

Princeton/Stanford Working Papers in Classics

**Towards Open Access in Ancient Studies:
The Princeton-Stanford Working Papers in Classics**

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Abstract: An investigation of the present impact and future prospects of open access electronic publication of scholarly research on working papers sites, based on the authors' collective experience with developing and maintaining a WP site for Classics and Classical Archaeology.

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Towards Open Access in Ancient Studies: The Princeton-Stanford Working Papers in Classics*

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Abstract: The authors' experience with founding and managing an open access internet site for publishing scholarly preprints provokes a number of questions (and a few answers) about the present and future status of publication in classical studies. Open access e-prints offer unique advantages to readers in terms of availability and to authors in terms of time-dated registration of their work. Yet they raise difficult questions about certification and archiving of scholarship. Internet e-prints and traditional forms of publication are currently complementary; the emergence of internet-based e-print sites is unlikely to render traditional publication venues redundant, at least in the near term. Yet both the world of scholarly publication and academic evaluation of scholarship are changing in important ways; closer cooperation between publishers, scholars, and university administrators could help to maximize the benefits and limit the costs to disciplines, institutions, and individuals.

The relationship between traditional or standard research publication venues and new types of communication is now a matter of sometimes-heated debate and serious

discussion -- within the discipline of Classics and Classical Archaeology and across the academic world. Our discipline has been in the forefront of exploring the utility of electronic technologies for the humanities. The Perseus Project (<http://www.perseus.tufts.edu>) and the *Bryn Mawr Classical Review* (BMCR) (<http://ccat.sas.upenn.edu/bmcr/>) are just two early ventures that have by now become standard points of reference in humanities research. In the area of research publication, traditional print journals have added web-based versions of their issues that run in parallel with the print versions, although often with ‘moving walls’ of access that block on-line consultation of current issues. Meanwhile newly launched e-based journals like *Histos* (<http://www.dur.ac.uk/Classics/histos/>) and *Ancient Narrative* (<http://www.ancientnarrative.com/>) fulfill all the normal functions of traditional print journals, including peer reviewing and quality editing. Each year witnesses the development of more of these scholarly electronic sources: the *Frankfurter elektronische Rundschau zur Altertumskunde* (FeRA: <http://www.fera-journal.eu>), for example, was recently initiated at the Johann Wolfgang Goethe-Universität, Frankfurt, with substantial EU support, as an e-journal primarily dedicated to new publication by graduate students in ancient studies. Internet-based ‘working papers’ (WP) sites have emerged within this broader context, as another means for making academic research more immediately accessible—and on a global scale. Yet the practice of circulating and archiving working papers antedates the advent of the Internet.

The idea of systematically collecting preprints of academic research apparently began at Stanford in 1962 among the High Energy Physics (HEP) community when the *Stanford Linear Accelerator Center* (SLAC) began archiving preprints in physics; the accessibility of these preprints or ‘working papers’ more took a big step forward in 1968-69 with the *Stanford Physics (later ‘Public’) Information Retrieval System* (SPIRES). The idea caught on, and WP series were initiated by leading academic departments in various social-science fields, notably Economics. It was only in the late 1980s and the early 1990s, however, that the practice of making pre-publication research quickly and readily available took off, once again within the HEP community, with the moves by Paul Ginsparg and others at the Los Alamos National Laboratory (LANL) to post preprints or working papers on computer sites that would be freely and openly accessible via the

internet.¹ The archiving of the preprint papers was now envisaged as a pure distribution system, set up so that research in progress could be made immediately available to all interested parties in the discipline. With the model set by the great success of this project, by the early 2000s Internet-based working papers sites proliferated. This brief essay traces the origins and development of one such recent experiment in our own field—the Princeton-Stanford Working Papers in Classics—in order both to comment on the benefits of this new mode of publishing research and to raise questions about the relationship of ‘working papers’ sites to the more traditional modes of scholarly publication.

The Princeton-Stanford Working Papers in Classics (henceforth PSWPC: <http://www.princeton.edu/~pswpc/>) is a web-based Open Access pre-print collection, featuring the work-in-progress of members of the Princeton and Stanford ancient-studies communities. Open Access (OA) means that anyone with an internet connection and browser has access to the site and can download its contents.² The site is managed by the Classics departments of the two universities. The papers are mounted on a server maintained by Princeton’s Classics Department. Papers are not peer-reviewed. Instead, quality control is instituted by restricting access to those who are permitted to post research on the site. Those who have the right to post on the site are, basically, the faculty of the two universities, postdoctoral fellows and visiting scholars, as well as graduate students with faculty approval (see <http://www.princeton.edu/~pswpc/who> for the details). The persons who submit papers are themselves individually responsible for basic formatting: Attaching a standard cover-page, providing an abstract of the paper’s contents and the author’s email address, converting their submission to a pdf file, and submitting the file to the local PSWPC coordinator (there is one faculty-member coordinator at each institution). The coordinator checks to see that the formatting is correct and then sends the file on to the Information Technology (IT) specialist who serves as site administrator. The specialist mounts the file, ensuring that it is properly cross linked by author, date, institution, and subject area. The site was designed and is currently operated by Donna Sanclemente, who holds a full time IT position in Princeton’s Department of Classics. In using the department server to mount this site, we have followed what appears to be the normal practice in mounting new pre-print or WP sites in many science and engineering fields, and it seems as though this practice will continue to be the principal means that will

be employed to maintain these sites in the near future.³

History and scope

The idea of setting up a web-based Working Papers in Classics series originally occurred to Josiah Ober in the spring of 2004, when he was serving on the Princeton Faculty Advisory Committee on Appointments and Advancements. The Committee reads appointment and retention dossiers from all academic departments. Many of the dossiers, notably in the social sciences, included references to “Working Papers”; in some cases, notably in Economics, a section of the candidate’s curriculum vitae was dedicated to a list of working papers. By chance, one of the members of the Committee, Professor Gene Grossman from the Department of Economics, had been instrumental in founding and maintaining his department’s WP series at Princeton. He offered Ober a detailed explanation of how this series operated, how it had evolved from a print-based to a web-based format, the costs of its operation, and the benefits reaped by both contributors and readers of these working papers.

There are obvious differences between how the academic fields of Economics and Classics operate – for example, promotion decisions in departments of Economics are based primarily on publications in scholarly journals, and articles are often multiple authored. Yet Ober reasoned that since economists, who are by disciplinary inclination very attentive to costs and benefits, had long found such working papers to be of substantial benefit—even worth the high cost of hard-copy distribution in the pre-internet era—then a *prima facie* case could be made that a similar series would be beneficial to classicists and classical archaeologists. Moreover, with internet publication rather than print distribution, costs were within reason. The project seemed timely in that Princeton’s Classics Department had recently hired an IT specialist with website design experience, and it was in the process of acquiring access to dedicated servers.

The project took shape in fall of 2004 at a luncheon meeting at the Center for Advanced Study in the Behavioral Sciences in Palo Alto, California. Walter Scheidel, who had been thinking along similar lines, suggested that there could be a joint series sponsored by the Classics departments of the two universities. Scheidel pointed to the benefits that would come with a somewhat larger series: more papers would be likely to

attract more readers, and more faculty involved in the design and maintenance of the site would lower the burden on specific individuals. Ober and Scheidel then met with other Stanford classicists who contributed ideas about how the site might be organized. A formal proposal was sketched out and presented to the faculty of both departments. The possibility of making the series a larger project from the beginning, by inviting other universities to join a consortium, was considered, but set aside as impractical at least for the first, experimental stage. The resources, including server space and staff time, that Princeton made available were generous, but necessarily limited. After further discussion, each department formally endorsed the project, and Sanclemente established the site using RapidWeaver, a powerful website authoring tool that eliminates much of the drudgery of coding web pages. Sanclemente estimates the costs for an in-house launch of such a website to consist mainly of a number of hours of labor of an IT professional and the costs either of the portion of a set-aside server or of space/time on a central server. In neither case, however, does she regard this work as particularly burdensome once the initial ‘launch period’ has passed. Maintaining the site requires the continued attention of the IT person; at present, this amounts to a few hours a week, on average.

When the PSWPC was launched in December of 2005, it was with a modest number of content contributors—about half a dozen—all drawn from the faculties of both universities. It has since experienced modest growth within the confines of its purview. By the late spring of 2006 there were about 15 contributors and about 50 working papers posted; and at the time of writing (December 2006) there are about 20 contributors and about 75 papers on the website. A number of papers have already gone forward to formal print publication and so have been deleted from the site. Deleted working papers are replaced by a notice that directs the reader to the venue of final publication. We discuss the complicated issue of archiving below, and may consider a shift towards permanent post-print self-archiving. Several other papers have been replaced by updated versions.

Although there are some graduate student papers now posted, the contributors, thus far, are drawn primarily from the faculties of the Princeton and Stanford departments. We hope that graduate students in both departments will use the venue more often in the future for pre-print circulation of their work-in-progress. Among the benefits of posting a Working Paper is the public registration of ideas, since submissions are time-marked to

the month of the year. Since the posting of research on the PSWPC is definitely a form of publication, it is a timely means of ‘hallmarking’ work-in-progress. As it now stands, this ‘registration’ or ‘hallmarking’ advantage is limited to members of the Princeton and Stanford ancient-studies communities. But it is our hope that the success of the PSWPC experiment will lead to the creation of other Working Papers sites in classics and classical archaeology, and in closely related disciplines.

The PSWPC website is accessed frequently by users scattered over a perhaps surprisingly wide geographical range. The site began with a modest number of inquiries or ‘hits’ and a somewhat limited and mostly domestic interest. But it has grown rapidly, and within a rather brief span of time, to have a substantial world-wide readership. At present—the following measurements were taken between September and November of 2006—the average number of hits per day has grown, over these recent months alone, from approximately 1100 a day to about 1600 a day. Only a portion of these ‘hits’ are actual requests for a specific paper. In the most recent counted week there were about 1750 requests for 67 papers by 20 authors—that is, for virtually all of the authors and for most of the active papers. Requests for a given paper ranged from 7, the lowest number of hits counted by the tracking program, to a high of 170, for an average of 26 per paper. There is a noticeable weekly cycle: the number of ‘hits’ is highest on Mondays through Wednesdays, noticeably fewer on Thursdays and Fridays, with the lowest number of inquiries occurring on the weekend days.⁴

A large number of requests come, as might be expected, from institutions of higher education in the United States. Cornell, Berkeley, Maryland, Chicago, UCLA, Adelphia, Texas, New York University, amongst others, represent a random selection of recent academic sources in the U.S.A. There are also a large number of ‘hits’ coming from private networks and sources within the United States, Canada, Australia, and Britain. Beyond this, however, there is also a considerable international component that at least equals sum total of all of these domestic and ‘usual suspects’ interests. Again, a random selection of these latter indicates queries—the following are a sample from the first two weeks of November of 2006—coming from Chile, the Netherlands, Peru, Greece, Finland, Spain, Poland, Ireland, Brazil, Israel, Indonesia, Russia, Turkey, New Zealand, Zimbabwe, Japan, Iran, Singapore, Bulgaria, Thailand, Mexico, Nepal, Taiwan, Croatia,

Saudi Arabia, and Argentina. Again, this is just a selection. The wide range of these sources would seem to indicate a large and growing international interest in the site.

Relationship to traditional scholarly publishing

If the PSWPC proves successful, if it is imitated, and if its imitators are also successful, does this point to the demise of established scholarly journals, whether print or web-based? We believe not, at least in the foreseeable future, given the fundamental difference between the role of a Working Papers series and a scholarly publisher in a field such as Classics. Moreover, there are problematic aspects to the new media that have not yet been fully resolved to the satisfaction of all. One of these concerns is over the guaranteed longevity of access to publication and the archiving of publications by WP sites. The traditional academic publishing houses and institutions that support research journals often seem to offer a firmer guarantee of continuity. Indeed, one of the e-journals mentioned at the head of this paper, *Histos*, no longer exists—it ceased publication in 2000 for a number of reasons that often bedevil the long-term maintenance of e-resources by university departments and academic programs.⁵ Yet, as Brent Shaw reports, based on discussions that followed his invited presentation on the PSWPC to the Society of Scholarly Publishing in September 2006, it is difficult to limit the effects of Working Papers series once they are initiated. Two of Shaw's interlocutor's, one from the NSF and the other from the field of economics, emphasized that once Working Papers sites are launched and become 'normalized,' they can become the preferred venue for the first publication of papers in certain disciplines.⁶ They believed that in several disciplines in the natural sciences and in economics, Working Papers sites are already in the process of replacing traditional journals as the first choice of venue for publication.⁷

One way to think about the potential impact of Working Papers sites on publishing in Classics is to think of the traditional role of scholarly publishing as being constituted by three main processes: *making public, certification, and archiving*.⁸ The first of these three processes, that of 'making public,' seems at first glance the heart of the matter—after all, what is publishing other than making public? Yet, in our opinion, this first process is probably the least important to the fundamental role and likely future of traditional scholarly publishing. Open Access working paper series certainly do have a

role to play in making scholarship available to a public, but only in a preliminary form. The ‘in-progress’ or ‘in some way incomplete’ state of the content is signaled by the term ‘Working Paper.’ If a paper or chapter of a book is still being worked on, it is not in its final state. Indeed, any given working paper might be close to or far from its final state. Authors sometimes indicate in the abstract or footnotes that a paper is “forthcoming.” But the PSWPC site itself does not make any claims or assumptions about *how* close any given working paper might be to its final form, or even whether or not there *will* be a final form. If Working Papers are to be cited, both those who cite and those who read the citation must be aware that it is work in progress.

In terms of ‘making public,’ therefore, little of this seems new, except for the medium of distribution. Long before the advent of the internet, “unpublished” papers and “not yet published” written work was circulated among friends and colleagues in the “prepublication release” form of more or less complete drafts. A Working Papers series may be thought of as an extension of this informal practice. The major difference is that access to the preprint is open and publicly accessible for as long as the paper is posted on the site. In the current practice of the PSWPC site, the “final and stable” phase of making public still remains in the hands of traditional publishers.

‘Registration,’ an ancillary but (to authors, at least) very important part of ‘making public,’ is particularly well served by a WP series. Registration refers to the role that an authorized venue for publication, traditionally an established scholarly journal or an academic press plays in time-marking the appearance of an author’s idea, analysis, and original data,. This is obviously a time-sensitive process: it is highly advantageous for a scholar to have his or her work registered as originally his or hers as soon as possible after it has been completed. Each successive version, including the important first one, may be immediately ‘time-marked’ by posting on a working papers site. Internet e-print sites can usually do this more quickly than most traditional venues of publication. Indeed, this is one of the reasons that WP sites are becoming preferred places of first publication in scholarly fields with a rapid turnover in ideas. In many of the natural sciences, having one’s idea time-marked as first in a series is very important to the researchers.

The idea of ‘certification’ refers to quality control. It is the implicit assurance to the reader that a publication has been carefully and impartially reviewed by experts in the

field and thus is worthy of serious consideration. In traditional publishing, certification is primarily through the process of peer reviewing. Thinking about how working paper series are *unlike* articles or book chapters published by established scholarly publishers points to the certification process as the central and defining feature of traditional scholarly publishing. First-rate scholarly journals and book publishers rightly pride themselves on their copy-editing and proofreading, on the aesthetic value of their products, and on their effective modes of distribution and marketing. In some cases senior editors may even offer certain authors substantial help in project development. But at the heart of a scholarly publisher's or a journal's reputation, and therefore of its "brand," is the care and rigor of its review process.

Arguably, from the point of view of the scholarly consumer-reader, the most important service that the publisher provides is a professionally competent pre-publication reviewing process. That process may take place partly in-house—indeed, many acquiring editors are themselves highly expert in the relevant fields—and partly externally, through the technical experts whom the editor persuades to do the hard work of providing a fair and detailed peer review. This review process is ultimately what separates not only WP series from traditional scholarly publications, but scholarly publications from other forms of publication. While non-scholarly publishers may employ fact-checkers in an attempt to ensure the accuracy of published work, it is the mark of the scholarly publisher to assume the time-consuming job of ensuring that the overall intellectual content of the books or articles that they publish has undergone a rigorous process of judgment by qualified scholars with established expertise in the relevant field. If this kind of peer review is an essential part of the establishment of scholarly knowledge, an 'epistemological objection' could be raised against Working Papers sites or pre-print archives—namely, that they will become filled with bad information and that the entire enterprise of academic scholarship could be thereby compromised.⁹ How serious is this objection?

Working papers series, at least those that operate on the principles of the PSWPC, do not institute editorial interventions to certify their content. As noted above, there is no content-review process. The only assurance to readers of the potential value of the contents is the reputation of the two departments: A reader may reasonably hope that members of the faculty at Princeton and Stanford would not make public—or allow their

graduate students to make public—work that is shoddy or fundamentally misleading. The great success of the arXiv site in Physics, for example, has been explained by the natural gate-keeping function of a research community that has a high degree of internal cohesion. This ‘core group’ of scholars similarly assures the reader of posted papers that they are of a minimum requisite quality.¹⁰

Whether the research community of Classics could boast a ‘core group’ cohesion similar to that of the HEP community is debatable. Yet the extent to which certification is a serious problem and peculiar to WP sites can be exaggerated by those who focus on the “epistemological objection.” First, traditional-publisher peer review may be relatively undemanding. Consider the related field of History: Although higher-ranking history journals have higher rates of rejection, more than half of all refereed history journals accept for publication more than half of the papers that are submitted to them.¹¹ Next, the public availability a working paper featuring bad information means that it can be cited and criticized in other scholarly work: bad information can thus be exposed as such by the ordinary processes of scholarship. Finally, although it might still be objected that a WP series offers relatively weak forms of assurance compared to formal peer review, the provision of fully completed and fully certifiable research is not the main purpose of WP sites. Working papers, indeed, may often be posted in a deliberately unfinished state, with arguments that still need substantial work, in order to attract potentially helpful comments from readers.

The “epistemological objection” may actually be a less troubling aspect of the emergence of e-print series than is the potential for modes of research and evaluation to come apart. In some of natural sciences, notably in Physics which has led the way in these changes, the presence of on-line WP series has already contributed to a strange disjunction between the way in which academic work is actually done and the way it is evaluated. The first-line recourse of Physics researchers is now to the universe of on-line working papers. Yet, because of professional requirements of evaluation for tenure and promotion, ‘the *arXiv* system has had very little influence upon... professional certification.’ That is to say, ‘when acting as authors, scientists have no choice but to care greatly whether or not their papers have been or will be formally published, because they must compile a record of research activities in a widely recognized and culturally entrenched form, recognizable

to “outsiders.” This is an odd situation.’¹² It is indeed odd; the disturbing nature of the schism is made clear in remarks made by the editor of a traditional physics journal: ‘... in physics, nobody except a student at a place where you didn’t really have active physicists would ever learn anything from a physics journal. That’s just where papers eventually were published so that [they] would look official and somebody would get tenure. All of the real action was happening first in the ... e-prints.’¹³ Whereas it is possible that such a disjunction can exist between ‘real use’ and ‘venue of evaluation’ in the short term, there are real questions about what the long-term future of academic evaluation will be in a research world that might be dominated by e-prints. There might be reasons why the disciplines of Classics and Classical Archaeology will be exempt from this process, but there are surely just as many reasons, including the comparatively enormous costs of traditional journal production, to make one suspect that our discipline will eventually have to face the ‘certification’ problems posed by these new modes of publication.

Those who think that web-based self-publishing will ultimately supercede traditional scholarly print publishing refer to a market analogy to argue that the certification issue will be sorted out in the e-world in ways that do not require traditional forms of peer review. They suggest that it is the ‘invisible hand’ of the market of ideas that will be the ultimate arbiter of the value, or lack thereof, of the research and scholarship published in these new electronic forms.¹⁴ The notion is that the value of a work of scholarship, like the price of a commodity, will be established by aggregated dispersed knowledge and general response to the work in question. Quality will be determined by many users rather than by a few editors, in a fashion that would be similar to the ‘citation counting’ or ‘citation assessment’ prevalent in many of the social and natural sciences. In this scenario, better work, like better commodities, will be more widely recognized and cited and will so rise to the top, while bad work will simply sink out of sight.¹⁵

Finally, the function of ‘archiving’ consists of making scholarship permanently available. At this time, the PSWPC project is not undertaking this function, although it would not be technically difficult to do so and we have been strongly urged to do so by Open Access advocates. A website that posts preprints can also be used to self-archive postprints, that is, the final texts of articles after they have undergone peer review and/or

have been published by a journal. Advocates of Open Access who see working papers as the future of publishing are strongly in favor of postprint archiving. If, as they argue, it is the working papers themselves that will tend to be cited and referred to with increasing frequency, deleting these posted versions is not just an inconvenience to readers, even if journal publication is finally achieved. The problem, as they see it, is that the e-versions posted on a WP site will have be referred to or quoted in other scholarly publications, sometimes frequently, and so this new process of ‘publication’ should reasonably require open access to the versions that have been cited.¹⁶

Postprint self-archiving serves the interests of both the author and the public by facilitating the immediate and costless dissemination of credentialed scholarship. Yet it may interfere with the economic interests of scholarly publishers who invest resources in the credentialing process but are unable to recoup costs when the work circulates in the form of self-archived postprints. Therefore, as things now stand, self-archiving of postprints requires greater circumspection than the posting of preprints or working papers. While the author always holds the copyright to preprints—unless the work was undertaken ‘for-hire’—he or she cannot legally be constrained from posting existing preprints beyond the publication of an article’s final version unless they have expressly forfeited this right in a contractual agreement with the publisher. Of course, publishers may, as a matter of policy, prevent authors from making the final version of an article available outside the journal itself.¹⁷

In keeping with the overall trend towards Open Access, however, a growing number of academic journals already permit the self-archiving of postprints. Of 9,291 listed periodicals produced by 192 publishers, 6,473 journals and 133 publishers, or some 70 per cent, currently permit the self-archiving of final postprints free of charge or time restrictions.¹⁸ While the overwhelming majority of these publications are from the sciences, some are relevant to this discussion. This group includes the Johns Hopkins University Press, which publishes the *American Journal of Philology* and the *Transactions of the American Philological Associations*; the Cambridge University Press, which publishes *Archaeological Dialogues* and the *Cambridge Archaeological Journal*; the University of California Press, which publishes *Classical Antiquity*; and Brill, the publisher of *Mnemosyne*. Several other academic publishers impose limited embargos.

Oxford University Press, the publisher of *Classical Quarterly* and *Classical Review*, bans self-archiving of postprints within 24 months from publication in the arts and humanities, and Routledge within 18 months. The embargo policies of the University of Chicago Press (*Classical Philology*) and Blackwells (*Oxford Journal of Archaeology*) vary according to the journal.

At the same time, substantial gray areas persist in our fields. Many important journals are published by professional associations without the intermediation of major publishers. Unlike larger organizations, such as the postprint-friendly American Anthropological Association, they tend to be missing from www.eprint.org's listings. Major players such as the *American Journal of Archaeology*, *Journal of Hellenic/Roman Studies*, and *Phoenix* belong in this category. It was only at the beginning of 2007 that *Hesperia* took the lead by deciding to incorporate a post-print self-archiving option into its copyright transfer agreements.¹⁹ Other publications, most notably the *Journal of Roman Archaeology*, are the product of rather small operations, while still others come out of continental Europe where they are subject to local conventions and without readily accessible pertinent policy information, or without any such policy at all. The considerable uncertainties and attendant information costs generated by this intense fragmentation of the scholarly publishing scene in Classics are bound to slow down the spread of Open Access practices in postprint self-archiving.²⁰

It has, however, long been recognized that even in the cases where publishers curtail postprint self-archiving or their pertinent policies are not easily discernible, authors can circumvent these difficulties by making their latest preprint (i.e., the version that precedes the final, peer-reviewed and revised paper as published) accessible beyond publication, and they post a separate list of corrigenda that reflect the changes between that preprint and the published version. This procedure, albeit more cumbersome than straightforward postprint self-archiving, maintains the integrity of the copyright-protected published version without depriving users of Open Access. In the current publishing environment, preprint self-archiving sites such as the PSWPC provide a convenient and essentially costless forum for authors who wish to self-archive postprints of their articles published in periodicals that do not impose restrictions or merely temporary embargos on this practice, and for those who wish to complement existing preprints with separate

updates that re-create the content of the final product.

In general, work-for-hire and publications that attract royalty payments may not be self-archived beyond publication without the publisher's permission. Although these arrangements do not normally apply to publication in academic periodicals, they severely limit the potential of Open Access initiatives in fields like Classics that rely to a significant extent on books and book chapters to disseminate research and evaluate the academic standing of scholars.²¹ While book chapters may seem similar to journal articles in terms of length and style, they often—though not always—result in publications that entail the disbursement of advances and royalties or—primarily in the case of handbooks and encyclopedias—involve up-front honoraria. While the latter, designated as 'work-for-hire', necessarily precludes self-archiving, the former may leave room for postprint archiving if the author retains the copyright and the archiving process does not conflict with specific contractual obligations. At the end of the day, the scope for postprint self-archiving of parts of academic books will be determined by bargaining between authors and publishers, and is likely to vary greatly between different publishers. For this reason, and to avoid any confusion about copyright issues, a preprint site like the PSWPC site is unlikely to embrace postprint self-archiving of most kinds of non-journal publications.

What's next?

The future of the PSWPC site, which is still in an early state of development, is uncertain. It was originally planned as an experiment, as a bit of a provocation and a possible example to other Classics departments, and as a temporary location where the ongoing research work of faculty and graduate students in the departments of Classics, and allied disciplines, at Princeton and Stanford could be opened to a wider readership in advance of formal print publication. The original thought was that if the site were successful, the demonstrated need might prompt and encourage a big professional organization, such as the American Philological Association or Archaeological Institute of America, to support a much larger Working Papers site for the whole discipline. In the meantime, the success, in terms of gaining readers, or at least visitors to the site, that the PSWPC has had so far raises the question of whether and how to widen its membership and scope.

In theory, for example, an e-print site such as the PSWPC should be able to accommodate doctoral dissertations. However, a more suitable means has just been created by the decision of ProQuest's UMI division to launch an Open Access service that complements the traditional sale of dissertation printouts or files. This new service, although somewhat more costly to the author, promises to optimize access by offering downloads of deposited dissertations free of charge and making them accessible via standard search engines

(http://www.proquest.com/products_umi/dissertations/epoa.shtml). This new policy represents a welcome shift from the established practice of double-billing authors as well as end-users, which was necessary in a time of microfilms and photocopies but has become increasingly hard to justify for the almost costless distribution of pdf files. It also obviates the need for the self-archiving of dissertations on eprint websites. At the same time, it merits attention that elements of larger theses are perfectly suitable as preprints: polished chapters that were used as writing samples for job searches may be the most obvious examples.

But why not expand the site to include the work of scholars at other universities, as some of our commentators have urged? The main technical problem with substantial expansion foreseen by Sanclemente is that the existing structure of the site, designed from the beginning as an Open Access site, was intended to support the limited number of persons who were anticipated as submitting research in progress from the two university departments. Any significant increase in the number and volume of posted research pieces would require a significant redesign of the website to cope with a proper indexing of the whole. This would be necessary in order to enable the casual viewer of the expanded site to have adequate access to its contents. As it stands, unlike many working papers sites, the PSWPC site is not formatted as a e-periodical, but rather it gives continual and immediate access to all its contents simultaneously through general subject and author indexing.

As things stand, therefore, it seems preferable to maintain the existing quality of the PSWPC site as a project of the two departments and to hope that its success will provoke the development of other Working Papers sites.²² The development of pre-publication Working Papers sites in other disciplines has sometimes followed this pattern. One might imagine the development of a single larger site, such as the arXiv site for

Physics and ancillary areas in Mathematics and Computing, that is maintained by Cornell University (<http://arxiv.org>). An alternative would be the development of diverse big sites, such as the ones found in the discipline of Linguistics, with distinct, fully-developed and autonomous Working Papers sites at MIT, Harvard, Toronto, and the University of Pennsylvania—amongst others. It might well be argued that Classics and Ancient History will be better served by the latter model. Yet another alternative that lies halfway between these two models would be a Web Ring system that would link different Working Papers sites into one big reference site where all papers could be searched. It might well be that this is the function that could be best served, in some fashion, by the APA or AIA as a central support organization.

Possible future developments that have been discussed by the authors of this article include making the site searchable—a problem that becomes ever more pressing as the site becomes larger—and better to enable e-responses by providing dialogue boxes. Dialogue boxes could be directly and immediately accessed by readers who might respond to the author more directly and rapidly than by email. As a result, authors might hope for more numerous and quicker comments on interpretative content, mistakes of fact, and so on. But these developments remain in the future, and, as noted above, would require substantial revamping of the site as it is currently designed.

Meanwhile, in view of the legal and practical constraints related to archiving, raised above, we think that scholars in the humanities currently stand to benefit most from the following initiatives.

(1) The promotion of preprint and—wherever feasible—postprint self-archiving on the largest possible scale. As discussed above, this objective requires the creation of a whole network of Working Papers sites or, alternatively and perhaps more efficiently, of a centralized repository that is capable of catering to a much larger constituency of scholars. Recent studies consistently show a positive correlation between Open Access practices and citation rates, leaving no reasonable doubt about the intrinsic benefits of self-archiving.²³

(2) There are compelling arguments that larger professional organizations in the field, like the AIA and the APA, should become involved, and as quickly as reasonably possible, both in organizing and facilitating the provision of large-scale e-publishing of research on WP and similar sites, and that they should also become involved in the discussion, analysis, and policy making about the ways in which these new fora of research publication will be evaluated in professional career development.

(3) The systematic inclusion of Classics, Classical archaeology and other humanities journals in existing databases that elucidate the postprint self-archiving policies of all relevant academic publishers and associations. This project will also encourage those publishers who have yet to formulate a policy to do so.

(4) Contractual bargaining between authors and publishers regarding the self-archiving of books and, perhaps more realistically, book chapters, especially in those cases where royalty payments are absent or minimal.

(5) Even for fields in the Humanities, institutions of higher education should move to greater flexibility in considering what counts as ‘publication’ in the new electronic media. There are some indications, even now, that the significant differences between traditional publication and e-publication are likely to be addressed in the near future.²⁴

(6) We ought not to extrapolate directly from existing trends in the natural and social sciences either to predict trends in the electronic dissemination of research or, more importantly, the modes of these transfers. Although studies of these other disciplines has indeed shown that ‘the shift towards the use of electronic media in scholarly communication appears to be an inescapable imperative... [nevertheless] the shifts are uneven both with respect to field and with respect to the form of communication.’²⁵ A considerable benefit of our experiment, therefore, will be to monitor the results and to attempt to discern trends that are likely to be followed within our discipline.

Our relatively short experience with the PSWPC—after all, at the time of writing our site has been around for fewer weeks than *Hesperia* is now celebrating in years—leads us to conclude that there is good reason for classicists, and other humanists, to embrace the use of the internet and web technology for preprint circulation and self-archiving. There are many unresolved issues with Open Access, but none appears to us to diminish the value to authors and readers of widest possible dissemination of pre-prints. While the ultimate impact of this, and other internet-based publishing enterprises remains impossible to determine, for the time being we believe that working papers in the field of Classics can best be understood as complementary to the traditional processes of scholarly publishers in making public final versions of scholarly work, certifying that it has been competently peer-refereed, and archiving that work for the benefit of future generations of scholars. At the same time, the principal advantages offered by working papers – quick registration, instant feedback from other scholars, and free access – highlight areas in which formal journals could learn from this model and enhance the services that they provide to the academic community.

NOTES

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¹ K. Gunnarsdóttir, “On the Role of Electronic Preprint Exchange in the Distribution of Scientific Literature,” *Social Studies of Science* 35 (2005), 549-69, at p. 551-54; K. Manuel, “The Place of E-Prints in the Publication Patterns of Physical Scientists,” *Science and Technology Libraries* 20 (2001), 59-85, at pp. 60 and 63 f.

² For the relevance of OA sites to this discussion, see G. Tananbaum, the president of The Berkeley Electronic Press, “Alternative Models of Scholarly Communication,” [in] K. P. Strauch, R. Bazirjian & V. H. Speck eds., *Charleston Conference Proceedings, 2003*, Westport, Conn., Libraries Unlimited, 2004; id. “Alternative Models of Scholarly Communication: the ‘Toddler Years’ of Open Access Journals and Institutional Repositories,” to *Library & Information Technology Association*, Forum, 1 October, 2005 (<http://www.lita.org/ala/lita/litaevents/litanationalforum2005sanjoseca/05forumsched.html>).

³ T. Andrew, “Trends in Self-Posting of Research Material Online by Academic Staff,” <http://www.ariadne.ac.uk/issue37/andrew/intro.html>.

⁴ Data reported by the Princeton Office for Information Technology, from December 8, 2006, 11.59 pm to December 15, 2006, 2.18 pm.

⁵ According to Professor A. J. Woodman and J. Marincola (personal communications to Shaw), the University of Durham based electronic publication might be revived. Its continued publication depended on a combination of interest between its originator, John Moles, and platform provided by the University of Durham that proved difficult to sustain amidst personnel moves.

⁶ To acquire an impression of the extent of the impact of working papers on this discipline alone, see the site EconPapers: <http://econpapers.repec.org/paper>

⁷ A conference blog is available at:
http://ssptmr.blogspot.com/2006_09_01_ssptmr_archive.html.

⁸ Most recently, see M. A. Mabe and M. Amin, “Dr. Jekyll and Dr. Hyde: Author-Reader Asymmetries in Scholarly Publishing,” *Aslib Proceedings* 54 (2002), 149-57, at 149-50.

⁹ The term is that of Gunnarsdóttir, *op. cit.*, p. 550.

¹⁰ See Manuel, *op. cit.*, p. 62 on this ‘peer-respect’ controls and pressures; and Gunnarsdóttir, *op. cit.*, p. 555, 558, 566 for the function of the ‘core group’ in the success of the HEP case.

¹¹ M. F. Stieg, *The Origin and Development of Scholarly Historical Periodicals*, University, Alabama, University of Alabama Press, 1986, pp. 15-16.

¹² Gunnarsdóttir, *op. cit.*, p. 563

¹³ Manuel, *op. cit.*, p. 61, quoting Stephen McGinty’s *Gatekeepers of Knowledge: Journal Editors in the Sciences and the Social Sciences* (Westport CT, Bergen & Garvey, 1999), at p. 100.

¹⁴ For some studies of this process, see G. McKiernan, “Quality Assurance in the Age of Author Self-Archiving,” *Association of College and Research Librarians (ARCL) Twelfth National Conference: Proceedings* (April 7-10, 2005, Minneapolis, Minnesota), pp. 190-96; and his “Invisible Hand(s): Quality Assurance in the Age of Author Self-Archiving,” *Journal of Science Communication*, 2 (September, 2003) = <http://jcom.sissa.it/focus/foc020302.pdf>; and S. Harnad, “The Invisible Hand of Peer Review,” *Exploit Interactive* 5 (April, 2000) = <http://www.exploit-lib.org/issue5/peer-review> (10 January 2005); for some of the problems: R. Kling, “The Internet and Unrefereed Scholarly Publishing,” *Annual Review of Information and Technology* 38 (2004), 691-631.

¹⁵ For an influential statement of the role of dispersed knowledge in establishing price, and the suggestion that dispersed knowledge is the central problem for all social science, see F.A. Hayek, "The Use of Knowledge in Society," *American Economic Review* 35 (1945), 519-30.

¹⁶ For some early reactions to the site by members of the Open Access community, including discussion of the archiving issue, see the online blog-interview of Ober conducted by Richard Poynder, with subsequent comments:
<http://poynder.blogspot.com/2005/12/oa-as-instrumental-good.html>

¹⁷ In the field of archaeology, the practice of using copyrighted images complicates the issue of pre-print archiving: authors need to explore whether pre-print self-archiving requires explicit permission from copyright holders, and whether separate permissions need to be obtained for the working paper version and the formal publication.

¹⁸ According to <http://romeo.eprints.org/stats.php>.

¹⁹ Tracey Cullen, personal communication to the authors, 12 January 2007.

²⁰ The fact that small and not-for-profit publishers less frequently accept post-print self-archiving than large and commercial publishers represents an additional obstacle: J. Cox, 'Scholarly Publishing Practices: A Case of plus ça change, plus c'est la même chose?'

Learned Publishing 19 (2006), 273-6, at 275. In practical terms, however, publishers' policies may have little impact on actual self-archiving practices, which are primarily determined by the customs and expectations that are specific to particular disciplines: K. Antelman, 'Self-archiving Policy and the Influence of Publisher Policies in the Social Sciences,' *Learned Publishing* 19 (2006), 85-95.

²¹ As already noted by P. Suber, 'Open Access in the Humanities', *Syllecta Classica* 16 (2005), 231-46, based on his 2004 APA paper, also available at <http://www.earlham.edu/~peters/writing/apa.htm>.

²² It might be noted that there are other comparable co-operative efforts between two universities in disciplines analogous to Classics—culturally broad in definition but encompassing specialist subfields—such as the co-operative WP site in Latin American Studies maintained by the University of North Carolina (Chapel Hill) and Duke University: The Carolina and Duke Consortium of Working Papers Series (<http://www.duke.edu/web/las/papers.html>).

²³ For a substantial and relevant survey, see C. Hajjem, S. Harnad, and Y. Gingras, 'Ten-year Cross-disciplinary Comparison of the Growth of Open Access and How it Increases Research Citation Impact' *IEEE Data Engineering Bulletin* 28.4 (2005), 39-47, based on 1.3 million articles in ten disciplines including Political Science, Economics, Sociology, Law, and Education.

²⁴ The recent Modern Language Association (MLA) report (http://www.mla.org/tenure_promotion) on rethinking tenure, for example, in which institutions of higher education are being urged give more serious consideration to understanding, evaluating, and crediting research work published in ‘new media’ is surely the not the first sign of such changes in the way in which disciplines in the humanities will evaluate publication in the future.

²⁵ R. King & G. McKim, “Not Just a Matter of Time: Field Differences and the Shaping of Electronic Media in Supporting Scientific Communication,” *Journal of the American Society for Information Science* 51 (2000), 1306-20, at p. 1306; cf. A. Sheridan & S. Brown, *Open Access Self-Archiving: An Author Study*, Truro, Cornwall, Key Perspectives, 2005, for a detailed study of field variance within natural and social sciences.