000). An earlier survey in 1991 found that in the humanities and social sciences

non-Dutch speakers are largely unaware of Dutch-language journals, and that they tend to ignore Dutch-language articles (Huang and Chang, 2008).

31. It is clear, however, that in most HSS disciplines books play an important role in scholars' research. A 1985 citation study found that researchers in numerous humanities disciplines prefer to cite books over journals (Watson-Boone, 1994). A more recent citation study, looking at outputs submitted to the UK's RAE exercises in 2003 and 2008, finds that humanities researchers cite the most books, on average, with fewer citations from social studies and education, and very few from the STM areas within the study (Creaser et al, 2010). Tang (2008) cites a number of studies which show that books are more heavily cited in humanities and, to a lesser extent, social sciences, compared to STM disciplines. Given the known limitations of citation studies, it is interesting that surveys of researchers – asking about their behaviour, rather than extrapolating from their citation patterns – found similar patterns. Tenopir et al's 2012 study found that humanities researchers read, on average, 20.50 books or book chapters per month. The equivalent figure for social scientists is 9.02 – lower, but more than the next-highest discipline, engineering/technology, at 5.27 books or book chapters per month. Interestingly, there appears to be a correlation between book reading and age – the older you are, the more books you are likely to read per month (Tenopir et al, 2012). Survey evidence also suggests that humanists see books as more important than social scientists: 90% of humanities respondents to a recent survey said monographs or edited volumes are 'very important' to their research activity, compared to 60% of social scientists. They are also more likely to assign monographs or chapters to their student than social scientists (Housewright et al, 2012).

32. There is some evidence to suggest that 'the journal and the book literature form different worlds' – although they overlap, they each retain a distinct identity (Hicks, 2004, p.7). Authors who write books, cite books; the same is true for journal articles (Tang, 2008). Creaser et al (2010) found within their sample of outputs submitted to the RAEs in 2003 and 2008, 64% of citations in books were to books, compared to 27% of citations in books which were to journal articles. Cronin et al (1997) find, in sociology, that there are two distinct populations of highly cited authors, one for journals and a second for books. This may link into other research which finds that books are more likely than journal articles to cite primary sources: in nineteenth-century American/British literary studies, 47.8% of citations in monographs were to primary sources, while only 32.5% of citations in journals were to primary work. Since primary sources are often themselves monographs, this might explain at least part of the separation (Thompson, 2002).

33. Humanities and social science researchers also seem to make significant use of relatively old content, compared to other disciplines. Tenopir et al (2012) find that around half of the 'last articles read' in the critical incident component of their survey were more than 6.5 years old; a quarter were more than 15 years old. In STM disciplines, only around 10% of articles read were over 15 years old. Hargens (2000) finds distinctive patterns of usage in humanities, social sciences and STM disciplines in relation to the age of the work cited, and shows that research in the two social science disciplines of the total seven considered in his study are particularly reliant on 'foundational' (i.e. older) work. Tang (2008) cites research which shows diversity at a subdisciplinary level in the social sciences: the half-life for all types of social science publication ranges from seven years (economics) to 37 years (study of social customs). Thompson (2002), looking at humanists, concludes that humanists use material from a broad age spectrum, rather than simply using old material.

How have new technologies affected scholarly communications in the humanities and social sciences?

General approaches to technology

34. Much research in this area has focused upon humanists and, in particular, their ongoing fondness for print. Ithaka (2006) identify that researchers across all disciplines believe that they will be more dependent on electronic resources in the future than they are now, but that humanists believe this to a lesser extent. The same study found that humanists were least comfortable transitioning to electronic-only journal collections, and that they had a particularly strong preference for at least some libraries maintaining print collections for safety (although this preference was noticeable across all disciplines: this finding was confirmed in a repetition of the survey in 2012 (Housewright et al, 2012). Bulger et al (2011) also find that humanities researchers are not ready to move away from print collections and manuscripts, but that they are prepared to use digital resources for their work.

35. Indeed, it would be unfair to classify humanities researchers as wilful Luddites, and several studies find interesting hybrid use of print and digital material. For example, Bulger et al (2011) find that researchers will move between print and digital versions of the same text, using whichever is more appropriate to their research needs. The British Academy (2005) found a similar result in a survey of HSS researchers: they asked, in a situation where print and electronic versions of content are available, which one respondents would prefer to use; 34% preferred electronic and 38% preferred print, but 28% said that they would use either, depending upon the reason for use. Similarly, Housewright et al (2012) found that researchers felt certain types of book use, such as searching for a topic or exploring references, were easier in digital formats, whereas others – reading in depth, for example, are easier in print (these findings aggregated responses from researchers across all disciplines). By extension, it is perhaps unsurprising that several studies find humanities researchers unwilling to adopt new technology simply for novelty's sake: they will only do so if it is useful. Watson-Boone drew this out as a key finding of her 1994 study; Bulger et al identified the same behaviour in 2011. Researchers are more likely to adopt new technologies if they fit with existing research patterns and behaviours (Palmer and Neumann, 2002; Collins et al, 2012).

36. There are of course other drivers that may affect researchers' uptake of digital resources. Bulger et al (2011) find that humanities scholars are easily deterred from using digital resources if they are not intuitive. Rutner and Schonfeld (2012) find some evidence among historians that those with tenure felt more comfortable experimenting with digital methods or outputs. The British Academy (2005) found several issues to do with supply and availability which may limit uptake of digital resources. At the time of writing, organisations responsible for supplying resources (they give examples of the British Library, the National Archives, museums and university libraries) were aware of the need to engage with e-resources but making only 'modest attempts to grapple with the problems involved' (p.36). Moreover, digital products presenting themselves as secure long-term storage solutions 'appear and then disappear with unpleasant rapidity' (p.6); a particular problem for researchers who are heavily reliant upon historic or old materials for their work. Though this study is relatively old, considering the rapid pace of developments in the digital environment, more recent studies suggest the problems are not entirely solved – for example, Bulger et al (2011) highlight the problem of partial digitisation and non-availability of primary resources, while Housewright et al (2012) find a continued reluctance on the part of humanities researchers in

particular to rely exclusively upon digital resources for long-term availability and access; there is a particular antipathy to relying exclusively upon electronic versions of books.

Research process

37. New technologies affect the research process at all stages. Beginning with discovery of resources, researchers have long been aware of the potential impact of new technology on their working practices. Citing research from 1986, Watson-Boone (1994) suggests that only 3.5% of humanities researchers had used the library's online catalogue, while work in 1990 found that humanities faculty preferred card catalogues or citations to source information over computerised databases. By 2005, however, the British Academy survey found that 47% of researchers used Google and other services to identify resources for their research. In 2006, Ithaka found that humanities researchers tend to begin their searches using the online library catalogue, while social scientists are more likely to use a specific electronic research resource: however, both groups are relatively unlikely to use the physical library and electronic tools have clearly achieved dominance in researchers' search choices. Repeating the study in 2012, Housewright et al found that arts and humanities researchers (like those in other disciplines) are most likely to begin their research with a general purpose internet search engine, followed by a specific electronic resource – the same is true for social scientists. Often, use of electronic resources to search implies using keywords rather than browsing through collections (Watson-Boone, 1994; Bulger et al, 2011) and some researchers miss the serendipity which was more common when using library shelves, particularly in history and social science (Harley et al, 2010). Other studies have identified the important role of electronic search tools in helping researchers to identify primary resources that they may want to use (Rutner and Schonfeld, 2012).

38. Once they have identified resources that they want to use, researchers then have to make a decision about whether to access them in print or electronic format. Availability (as distinct from accessibility, which will be discussed later) plays an important role. Many studies identify researchers' concerns that content that they might need is not available to them in electronic format. Selective digitisation occurred as a concern for political scientists and historians in Harley et al's study (2010), while Bulger et al (2011) identified a similar concern among musicians. In another study, humanities researchers felt that online systems did not hold enough old content (Palmer and Neumann, 2002). Electronic availability may be a particular problem for books: 78.2% of respondents to the British Academy survey said that the books they need are not available to them in e-format (British Academy, 2005). But new technologies may also be improving the availability of certain types of research material – for example, original sources located in overseas archives which are now much easier for researchers to reach (British Academy, 2005; Bulger et al, 2011; King et al, 2006) or images from national institutions (Ithaka, 2006). And Rutner and Schonfeld (2012) find widespread use of digital cameras among historians who want to create their own copies of archival materials.

39. Other issues affect a researcher's decision about whether to use print or electronic versions of the resources that they need. Most studies in this area identify a strong feeling among researchers that electronic resources are not yet a direct replacement for print versions of the same work. Often, these findings relate to primary sources where the presentation is as important as the content – for example, Bulger et al (2011) discuss the importance of markings on original manuscripts for researchers working in music. In some cases, the preference for print can be less

about utility and more about field-specific norms: one musicologist reports 'I do feel pressure to work more with originals than with the digital images because of the traditions of the field' (Bulger et al, 2010, p.34). Palmer and Neumann (2002) have similar findings.

40. With respect to secondary texts, there is also a strong preference for print, including print books (Tenopir et al, 2012). Again, use of e-resources for research seems to vary by discipline: Houghton et al (2004) cite research showing that 66% of law and 56% of business researchers used e-resources for research most or all of the time; only 37% of social scientists and 25% of humanities researchers said this. Several studies note an interesting 'hybrid' approach to print and electronic resources, selecting the most appropriate format for the purpose of use. For example, both Bulger et al (2011) and Rutner and Schonfeld (2012) find humanities scholars who use Google Books to search or read through content of books that they either already own or are thinking about buying. Bulger et al (2011) also identify a habit, across a number of humanities disciplines, of citing the print version of a book even if use has been made (partially or primarily) of the electronic version. This probably reflects standard behaviour in the field, but it also suggests that looking at citations to establish the extent of print vs electronic resource use is likely to underreport true usage of electronic resources: this may explain why Thompson (2002) found very low citations to digital media in her study of monographs and periodicals in nineteenth-century British and American literary studies.

41. Access to electronic resources is by no means guaranteed. Even where content has been digitised, the British Academy (2005) survey found that potential users may be limited by not having a subscription, only being able to access electronic resources when onsite at the library or even not understanding how to use the services providing access. It found that researchers in smaller institutions or outside institutions were most likely to experience these challenges. On the other hand, Ellison (2007) argues that the internet has increased the ability of authors to reach their readers outside the confines of top peer-reviewed journals, while some interviewees in King et al's (2006) study noted that their work is accessed far more often through copies placed on their personal websites than through the formal publisher channels. And, as the British Academy (2005) study suggests, some resources which are highly valued by HSS researchers, such as librarians, cannot be digitised.

42. Once researchers have found the content that they want to use, many of them like to store and organise it in their own way, often relating to projects that they are currently working on. This is a well-developed habit for print resources (Watson-Boone, 1994). Researchers working with electronic resources often maintain these practices, creating mini-databases using software like Excel to record and store useful information that they need (Bulger et al, 2011; Rutner and Schonfeld, 2012). These studies do not, however, uncover evidence of researchers using new electronic tools specifically designed to store and track research outputs in an online environment: rather, they use standard software and files stored locally on their machines or external memory drives.

43. There is a general consensus across studies that new technologies have sped up or improved the research process. The British Academy (2005) survey found that 68% of respondents felt their research had changed as a result of working with e-resources, in terms of speeding up discovery, making it easier to locate and access material, working more rapidly with data and communicating more effectively with colleagues – but these changes were more likely to be identified by older than younger respondents. The authors suggest that young researchers have developed their working

practices in a digital environment and therefore see the opportunities offered by new technologies as less of a change. King et al (2006) observed similar reactions from English-language literature researchers: new technologies make resource discovery and use easier, and democratise research with open listservs which permit anyone to join and participate. Harley et al (2010) have similar findings across the humanities and social science disciplines that they consider, as do Bulger et al in the humanities (2011). Houghton et al (2004) suggest that new technologies support collaborative research, but mostly in fields where collaboration is already common; Collins et al (2012) draw similar conclusions.

44. Many of these studies also consider the question of whether new technologies have fundamentally changed research methodologies and research questions in HSS. There is not a strong consensus here. Most studies working with traditional humanities fields find that researchers believe new technologies have not changed their fundamental work: the 'careful analytical research process' as one study put it (Harley et al, 2010, p.18). The British Academy (2005) study found that 65% of respondents either disagreed with or did not respond to (a strange amalgamation of response options which unfortunately is not presented in a disaggregated format) the proposition that e-resources are sufficiently different to offer new research possibilities. Similarly, Bulger et al found that most researchers in their case studies felt that new technologies made it possible to answer long-existing research questions that would previously have been too arduous (searching through numerous texts for a single person for example), but did not suggest new questions. However, studies working specifically with researchers using more advanced technologies, such as digital humanists, found more evidence of changing research questions, particularly when researchers work in partnership with tech developers to create new resources. Anderson et al (2010) talk about the 'mutual shaping' of e-research structures that occurs in these situations, offering new perspectives on established research questions (Anderson et al, 2010, p.3781). Bulger et al (2011), considering the development of a specific digital humanities resource, identify the collaboration between humanities researchers and tech developers as an important opportunity to drive forward not just the technical possibilities but also the underlying theoretical approach to research questions. So it seems that this kind of development is possible but not, as yet, particularly widespread in the humanities.

Research outputs

45. Studies indicate that some researchers want to explore how new technologies can support communication of their research findings. As was identified earlier, perceptions of peers and particularly hiring and promotion committees are very important for researchers thinking about exploring new ways of communicating research outputs. Harley et al (2010) find that established scholars have more flexibility in experimenting with new ways of communicating outputs: by contrast, untenured scholars are unwilling to present non-traditional publications as part of their tenure packages as review committees often do not know how to evaluate them. They also found that researchers working in newer or less-established departments are more willing to take risks with formats of scholarly outputs; this is often a conscious decision to help carve out a niche identity and is supported by their employing university. King et al (2006), in their work with English-language literature scholars found similar results, with a strong emphasis on the importance of legitimisation from the field itself for new formats of research output. Interviewees felt that change would not be achieved by administrators writing new forms of publication into tenure and promotion guidance; it would only come from a bottom-up movement from within the field itself. Estabrook and Warner

(2003) concur, finding that the number one concern about e-publishing among faculty is that it will not be rated as highly as print by promotion and tenure committees. Fry et al (2009b) find that tradition means that the monograph remains dominant in the humanities, even though other outlets may do a better job of communicating research findings.

46. If any such bottom-up movement within the field is to occur, peer review is certain to remain at the heart of it. Harley et al (2010) suggest that experiments in communication are occurring in every field in their study, but that they are 'taking place within the context of relatively conservative value and reward systems that have the practice of peer review at their core' (p.13). Blogs, for example, are often rejected as a waste of time because they are not peer reviewed, although they may be used to identify developments in the field. King et al (2006) found a perception that electronic-only publication means no peer review; even those who understand that this is not the case are concerned that their colleagues, reviewing job or funding applications, may not. However, the anthropologists in their study suggested that online-only journals may struggle, not because they are online-only, but because they are new; in general, new journals without a reputation struggle to establish themselves, regardless of publication format. King et al record that English-language literature academics suggested peer review may need to evolve for e-resources by including some measure of persistence and stability for long-term availability. This ties into concerns about the technical integrity and long-term preservation of research outputs made available in electronic format (British Academy, 2005).

47. Studies identified researchers who are already experimenting with new types of output, but the definitions of 'new' were perhaps rather broad. The British Academy (2005) survey found that 51% of respondents were e-resource creators, although this data tells a slightly different story when we understand that it includes contributions to journals with an online presence, e-editions of books and putting papers on a departmental or other website. Other studies also found a surprisingly narrow understanding of new technologies. One English-language literature interviewee mentioned that print-on-demand could revitalise availability of obscure out-of-print books in their discipline (King et al, 2006). The British Academy (2005) study suggests that electronic workflows can speed up the creation and sharing of information. But in general the perception was very much around digital content which is more like a reproduction of a print book than a new type of digital discourse. Harley et al (2010) probably came closest to this kind of change, identifying innovators in book-based fields who used hyperlinks, graphics, video and audio in their work to enhance content, but even these might be considered quite limited. Furthermore, researchers interested in using them found a dearth of support from institutions or publishers.

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List of Abbreviations

CIC	Committee on Institutional Cooperation
HSS	Humanities and social science
RAE	Research Assessment Exercise
REF	Research Excellence Framework
SSRN	Social Science Research Network
STM	Science, technology and medicine