Education Policy Analysis Archives

The Academic Journal:
Has it a Future?

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Abstract
This article examines the current state of the academic journal. It does so
for a number of reasons: the increasing expense of paper journals; the
advent of electronic publishing; the use of publication in journals as an
indicator of research quality (in addition to disseminating knowledge
within a discipline) and consequent criticisms of systems of peer review
and evaluation of scholarship; emergent issues of equity and access; and
evidence of malpractice. These issues taken together constitute a critique
of, and challenge to, the process whereby research papers become journal
articles, which has in the past been viewed as unproblematic and
straightforward. This paper brings together a wide range of literature in
order to inform discussion about the future of the academic journal. It
briefly examines the origins of the academic journal and then provides a
comprehensive overview of current debates concerning how academic
journals work today. In so doing, it raises questions about decisions that
will need to be taken regarding the continuity or otherwise of the
conventional academic journal, and how publishing practices may

change in the future.

This journal, *Education Policy Archives Analysis*, available online, free of charge, and produced with minimal maintenance costs, is indicative of why scholarly publishing is in crisis. The future of paper journals has been put in doubt by the emergence of the electronic journal, of which there were 1,465 in 1997 (Association of Research Libraries, 1998). The "Communication of Research" Special Interest Group of the American Educational Research Association maintains a directory of freely accessible, peer-reviewed scholarly journals in education, of which there were 93 available as of February, 2001: http://aera-cr.ed.asu.edu/. Paper journals are also threatened by other forces, for example, the proliferation of paper and electronic journals as a result of the "publish or perish" academic cultures of many western countries, and the increased use of the academic journal as a means of evaluating the quality of one's scholarship. The widespread introduction of research reviews and assessment exercises based largely on publication in learned journals has led to perceptions that the practices of academic journals are more important to individual academics and their institutions than ever before. Thus, criticisms have been raised regarding the use of published work as an academic "performance indicator" and about the need for standard, equitable and open journal procedures and practices. Assurance has been asked, for example, that papers are dealt with fairly and that different journals use similar procedures and criteria for submitted manuscripts.

Eisenstein (1979) tells us that two potentially incompatible processes of change ushered in the first print revolution in the 1450s: one "gradual and evolutionary" and the other, "abrupt and revolutionary":

> Thus the invention and utilization of movable type may be viewed as one by-product of previous developments, such as the spread of lay literacy, and as a factor, which, in turn, helped to pave the way for later developments, such as modern mass literacy. (p. 33)

A similarly significant challenge to movable print is now with us, this time from electronics and telecommunications. This brings with it clear signals that the dominance of the paper journal, the main form of academic knowledge communication for the five centuries since Gutenberg, may be coming to an end. Whether the conventional form of paper academic journal is viable, necessary, effective or affordable in the present economic context is in some doubt.

Yet, even though some academics (and librarians) have become critical of today's system of academic publishing, others show few signs of dissatisfaction, and, indeed, seem ever more interested in strengthening their ties with publishers, both as producers and consumers. As a recent review of the state of academic publishing notes:

> What gives this enterprise its peculiar cast is the fact that the producers of knowledge are also its primary consumers. In most fields the market for scholarly publications is driven largely by the internal mechanics of a culture, in which further specialisation increases greatly the volume of published work at the same time as individuals come to read more narrowly within their field. (PHER, 1998:3).

Here I seek to clarify some of these issues by providing an overview of debates and

studies concerning the role and impact of the academic journal. First, I explore the origins of the academic journal and how early traditions continue to influence academic journals today. Then I will attempt to map the range of debates in recent years among researchers and writers interested in academic publishing and its changing role. This article ends with a discussion on the future of the academic journal, and what changes are needed if it is to continue to be the main vehicle for academic communication.

The impact of Gutenberg was not immediately evident and in fact printers and scribes continued to copy texts manually for more than fifty years after the first moveable-type printing press was established: "one must wait until a full century after Gutenberg," Eisenstein notes,"before the outlines of the new world pictures began to emerge into view." (Eisenstein, 1979, p. 33) Writing in the middle, as it were, of another kind of revolution, this paper explores the various pulls for and against change in the context of academic publishing, but of course, can only but speculate about the eventual and extent of the outcomes.

The Origins of the Academic Journal: two traditions

There is some disagreement about the origins of the academic article depending on discipline. Reports. The first two scientific journals appeared in 1655: *Journal des sçavans* in France, and *The Philosophical Transactions of the Royal Society,* in England (Swales, 1990; Vrasides, 2000). The genre of the scientific article followed on from letters that scientists wrote to each other and thus many of the earliest contributions used the first person, as in the case of letter-writing. The aim of *Transactions* and other similar publications was to provide a general forum for discussion which eventually became transformed into a new genre of scholarly writing.

An additional, and powerful influence came from the convention of publishing scientific treatises in order to establish a sound foundation for scientific knowledge. To establish the factual nature of experimentation, mid-seventeenth century scientists such as Robert Boyle, developed "a largely self-conscious and highly complex set of strategies" (Swales, 1990, p. 111). This involved making public the form of the apparatus used (actual or by detailed drawings) and if possible carrying out the experiment in front of an audience—so that agreement of the relevant community could be gained. Replication of experiments was also believed to strengthen any scientific claims, though clearly experiments had to be successful to do so. Written accounts of experiments were lengthy and detailed so that readers could feel they were gaining a true account, whether or not the experiment succeeded. Claims were deliberately cautious and philosophical speculation was avoided. Bazerman's (1983) study of the development of the *Transactions* during the period 1665-1800, however, shows that the articles were neither uniform nor were they mainly experimental. In the early days of the journal, the majority of reports were of "natural" phenomena such as earthquakes, or anatomical observations and dissections. Later, understanding of the complex nature of phenomena led to a more uniform approach.

> In this process of evolution, the scientist's relationship with nature gradually changed from a view that the nature of things would be easily revealed by direct or manipulated observation to a view that nature was complex, obscure and difficult to get at. Inevitably enough, this changing view also meant that more care began to be taken in describing how experiments were done, in explaining why particular methods were chosen, and in detailing precisely what results were found (Swales, 1990, p. 113).

The humanities took a different later pathway to the scholarly article. Today's scholarly journals are modelled on those developed for the new "professional history" of nineteenth- century Germany (McDermott, 1994). One of the first historical periodicals, still in existence, is the *Historische Zeitschrift* which appeared in 1859, some two centuries after the first scientific journals (Steig, 1986). Based in universities which were regarded as central and unifying institutions of academic professionalism, scholarly journals in the humanities were used in Germany to bring coherence to a discipline, and as a means of communicating knowledge among like-minded scholars. Ideological commitment was considered congruent with scholarship; and political discussions were included alongside more recognisable academic contributions. The conviction that politics is incompatible with scholarship became widespread only after the Nazis took control of German universities in the 1930s: hence the post-war emphasis in *Historische Zeitschrift* on "the maintenance of rigorous scholarly striving towards true unbiased knowledge" (Steig, 1986, pp. 134-5).

The legacy of the two traditions for today's academic writing remains evident, causing much debate among those who have sought to unify and generalise across disciplines. This has often confused students and beginning researchers who have questioned whether it is "more scholarly" to use the first or third person in academic writing or whether all research articles need to follow a standard "scientific" form. Or indeed whether it is so necessary to take up a stance of neutrality and objectivity. And, of course, there are as many responses as questions, all highly dependent on specific disciplinary and research cultures.

Today's Academic Journals

Despite academic publishing's distant and relatively modest origins as described above, it has enlarged and diversified, conventionally embracing a wide number of forms: for example, books of varying lengths written by one or more authors; collections of articles edited by one or more academics; research monographs or reports; undergraduate and postgraduate texts; vanity (i.e., self-financed) monographs or books; articles in regular or special issues of journals, and so on. The *academic journal*, however, is distinctive from other forms of publishing in certain key ways. It is likely to be university-based; it involves academics editors and consultants; it uses standard forms and styles of binding, type-setting and publishing; and it is published at regular intervals (McDermott, 1994). Furthermore, academic journals usually employ referees, that is, experts in specific fields, who are asked to comment and make recommendations as to whether submitted manuscripts merit publication.

Academic journals are used in three main ways: first and still most importantly, to produce, disseminate and exchange academic knowledge; second to rank research and scholarly work in order to aid the distribution of research funds; and third, to inform decisions concerning appointment and promotion. The second and third factors, in particular, have meant that journals and the procedures they use have become more important to individual writers and academics, and their institutions. This is most acute where research activity is highly prioritised and where it constitutes a significant source of institutional income.

However, to understand how academic journals work, it is also important to understand that they have at their core a set of social, economic and academic relationships which involve a complex variety of roles and people. At different times, individuals may hold positions and responsibilities for different journals at the same time. They may, for example, be editor, editorial board member or referee for one or

more journals at the same time as trying to get a paper published in these or other journals.

A useful way of looking at academic writing is as a social game, the rules of which need to be understood before individuals are able to successfully engage with it. For example, Clark and Ivanic use the term "literacy practices" to include both the social conventions and "the physical, mental and interpersonal practices that constitute and surround the act of writing" (Clark and Ivanic, 1997, p. 12). Hence we may refer to the "literacy practices" of academic journals (meaning both the practices employed in researching and writing papers, and the social rules and regulatory frameworks surrounding them) when we explore similarities or differences between academic journals within the same discipline or between disciplines. "Practices" are largely determined by dominant individuals or groups at any historical moment, although writers have the option, in principle, not to conform to given practices if they so wish. Thus power is important in writing since the need for acceptance shapes practices of both form and content. But power can also be used in another way —as in "the power of writing." The writing act itself is associated with great power —it can provide access to influence over others through the communication of ideas and the use of rhetoric, which, in the case of the great philosophers, playwrights and novelists, can endure for hundreds of years.

Another useful concept is "discourse community" which if applied to academic disciplines and sub-disciplines helps explain why, until now, there has been relatively little disagreement about how academic journals work. In order to enter and be part of a particular discourse community, individuals need to share certain characteristics. These include: a broadly conceived set of public goals; mechanisms for communication between members and circulation of information and feedback; utilisation of specific language practices; and membership requiring a level of specific expertise and knowledge-base. Such a concept of "discourse community" shows what binds specific groups of academics together, how others come to be excluded, the relative conservatism of such communities, and the potential difficulty of introducing changed practices (Swales, 1990). However such communities are also sites of contestation which may lead to break-away sub-disciplines generating new discourse communities (and new journals).

The power of' certain groups ("experts") to shape and confirm the production of certain kinds of knowledge determines the ethos and membership of each discourse community. As a consequence, "outsider" or unofficial knowledge may be disqualified and dismissed as non-rigorous, undisciplined, and unprofessional. In his conceptualisation of power/knowledge configurations, Foucault (1980) focused on the power of research to control as well as to generate knowledge. This does not mean that oppositional viewpoints are eradicated: rather the inclusion of different (but tolerated) viewpoints not only confirms academics' espoused commitment to freedom of speech and respect for diversity of opinion, but indicates the boundaries and limitations of what may be said and written. Thus, as Apple states, "reproduction and contestation go hand in hand." (Apple, 1982, p. 8).

Challenges to Academic Journals

A number of developments have taken place in recent years that challenge the foundational paradigm of the conventional academic journal. Considered in this section are the economy of journals, the impact of electronic journals like *Education Policy Archives Analysis*; peer review and the assessment of research productivity and quality;

and social justice and ethical issues.

The Economy of Journals

The conventional academic journal has been highly profitable for publishers, because copy is consistently produced (with copyright assigned to the publisher) while academics generally give their labour free—as writers, reviewers, editors and members of editorial boards. The paradox is that on the one hand, academic institutions make the initial outlay in the form of salaries and infrastructure to support the research which provides the raw material for articles and to provide editorial labour for the journals: on the other, universities, colleges and individual academics are made to pay heavily (through subscriptions) for the publication and distribution of that research.

The act of publishing has been referred to as "a gift exchange" within a community of like-minded people —where the gift, freely given, generates esteem and professional advancement (PHER, 1998:3). However the producers are not held responsible for market failure, neither are they beneficiaries of market success. Rather their role is to keep the system fuelled by submitting papers, by providing academic editorial services, and as purchasers.

In their original conception, journals *belonged* to those who wrote for them and read them, being in the main published by university presses. This remained the case until the post- war period when, in the US in particular, the university sector expanded with an accompanying rise in level of publications from the increased number of academics in the system. Commercial publishers entered the scene at this point and were welcomed as one way to diffuse the bottleneck of papers waiting to be published. However publishers were quick to exploit the opportunities presented to them.

Recognising the bottleneck, commercial publishers came to absorb an increasing share of the market, with broad support of higher education institutions, scholarly societies, and faculty who served as editors, reviewers, and members of editorial boards. Consigning the production and distribution functions to the commercial sector purchased an immediate increase in capacity: existing journals expanded, and new journals were formed to accommodate a growing quantity of research in increasingly specialised domains (PHER, 1998:3).

Initially these arrangements seemed to work well, providing benefits for all concerned. Academics were able to get their work published, publishers took responsibility for the organisation and distribution of the journals, and profit margins seemed acceptably balanced against the cost of the journals. However problems began to emerge as the requirements of the market clashed with the academic milieu. For example, publishers required authors to turn over their copyrights and were thus free to buy and sell academic knowledge as a commodity. The burgeoning costs of print and distribution were passed directly over to the purchasers of the journals, enabling publishing houses to accumulate substantial profits. Thus, the British entrepreneur Robert Maxwell made his fortune in the 1970s and 1980s through the journals associated with his publishing house Pergamon. Academics, conventionally unworldly about financial matters, were slow to realise what was happening and the pressure to publish meant that they were willing collaborators in a system which exploited them.

Thus it comes as no surprise that the volume and price of academic information dissemination increased nearly three-fold in a decade with the "cost of scholarly journals increased [by] a whopping 148% in the US between 1986 and 1996 (PHER, 1998, p. 1 - 2). Concerns were raised about whether the creation of more and more knowledge outlets (through the creation of new journals) is indeed a solution. Indeed, the

proliferation of new journal titles attracted criticism in the UK, both about the quality of much of the output of academic research and writing, and the problems quantity presents to the academic reader (Hillage et al., 1998).

The system we have now was designed, and seemed to work best in, the academic world of the 1960s when academic and market interests coincided. It produced, for a time, a form of academic scholarly discourse in printed form serving higher education institutions and their staff in a fair and cost effective manner. However the fit seems less perfect in the much changed academic climate, four or more decades later. Increased necessity to publish in academic journals in an expanded university sector has generated further pressure, both to increase the number of journals available and on library budgets, in particular. Predictably perhaps, whilst both the numbers and prices of academic journals have increased as have individual subscriptions to journals, the number of articles that an individual academic reads on average each year has remained much the same (about 150 to 190 articles). Again, it is libraries that have most felt the burden of journal proliferation.

Publishers report that as the number of journals have increased, academics have not increased their personal subscriptions, but have instead relied upon the library, with most academics continuing to subscribe to between three and four journals. Publishers also report that scholars are purchasing fewer personal copies of scholarly monographs, which has helped contribute to smaller press runs and the current tenuous economic situation of the scholarly monograph (University of Austin, 1998, p. 1)

The system we have now is clearly at a crucial point—some might say in a state of collapse—with librarians in the forefront of calls for urgent change.

> Those librarians who help you decode Dewey's decimals are becoming unlikely warriors at the end of this decade. They have to. With large publishing conglomerates driving the prices of scholarly journals higher and higher, librarians find themselves spending more and more money to purchase fewer and fewer books. Their constituencies are concerned. Scanning the stacks, professors moan; brooding their budgets, the financial officers grumble. It's no wonder that many librarians are asking: Is there a better way? If you don't like the way journals are being published, why not do it your self? (Rambler, 1999, p. 1)

Librarians have had the fullest picture of a crisis-in-the-making; because of academics' greater reliance on libraries for the journals and books they cannot afford, because of libraries' diminishing resources and reduced budgets, and also because of their need to develop paper and electronic systems simultaneously.

Electronic Publishing

An important challenge to the conventional paper journal has come from electronic publishing, as has already been noted - that is, the "full-blown usage of networked computers" (Waaijers, 1997, p. 77). The so-called electronic revolution emerged because of two main technological changes:

> First the evolved computer, now cheap, robust and powerful, and second, our recent ability to store and send huge quantities of data from computer to computer hither and thither across the globe by connections such as the internet. (Young, 1996, p. 290)

As electronic journals pioneered new forms of text production designed to reach a wider and more diverse readership, conventional academic journals continued as before. But demands for change came not only from the imperatives of technology. Pressures to incorporate electronic journals in current systems of academic publishing, and even to substitute them for paper journals, arose from a number of sources. For example, certain problems in the production of the paper journal are perceived as resolvable by electronic versions: in particular, the slowness of the process, proliferation of journals and high costs to university and college libraries. Electronic publishing makes possible faster turnarounds of papers from submission to publication and its potential to lower the production and distribution costs —by 30% or more – could lead to cheaper journals for libraries and individuals, although initial capital costs may be higher (Burbules & Bruce, 1995). Electronic publishing, moreover, creates possibilities for flexibility in the writer-reader relationship; with enhanced opportunities for interactivity, multiple-modes of data presentation, publication in more than one language and fewer restrictions on word-length and format (Vrasidas, 2000). Moreover, Glass (1999) claimed that online education journals also widen readership, to include groups such as teachers, administrators, school board members, and those living in countries, all previously unlikely to have access to scholarly literature

A less positive projection is that the promise of quick turnarounds may encourage hasty and under-developed submissions, and that lack of access to fast changing technologies of text communication is likely to increase exclusivity rather than wider access. Also if, as Glass (1999) suggested, "a reader in the year 2000 browsing a scientific journal from the year 1910 will find the environs thoroughly familiar," arrangements of storage and information retrieval in the new electronic era cannot promise such familiarity.

The term *archiving* denotes not only the storage of materials but the systematic organisation and exhaustive provision of access to these materials. In the case of electronic publications one of the major problems to be addressed in access provision has been the wide variety of formats in use. This was illustrated by the statement "I can read a printed book published 300 years ago but it is impossible for me to read a Microsoft Word II document written in 1988." (ICSU, 1998, p. 2).

Vrasidas (2000) neatly summarizes the range of reasons given against the broader acceptance of electronic journals.

> Among the most prevalent ones are the politics of controlling scholarly communication, the economic benefits of publishers, copyright issues, bandwidth issues, access to the Internet, the lack of skills to write for the web, the technology phobia among scholars, the prestige for publishing an online article versus an article in paper, and resistance to changing the old traditions of scholarly publishing that legitimizes the academic disciplines (Vrasidas, 2000, p. 4)

Notwithstanding, the advent of electronic publication has stimulated an extensive debate about conventional forms of journal publishing and whether the paper journal is now the most effective means of disseminating research and scholarship. It has provided a challenge to how the dissemination of scientific knowledge through journals is structured, and simultaneously, to existing systems of peer review.

Peer Review

The employment of peer review lies at the center of academic journals' procedures and practices. Each journal relies on the input of a panel of academics, each of whom has made a significant scholarly contribution to a particular field, and who is therefore assumed to be able to pass judgement on the quality of papers of colleagues and scholars working in the same or related fields. Ostensibly fair and non-hierarchical—what could be more non-hierarchical than being judged by one's equals?—nevertheless, the system is fraught with tensions, particularly where challenges are made to the reviewer's own work or academic stance.

Peer review has been chosen as the most just and appropriate means of coming to a decision about the quality of research, despite the recognised fallibility of some peer review systems and the consequent need to constantly review and reconsider their practices (ABRC, 1990). However, it has also drawn criticism for being inherently conservative, and a means by which powerful academics in a field (or within a particular discourse community) retain their grip on who contributes and what knowledge is generated. Because peer reviewers (known also as referees) are generally recruited through informal professional contacts, the system has also been condemned as an "old boy" network which is unfair to outsiders and newcomers (Furnham, 1990).

Another challenge to peer review has come from evidence both of substantial disagreement between referees when evaluating manuscripts and of lack of objectivity. This suggests, according to Berardo (1989):

> a differential application of established criteria and reflecting the biases of
> individual reviewers. There is little doubt that a reviewer's proclivities
> toward certain theoretical perspectives, methods of data collection and
> analysis, or substantive foci play a role in the evaluation process (Berardo,
> 1989, p. 133).

If evidence is available to support the view that the peer review process differs *within* a field or discipline as above, there is also evidence that differences can be found *between* disciplines. Harnad & Hamus (1997) suggest, for example, that variation in rejection rates does not necessarily indicate variations in scholarship.

In some disciplines, the mark of excellence is their rejection rate, which can be as high as 90% (and probably higher in a journal like *Science*); in other disciplines, it is the acceptance rate that is 90% or more—and this need not mean that the journal is of lower quality. Sometimes it is the very prestige of the journal that keeps contributors from submitting anything but their very best work to it for refereeing (Harnad & Hamus, 1997, p. 19).

Thus, we can see that while peer review is widely used by journals, it is more problematic than its widespread use suggests. As a system of accepting and rejecting papers within a discipline, peer review seems a reasonably robust strategy. However when the selection of papers is invested with different purposes, the discourse changes and becomes more complex - as we shall see with regard to the use of journals to evaluate research quality and productivity.

Productivity and Citation

Numerous and diverse methods have been developed to assess the quality of scholarship and rate of productivity of academics. However these are frequently complex and superficial as Hanish et al. suggest below.

Productivity refers to the quantity of publications attributable to a given scholar, expressed in a lifetime total or a yearly rate when divided by the scholar's professional age. Impact generally means how frequently that an individual's work is cited by other authors, which likewise can be expressed as a lifetime total or a yearly rate. Quality is almost never assessed directly; productivity and impact, though, frequently pose in its place (Hanish et al., 1998, p. 1)

One of the most direct and straightforward measures of quality of work and research productivity is "the simple publication count" that is the number of publications an individual scholar has accumulated over a given period (Colman et al., 1992, p. 98). However, in the competitive climate of academia at the turn of the twenty-first century, merely to succeed in getting into print is not considered a sufficient guarantee of scholarship. Sometimes all publications are weighted equally. But how are co-authors to be accredited? Some assume an equivalent contribution from each author listed while others employ a weighting system based on authorship order (Hanish et al., 1998). There is also the issue of how to compare single-authored and co- authored work. Moreover, some journals "count" for more, for example, those included in citation indexes. This brings us to an alternative method of evaluating scholarship—to count not publications but citations. The use of citation is premised on the assumption that the quality of a scholarly article can be gauged by the number of times it is cited in subsequent journal articles, books etc. Thus, a commonly used method of judging whether a particular academic journal or an individual scholar has made a significant impact on a field is to see how many times they have been cited by other scholars in the field. This has developed into a complex technology of measurement delivering "citation data" as "quantitative indicators" (Garfield, 1990) which can be used to evaluate existing journals and individuals against other journals and individuals, on a yearly or other chronological basis, and according to impact factor, i.e., whether citation occurred in a newspaper, article, research review and so on.

It is assumed that the higher the number of citations of an academic's work, the greater the peer esteem and therefore the higher the quality of scholarship (e.g., Field et al., 1991). In practice, the use of citations involves counting the number of citations over a specific period in journals covered by one or more of the established citation indexes—which raises a number of further problems. First, a large number of journals including the newest and most innovative, are absent from standard citation indexes. As Garfield (1990, p. 6) points out "no matter how many journals are on the market, only a small proportion account for most of the articles that are published and cited in any given year." Second, citation indexes are generally unable to distinguish between positive and approving citations, critical and dismissive citations, and self-citations. Third, citations too may be seen as merely reflecting the status quo, because of the frequency of self-citation and citation of friends (Field et al., 1991).

Whatever performance or quality indicator is used regarding publication, whether publication count or citation, a key factor for each institution in the present competitive climate is how the performance of its researchers measures up to others. Institutions which are able to prioritize investment in the buying in of productive researchers or in creation of a research milieu, are those most likely to see a positive outcome in terms of commercial or charity grants, or government funding. Put another way, there is a strong relationship between investment in research and its "quality" outcomes.

The most obvious output measures relevant to departmental research performance

are simple publication counts and more elaborate publication-based measures designed to take quality into account. The most important input variables are the number of departmental staff members, the number of research assistants, the size of equipment and recurrent grants, and the amount of research income (Colman et al., 1992, p. 97).

When these performance indicators, however arrived at, are used as surrogates for the distribution of "quality" and "excellence," a crisis emerges not about selection but about social justice.

Equity and Access

At the annual meeting of the American Educational Research Association (AERA) in New York in 1996, the AERA Publications Committee noted that some inequalities relating to getting published lay outside its control and that perfect representation of authorship and content was impossible to achieve, despite strategies to increase diversity of authorship. In particular, the "struggle over hiring" in the US (such that proportionally few female or minority ethnic academic staff are appointed) has created preconditions which militate against greater inclusiveness in journals. The response of mainly young, graduate students on this occasion, however, was to be highly critical of existing publishing practices, in particular, what were seen as the lack of openness in the appointment of journal editors, lack of encouragement to new authors, and predominance of white/male networks of power.

AERA's response to these, and other similar points raised by its membership, was the development of a "list" of minority scholars, produced each year "for the purpose of increasing the availability, visibility, and representation of minority scholars within AERA's visible structure" to AERA division and committee chairs, journal editors etc. (AERA, undated). This has encouraged those in the most senior echelons of the US educational academic community to widen their conventional notions of whom to appoint to what —though it is difficult at the present time to estimate, with what success.

Thus we can see that the discourses of excellence, competitiveness and, to some extent, exclusivity which have suffused academic journals since their inception, have not necessarily provided a fruitful ground for discussion of social justice or equity issues. The exclusive nature of academia, indeed, is seen to underscore its claim to excellence. However, following developments of equity policies in other areas of academia (Weiner, 1998), who writes in academic journals has become a topic of considerable importance. Questions arise as to whether there is evidence of sexism, racism or other unjust practices in academic publishing and whether new forms of publication are likely to promote a change in publishing's ethos of elitism. Does electronic publishing favour the favoured, or does it enhance equality of access and usage?

Sociologists of science have suggested that certain characteristics of writers, for example, where they were educated and are presently employed, influence reviewers' recommendations and editors' decisions about whether or not to publish (Bakanic et al., 1987). Thus a "big" name may well gain the advantage in the competition for journal space in various ways:

> Judgement ....may be systematically skewed by deference, by less careful appraisals involving exacting criteria, by self-doubts of one's own sufficient competence to criticise a great [scholar] or by fear of affronting influential persons in the field (Zuckermann and Merton, 1971, p. 82)

Following feminist activity in other areas of academia, gender has recently received attention as a factor in academic scholarship and writing. An aim of feminist research into higher education generally has been to "generate a transformation of the academy" by highlighting discrimination and by developing theories and frameworks for gender difference (Townsend, 1993, p. 22). Gender studies of academic publishing have reported a number of consistent findings: that women or feminist issues rarely form the topic of mainstream journals, though there has been a slight increase in recent years (Townsend, 1993); that male authors have generally higher profiles and higher productivity than women, are cited more and are more likely to self-cite (Helmreich et al., 1980); and that male authors are more likely to be cited by men (Ward et al., 1992). However, Over showed nearly two decades ago that article-for-article, women are as likely as men to be cited, but their proportion of citations is lower because of their lower overall publication levels (Over, 1982). It should also be noted that there is a small, specialist group of publications focusing primarily on gender or women's issues, which draws a mainly female authorship and readership.

Other social patterns of authorship, for example, ethnic origin or colour, have attracted less attention although there is some evidence that minority and black writers are as under- represented as authors, as they are as a focus of study. In the latter instance, a study of the proportion of articles on minorities in psychology and education journals in the US between 1952 and 1973, found less than 2% discussing minority issues (Van Scoy & Oakland, 1991). It is likely to be minority and black researchers and academics who are most interested in exploring "minority" issues in research, if trends are similar to those of women researching and writing about gender issues. This suggests that there are relatively few minority and black academics as researchers and authors, although there may have been a slight improvement in numbers more recently.

Countering Malpractice

Another less visible issue for academic journals but one that has come to prominence for several different reasons in recent years, is ethical considerations regarding journals and intellectual property rights. It has been argued that the intense pressure for academics to get into print, and the linking of tenure and promotion of academics to publication, has led to a variety of abuses of the system. Singer (1989) cited cases of gross malpractice, for example, where researchers fraudulently claim to have made a new discovery or fabricate research findings. Most ethical violations, however, are less severe but nevertheless significant. As Berardo pointed out:

> Upward mobility (promotion, tenure, recognition, awards, etc.) is facilitated by getting one's name on many publications, and especially if one appears as the single or first name author. Sometimes this leads to having one's name on an article even though the person hasn't written any of it or whose contribution to its composition has been minimal….A related but more insidious pattern is for a the major professor to insist, sometimes subtly and other times bluntly, that graduate students include their names on any publications derived from theses or dissertations completed under their supervision. Such incidents clearly represent violations of the moral and ethical norms which represent the ethos of science. (Berardo, 1989, p. 126)

The issue of intellectual property rights, that is, who owns the ideas, concepts, theories, experimental data, fact and opinions in research articles and reports, has been

raised in two contexts. First, electronic publication has been perceived as providing greater possibilities for plagiarism—technically it is relatively simple to cut and paste someone else's text into one's own. The second context involving intellectual property rights of researchers concerns the relationship between government and/or research sponsors (or purchasers), and researchers. A recent concern in the UK has been how to resist pressure on journal editors from government representatives wanting to "pull" papers which are critical of government policy, despite the fact that the papers have satisfactorily scaled all peer review and editorial hurdles. At a time when many academics are exhorted to seek research funding from a range of sources, the UK researcher Nigel Norris (1995, p. 274) draws attention to related problems when government departments sponsor research to support "their strategic objectives and continuing responsibilities." The research community is caught between a rock and a hard place. It needs both to remain "true" to professional standards yet at the same time, avoid being seen as overly critical of sponsors, governments or policies.

One solution to this predicament is not to sign up to such contracts, but there may be good reasons why researchers have little choice; for example, because work will be provided for temporary researchers or the university demands that they gain external funding for research. A strategy evolved to deal with such situations, therefore, has been to develop a code of ethics to be adopted by all partners in a research enterprise which will allow the negotiation of research practice boundaries. Ethical guidelines published by the British Educational Research Association (BERA) which could form the basis of such a code, include the following stipulations regarding academic writing and publication:

- Educational researchers should aim to avoid fabrication, falsification, or misrepresentation of evidence, data, findings, conclusions.
- Educational researchers should aim to report their findings to all relevant stakeholders and so refrain from keeping secret or selectively communicating their findings.
- Educational researchers should communicate their findings and the practical significance of their research in clear, straightforward, and appropriate language to relevant research populations, institutional representatives, and other stakeholders.
- Educational researchers should remain free to interpret and publish their findings without censorship or approval from individuals or organisations, including sponsors, funding agencies, participants, colleagues, supervisors or administrators… (BERA, 1992, 1&2).

Has the academic journal a future?

A key question raised in previous sections of this paper is the extent to which current and future academic cultures and publishing practices might be made more equitable and inclusive. Knowledge of the origins and current state of academic publishing, and debates concerning publishing as a performance indicator and as a site of struggle over power and knowledge as discussed in this paper, suggest that getting a paper published in an academic journal is not nearly as straightforwardly about "good scholarship" as it might at first seem. The impact of technology, literary practices, discourse communities and the power over academic knowledge of like-minded "experts," are all important to our understanding of how academic journals work. The heightened tension in recent years between their utilisation as disseminators of scientific knowledge and as accreditors of scholarship is another factor for consideration.

How can present day academic journals be understood by those aiming to boost their publications count or for beginning researchers or for the wider society which hopes to benefit from its investment in research? Is this the system that we want or need? Does it have to be so unfair? Does electronic publishing offer greater or fewer possibilities for widening academic access and participation to hitherto excluded groups? Some countries, for example Sweden, have not yet succumbed to the academic "publish or perish" ethic so prominent in the US. However, sexism in refereeing practices exposed in a recent study of allocation of research council funding in Sweden (Wennerås & Wold A.,1997) suggests that even in more equity conscious environments, academics, consciously or unconsciously, discriminate in what counts as "excellence" and "scholarship." What are the alternatives to current systems of research evaluation and review?

Briefly there seem to be three main future scenarios:

1. *Stasis*—keeping the system as it is, defending existing cultures of excellence, seeking to impose conventional publishing practices on web-based journals, resisting change;
2. *Deregulation*—reduction of publishing controls, access to technology paramount, a web publishing free-for- all, decline and eventual elimination of the paper journal (while other means are found for evaluating research);
3. *Reform*—comprehensive review of the system, fusing of dual systems of paper and electronic journals, preservation of some form of peer review and quality assurance but re-designed to enhance openness and equity, thinking creatively about how to encourage production, dissemination and exchange of academic knowledge across a variety of communication media, and so on. The Knowledge Exchange Model (KEM) for scholarly publishing proposed by Willinsky (2000) is one step in this direction.

Most academics (apart from Internet specialists and university librarians) seem stuck in the statis scenario, fearing deregulation but unwilling or unable to attempt reform. Reform, nevertheless seems the most promising option, but will need a certain level of conscious attention and commitment for those involved. Editors and referees will need to reflect on the fairness both of their policy regarding acceptance and rejection of papers, and the modes of publication available and appropriate for their present and future readership. University administrators and appointment panels will need to develop more refined and fairer ways of judging research quality, to include, perhaps perusing examples of researchers' work, as in Sweden. Publishers and librarians might work more closely together to see whether a system can be developed which serves both university and market interests. And web-based journal editors will need to develop practices that encourage genuine access and openness rather than merely favouring the privileged academic "nerd" as in the past.

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