

**THE DIGITAL FUTURE OF AUTHORSHIP:
RETHINKING ORIGINALITY**

Kathleen Fitzpatrick

'If I have seen further, it is only by standing on the shoulders of giants.'
Sir Isaac Newton

I have spent the last several years writing about the kinds of social and intellectual changes that digital publishing will require of academics and their institutions. These changes encompass many aspects of the ways that we as scholars work, but few of those changes will be so deeply felt as those that the digital presents for our conceptions of ourselves as authors – what we're doing, why we're doing it, and how we go about it. That these changes are as hard to grapple with as they are might be seen in the slightly bumpy path that this particular manifestation of my argument – this article, in *Culture Machine* – took in coming to fruition. When I was originally contacted by the journal editors, who sounded as though they were interested in republishing some part of the work I'd done in my online book manuscript, *Planned Obsolescence*, I took them somewhat literally. It's a model we all understand: you publish something somewhere, and then sometimes, if you're lucky, it gets reprinted somewhere else, in whole or in part.

What I somewhat densely missed is the difference that the Internet makes in such a process. In print, reprinting makes sense: an article appears in a journal and then re-appears in an anthology, or perhaps in a single-author book expanding on the argument. The different context of the reprinted article allows it to reach different audiences, to accomplish different tasks, than the original text has done. On the Internet, however, such literal reprinting makes far less sense; if the editors of *Culture Machine* wanted their audience to read my text as previously published, why wouldn't they simply link to it? The seamlessness of the Internet makes nearly all texts available as part of the same vast (if at times poorly edited) anthology; despite the

common practice of cross-posting blog entries on multiple sites, reprinting is no longer strictly speaking necessary.

What digital publishing facilitates, however, is a kind of *repurposing* of published material that extends beyond mere reprinting. The ability of an author to return to previously published work, to rework it, to think through it anew, is one of the gifts of digital text's malleability – but our ability to accept and make good use of such a gift will require us to shake many of the preconceptions that we carry over from print. In this case, the networked venues in which this article and its predecessor chapter appear have afforded me the opportunity to focus in on the relationship between my own assumptions about originality and the kinds of reworking that the digital facilitates. Originality, however, especially in its relationship to productivity, is deeply ingrained within our scholarly values, and the process of breaking down those assumptions, of changing those values, will no doubt be an anxious one for many of us.

But of course many of us live with a host of anxieties about writing already, anxieties that can interfere with our work and yet make it difficult to change the ways that we approach that work. These anxieties have deep roots, being embedded not just in the complexities of academic life (such as the often painful changes in focus required to move from teaching through committee meetings and into writing), and not just in the enormous weight placed upon the quantified outcomes of our writing within academic systems of reward, but in the very nature of authorship as we have constructed it in western culture. This is the reason that so many academic self-help books focused on issues around writing have been published: from *Academic Writing for Graduate Students* to *Writing Your Dissertation in Fifteen Minutes a Day* (Bolker, 1998), from Bill Germano's *From Dissertation to Book* (2005) to his *Getting It Published* (2001), and from Beth Luey's *Handbook for Academic Authors* (2002) to Robert Boice's *Professors as Writers* (1990) to Paul Silvia's on-the-nose *How to Write a Lot* (2007), just to name a few. The existence of such an enormous selection of guides to the academic writing process suggests both that many of us are in substantive need of advice and assistance in our writing lives and that we're not getting that advice and assistance elsewhere, whether in grad school or beyond. It also suggests that we believe that someone out there knows how to be a successful author, and that if they could just put their process into words, words that could be transmitted clearly enough, we could put them into practice.

In what follows, I argue that we all need — myself not least among us — to rethink our authorship practices and our relationships to ourselves and our colleagues as authors, not only because the new digital technologies becoming dominant within the academy are rapidly facilitating new ways of working and new ways of imagining ourselves as we work, but also because such reconsidered writing practices might help many of us find more pleasure, and less anxiety, in the act of writing itself. This is of course not to suggest that digital publishing networks will miraculously solve all of the difficulties that we face as writers; rather, it is to say that network technologies might help us feel less alone and less lost in the writing process. But such change will require taking the time to question our assumptions about authorship and how they impose themselves on our writing lives. In my exchange with the *Culture Machine* editors, I've found the opportunity to think about how digital publishing might encourage authors to rework previously published material, and how, in returning to a text that seemed complete, we might find new modes of engagement with our ideas and our audiences.

It may seem odd to suggest that we need to spend some time rethinking the nature of authorship, as it certainly looks as though, at least in literary fields, we've done little other than that for the last four decades or so. Authorship, its institutions, and its practices give every impression of having been under continual scrutiny since the moment of conception of poststructuralism. Nonetheless, the kinds of changes in publishing practices that I'm discussing in this text reveal the degree to which our deconstruction of the notion of authorship has been, in a most literal sense, theoretical. However critically aware we may be of the historical linkages among the rise of capitalism, the dominance of individualism, and the conventionally understood figure of the author, our own authorship practices have remained subsumed within those institutional and ideological frameworks. If anything, questioning those frameworks seems to have added to our anxieties about our own writing; Ede and Lunsford (2001) point out that, 'however we theorize the subject and author, problems of writing and of scholarly (and pedagogical) practice decidedly remain. Amid such intense questioning, a kind of paralysis seems possible' (Ede & Lunsford, 2001: 355). Little wonder, then, that we prefer to leave such notions in theory: 'We scholars in English studies, it appears, are often more comfortable theorizing about subjectivity, agency, and authorship than we are attempting to enact alternatives to conventional assumptions and practices' (356). Examining those structures closely, with the intent of making any kind of practical change, will no doubt be

uncomfortable for many of us. Academic authorship as we understand it today has evolved in conjunction with our publishing and employment practices, and changing one aspect of the way we work of necessity implies change across the entirety of the way we work — an unnerving thought, indeed.

As I've argued across my recent work, though, it's possible that all of these practices would benefit from certain kinds of change: some of our publishing practices are economically unsustainable, some of our employment practices are out of step with our actual intellectual values, and some of our writing practices are more productive of anxiety than they are of good work. Digital scholarly publishing itself cannot solve these problems; none of them has an easy technological fix. However, adopting new technologies will require us to face these problems; as Lawrence Lessig's work has explored, the networks of electronic communication carry embedded values within the codes that structure their operation, and many of the Internet's codes, and thus its values, are substantively different from those within which scholars — or at least those in the humanities — profess to operate (Lessig, 2006).¹ We must examine our values, and the ways that our new technologies may affect them, in order to make the most productive use of those new forms.

Having said that, this has now become a point at which I need to perform the ritual of forswearing technological determinism; I'm not arguing that the technologies with which we work determine social, intellectual, or institutional structures within which we use them. Computers do not *make* us think differently. At the same time, however, I would not argue that they have no effect on the world in which they operate, or that their development is ultimately determined by cultural constraints; clearly computers, like all of our other technologies, have had certain effects on our lives, some intended, and some unintended. Rather than asserting either an obviously flawed technological determinism or an equally flawed anti-determinism, what I'm suggesting is that technologies and cultures are mutually determining, and thus must evolve in concert. As Jay David Bolter has argued, 'Technological constraints and social construction always interact in such a way that it is impossible to separate the two' (Bolter, 1996: 254). Social and institutional structures develop new technologies to serve their purposes, but the design of those technologies can have effects that are often unforeseen.

The example of the word processor might be relevant here. In the not too very distant past, many professors had secretaries, or perhaps typists, or at the very least *wives*, who handled a key aspect of the production of their work. Over the last three decades, a series of technological and social changes has made such a phenomenon all but unheard of; with very few exceptions, everybody operates his (or her!) own word processor, manages his own email, writes his own memos, and so forth. Such changes have of course taken hold in any number of professions, but the impact for scholars on the writing process has been significant. Typing has ceased to be a technological process that follows the intellectual act of writing, which thus allowed it to be outsourced, and has instead become the core of the writing process itself. This change has in turn had dramatic effects on the ways we write.² The chapter on which this article draws, for instance, was originally composed in the kind of fits and starts that would have been all but impossible if I'd been tied to a typewriter; first, I put together a very spotty outline, and then fleshed that outline out, moving and changing sections as the logic of the argument began to unfold. I then gradually transformed that outline into ugly, hacky prose, and then into a more polished, more readable draft. And all of this took place within the same document, within the same window on my laptop screen. Things got moved around, deleted, inserted, revised; I jumped between sections as various thoughts occurred to me; I began sentences having no idea where they would end; I trashed entire concepts in mid-stream. And in transforming the chapter into this article, I duplicated the document and began my revisions from that point. None of this would have been possible — or, where possible, it certainly would have been much less pleasant — back in the days when I wrote my term papers in longhand on legal pads before laboriously typing up the final draft. The word processor has allowed my writing to become much more about *process* — more recursive, more nonlinear, more open-ended, more spontaneous — than previous technologies permitted.

Even more to the point, the technologies that support Internet-based writing and communication developed in a milieu — among scientific researchers — in which a higher value was placed on the sharing of information than on the individual authorship or ownership of particular texts. From Vint Cerf's development of the 'transmission control protocol' at the heart of TCP/IP, to Tim Berners-Lee's creation of the World Wide Web, to Marc Andreessen's invention of the graphical web browser, the Internet's technologies have been designed to promote the open exchange of

data in a content-agnostic fashion. As Lawrence Lessig explains in *The Future of Ideas* (2001), the ‘end-to-end’ design of the networks that make up the Internet produce its neutrality; the network treats any packet of data just like any other, leaving it to the applications located at the network’s ends to determine how such data should be interpreted. Similarly, in the design of the HTTP and HTML protocols that make the web possible, Berners-Lee privileged an ideal of open communication based upon the interconnectability of all documents on the network, regardless of their location, and he gave those protocols away for free, enabling others to build upon them. And every major web browser since the beginning has allowed users to view any page’s source code, encouraging the sharing of new technologies and designs. Since those early days of its development, of course, the web has changed enormously, including an increase in technologies for the regulation and restriction of certain kinds of communication, but the values of open, shared protocols and codes that encouraged the web’s development still linger in its culture. And just as many long-established industries — the music business most famously, but only because they were hit first — are being forced to reinvent the ways that they do business in the wake of the model established by a small group of theoretical physicists, so many of us in the academy would benefit from taking a long, hard look at the ways that we work, and from trying to imagine the ways that current and future technological developments might continue to affect the ways that we write.

In fact, some of these effects may be even more significant than those enabled by the word processor, precisely because of the networked structures of the newer technologies, and the kinds of interconnections and interactions that they make possible. Writing and publishing in networked environments might require a fundamental change not just in the tools with which we work, or in the ways that we interact with our tools, but in our senses of our selves as we do that work, and in the institutional understandings of the relationships between scholars and their now apparently independent silos of production. As Carla Hesse wrote in 1996, in an examination of the historical development of the culture surrounding the book,

The striking parallels between the late eighteenth and late twentieth centuries’ cultural debates suggest to me that what we are witnessing in the remaking of the ‘modern literary system’ at the

end of the twentieth century is not so much a technological revolution (which has already occurred) but the public reinvention of intellectual community in its wake. (Hesse, 1996: 29)

The technologies of a new literary system, in other words, are here; they've taken root, and are quickly becoming dominant, both in the culture at large and in the academy in particular. What we need to consider, in this sense, is less whether we ought to change our tools but what shifts and reinventions in our intellectual lives the changes already underway will require of us.

I want to suggest, however, that such shifts are not, in actuality, radical alterations of the nature of authorship, but rather an acknowledgment and intensification of things that have been going on beneath the surface all along. In that sense, my aim is less to disrupt all our conventional notions of authorship than to demonstrate why thinking about authorship from a different perspective — one that's always been embedded, if dormant, in many of our authorship practices — could result in a more productive, and hopefully less anxious, relationship to our work. This relationship will be more productive both because we'll have the opportunity to re-center our understanding of what we're doing when we're writing, and what others are doing when they're reading what we've written, within the framework of an ongoing conversation, a process of communication amongst peers that can be promoted and supported by the technologies of the Internet. Such a return to communication, to interconnection, as the focus of our writing practices will furthermore enable academic authors to think about the ways that open technologies might lead us to open our texts — to understand them as always potentially in process, and always in conversation with other texts and authors. Such open texts will have the potential to address multiple audiences, in multiple forms, allowing for the possibility of a renewed dialogue between the academy and the surrounding social sphere.

In all of this, the key issue is interaction. The author is not operating — and has never operated — in a vacuum, but has always been a participant in an ongoing conversation. Some aspects of the interactions made possible by new network technologies may seem daunting or alarming to us today, but in the long run, used with care, they'll provide significant possibilities for the kind of advancement of knowledge that we all seek, an advancement that requires a broad

communal framework. Earlier thinking about the intersection between authorship and computer technologies often overlooked this communal framework, in part because such examinations were focused on standalone computers running discrete hypertexts. Howard Bloch and Carla Hesse argued, for instance, in the introduction to 'Future Libraries,' the Spring 1993 special issue of *Representations*:

The potential loss of the object book, the disappearance of the author and reader as coherent imagined selves constituted through the stabilizing form of the bound book, the disordering of authorial agency in favor of an increasingly active reader (or alternatively, the empowerment of the 'online' author in control of the uses and distribution of texts), the displacement of a hermeneutical model of reading by one premised on absorption, the transformation of copyright into contract: all point toward the subsuming fear of a loss of community. (Bloch & Hesse, 1993: 8)

I want to suggest, however, that while these senses of loss are indeed linked, the dominant fear toward which they point in the age of 'Web 2.0' may not, in fact, be the fear of loss of community, but the fear of loss of individuality, the assumption that 'coherent imagined selves' require separation rather than interconnection to be thought coherent, and that the 'disordering of authorial agency in favor of an increasingly active reader' is a disruption of authority inasmuch as a changing relationship. If academic writing is to move productively into a digital environment, and if, as Mark Poster has argued, 'the shift in the scene of writing from paper and pen or typewriter to the globally networked computer is a move that elicits a rearticulation of the author from the center of the text to its margins, from the source of meaning to an offering, a point in a sequence of a continuously transformed matrix of signification' (Poster, 2001: 91) then we must stop to consider where, in the age of the Internet, authority lies.

From product to process

While there are several key changes in the forms that authority takes online that are worth exploring, I want to focus here on a coming shift in the status of the texts that we produce when we write,

including their very shape and structure. We are all attuned to the form of the book review, the essay, the article, the book, but digital publishing has thus far produced a number of new forms, none of which comfortably fit in our old structures. The blog, for instance, is arguably the first successful web-native electronic publishing platform, one with a number of structural elements that cannot be replicated in print, and one that therefore encodes different expectations than do print texts. Blogging developed quickly from a mildly peculiar and somewhat self-regarding web-publishing practice limited to a small sector of the techno-elite into a surprisingly widespread phenomenon, thanks in part to a number of free software packages and services that made blogging no more difficult than writing itself. Blogger, the first of those tools, was released in October 2000; by July 2008, Technorati.com was tracking the activity on 112.8 million blogs.³ Among those blogs, the type and level of discourse vary greatly: some blogs are exclusively personal journals, while others are focused on politics or other aspects of the public sphere, and many are in fact a blend of the two; some blogs are single-authored while others are the works of groups; some blogs exclusively publish text while many others include other forms of media. And, of course, some blogs are ‘good,’ while others aren’t. None of this variation should distract us from the key point: the rapid spread of blogs and the relative robustness of their platforms should suggest that their tools might be useful to a range of potential, specialized digital publishing modes.

Among these tools, that most commonly associated with blogs is the ability of readers to comment on entries, creating multi-vocal and wide-ranging conversations; another such tool is the link, whether standard HTML links created within blog entries in order to comment on other web-based texts or the links automatically generated and transmitted by blogging engines in order to leave an indication on a linked-to text that it has been commented upon elsewhere (known as ‘trackbacks’ or ‘pingbacks’). There’s an often-unremarked third feature provided by some blog engines, as well as by other web publishing platforms such as wikis, which might even more powerfully affect our thinking about the life of scholarly writing online: versioning.

All three of these features — commenting, linking, and versioning — produce texts that are no longer discrete or static, but that live and develop as part of a network of other such texts, among which ideas flow. Of these features, however, versioning may in some ways be the most disconcerting for traditional authors, including

academics, whose work lives have been organized not around writing as an ongoing action but rather writing as an act of completing discrete projects. In part this emphasis on the completeness and stability of written texts developed in conjunction with the ideas about originality subtending the modern author; one of the assumptions that the technologies, implementations, and organizations surrounding print publishing have produced is that any text that comes into our hands, whether a book or a journal, is present in its entirety and will be consistent from copy to copy. We further assume that any changes made to the text in further printings will be corrections or emendations meant to bring the printed text into line with the author's or publisher's intentions; changes more substantive than these, we assume, will be revisions of a sort labeled by the publisher as a 'second' or 'revised' edition. We rely on such stability as a sign of a text's authority, and where it doesn't exist, the resulting oddities often become themselves the object of scholarly investigation.

There's another factor, however, one perhaps peculiar to academic authorship, that puts additional pressure on completion as the most significant moment in the writing process. Only at the point of completion, after all, can our projects at last attain their final purpose: the entry of a new item on the CV. This emphasis on the academic version of the bottom line — evidence of scholarly 'productivity' that must be demonstrated in order to obtain and maintain a professorial appointment — brings a distinctly Fordist, functionalist mode of thinking to bear on our work as writers. Bill Readings, in *The University in Ruins* (1996), calls attention to the ways that the metaphor of 'production' in scholarly life transforms the university into 'a bureaucratic apparatus for the production, distribution, and consumption of knowledge' (reading, 1996: 163), whose purpose rapidly degenerates from the knowledge that is produced to the fact of production itself: 'Produce what knowledge you like, only produce more of it, so that the system can speculate on knowledge differentials, can profit from the accumulation of intellectual capital' (164). Such functionalism, however, cannot become so endemic to our institutions without being reflected in our individual approaches to the work we do as members of them. Lindsay Waters links the emphasis on scholarly productivity to the crisis in academic publishing, arguing that 'there is a causal connection between the corporatist demand for increased productivity and the draining of publication of any significance other than as a number' (Waters, 2004: 6). Writing has, in Waters's view, been reduced from a process of discovery and exploration, a process

of communication, to a system for the assembly of more and more new products. If this is the case, and if the result is, as Waters claims, that many scholars feel 'more and more like the figure portrayed by Charlie Chaplin in the film *Modern Times*, madly and insensibly working to produce' (45), it is little wonder that many of us experience unresolved anxieties about our writing. As long as we are in the process of writing, we have not yet completed it, and without completion, we cannot get credit for what we have produced; we haven't accomplished anything. We must put a close to our texts, put them into print, and walk away, not least in order to move onto the next project.

But being 'done' with a project published online runs to some extent counter to the network's open-endedness.⁴ What made blogs so immediately popular, both with readers and with writers, was the very fact that they changed and developed over time, existing not as a static, complete text but rather as an ongoing series of updates, additions, and revisions. This is of course to be expected of a journal-like format, and might easily be compared to any form of periodical or serial publication; the blog as a whole remains relatively constant, even as new 'issues' or posts are added to it. But the fact that a blog's readers return again and again in order to find those new posts might encourage us to ask whether there is something in the structure of digital authorship that privileges and encourages development and change, even beyond the obviously diachronic aspect of the blog's structure. When web pages are not regularly updated and attended to, after all, they're subject to rapid degeneration: aging styles, outdated standards, and worst, perhaps, 'link rot.'⁵ Such ephemerality makes it arguable that the unspoken contract between the author and the reader of a piece of digital text is radically different from that between the author of a book and its reader; rather than assuming that the text is fixed, complete, and stable, the reader of a digital text may well assume otherwise. As Clifford Lynch suggests, we do not yet fully understand what 'reader expectations about updating published work' will be (Lynch, 2001); will the assumption come to be that a text must be up-to-date, with all known errors corrected, reflecting new information as it comes to light, in order to maintain the 'authority' that print has held? Sites such as Wikipedia seem to indicate a growing assumption that digitally published texts not only will but *should* change over time. Digital text is, above all else, malleable, and the relationship between the reader and the text reflects that malleability; there is little sense in attempting to replicate the permanence of print in a medium whose chief value is change.

On the other hand, allowing a text to grow and change over time shouldn't — and needn't — efface earlier incarnations of a text by simply overwriting them with newer versions. Versioning preserves the history of a text, allowing it to live and breathe while maintaining snapshots of the text at key moments, as well as the ability to compare those snapshots, permitting readers to approach a text not just in a finished state, but throughout its process of development. That ability to focus on process may well lead to new modes of criticism; as Carla Hesse suggested in the mid-1990s, well before any but the very first blogs had been established,

What appears to be emerging from the digital revolution is the possibility of a new mode of temporality for public communication, one in which public exchange through the written word can occur without deferral, in a continuously immediate present. A world in which we are all, through electronic writing, continuously present to one another. There is, I would like to suggest, something unprecedented in this possibility of the escape of writing from fixity. What the digitalization of text seems to have opened up is the possibility for writing to operate in a temporal mode hitherto exclusively possible for speech, as *parole* rather than *langue*. (Hesse, 1996: 32).

This 'continuously immediate present' of writing could allow our writing projects, and our conversations around those projects, to develop in a more fruitful, more organic fashion.

But this will require a fairly radical shift in our understandings of what it is we're doing as we're writing, because if our texts are going to continue to grow even as they're published online, we're going to need to be present in those texts in order to shepherd that growth — perhaps not forever, but certainly for longer than we have been with traditional print publishing. This thought will make many of us nervous, in part because we already have difficulties with completing a project; if we have the opportunity to continue working on something forever, well, we just might. On the other hand, would that necessarily be such a bad thing? What if we were freed — by a necessary change in the ways that we 'credit' ongoing and in-process work — to shift our attention away from publication as the moment of singularity in which a text transforms from nothing into something, and instead focus on the many important stages in our

work's coming-into-being? What if we were able to think of our careers as writers in a more holistic sense, as an ongoing process of development, perhaps with some key moments of punctuation, rather than solely as a series of discrete closed projects, the return to the scene of which — whether in order to reveal changes in one's thinking about something one once committed to print or to take old material in new directions — seems somehow vaguely scandalous? Such abilities would no doubt lead to work that was better thought-through, more 'significant,' in Waters's sense, but in order to take advantage of those abilities, we will first have to learn to value process over product, and to manifest that value in our assessments of one another's work.

Even more frighteningly, perhaps, we'll have to become willing to expose some of our process in public, to allow our readers — and our colleagues — to see some of the bumps and false starts along the way. This, I will confess, is the aspect of my argument that I personally find the most alarming, and yet as soon as I admit to my own anxiety, I have to recognize that, through my blog, I've long been doing some of this in-public work. Many of the ideas in *Planned Obsolescence*, for instance, were first articulated in somewhat nebulous blog posts, clarified in discussions with commenters, expanded into conference papers and lectures, formalized into articles, and revised into chapters. That process was absolutely key to the project's formation: I didn't at all have the sense, as I wrote those early blog posts, that I was embarking on a book-length project; I only knew that I had a small, persistent question that I wanted to think a little bit about. Having formulated an initial stab at one possible answer, having been disagreed with, supported, and encouraged by my commenters to think in more complex ways about the issues I'd presented, only then was I able to recognize that there was more to be said, that there was something in the ideas to which I was compelled to commit myself. Without the blog and the inadvertent process of drafting in public to which it led me, none of the ideas in the longer text could have come together.

This is not to say, of course, that every stage of this project was conducted in front of an audience, or that every academic blogger has experienced the same relationship between the in-public work of the blog and the more traditionally private work of scholarly writing. My interest in the possibilities that versioning could present for shifting our focus in writing from product to process is not meant to suggest that every author need expose every draft of every sentence online, in real time. What constitutes a 'version,' and at what stage it

is made public, will be, and indeed ought to be, different for each author. But approaching our writing from the perspective of process, thinking about how ideas move and develop from one form of writing to the next, and about the ways that those stages are represented, connected, preserved, and 'counted' within new digital modes of publishing, will be necessary for fostering work that takes full advantage of the web's particular temporality. Everything published on the web exists, in some sense, in a perpetual draft state, open to future change; we need to recognize both the need this creates for careful preservation of the historical record of the stages in a text's life and the equal importance for authors of approaching our work openly, thinking about how our texts might continue to grow even after they've seen the light of day.

From originality to remix

As our texts become increasingly available for this sort of ongoing development, however, we need to recognize the degree to which we may no longer be the sole authors working on them. Our work is likely to become far more collaborative than it has been in the past, and new modes of collaboration – over time, across distances – made possible by networked writing structures are likely to require us to think about originality quite differently, precisely because of the ways that these new modes intervene in our conventional associations of authorship with individuality.

These two facets of conventional authorship — individuality and originality — are complexly intertwined: insisting that a text must consist of one's 'own' work is to insist that it make an original contribution to the field; the bottom that every tub sits on must not simply be its own, but uniquely its own. But not only does the operation of the digital network exclude the possibility of uniqueness in its very function — the web page I open in my browser window is never *the document itself*, but a copy of the document, and, in fact, my browser's *representation* of a copy of the document — but the links and interconnections that the network facilitates profoundly affect the shape of any given text. If, in digital scholarship, the relationships between the authors whose ideas we draw upon (now traditionally cordoned off from our own ideas via quotation marks and citations) and the texts that we produce in response are made material — if the work of our predecessors is some sense contained within whatever increasingly fuzzy boundaries draw the outlines of our own texts — how can we demarcate the

thing that constitutes our own contribution to the discourse? How can our texts possibly remain unique, discrete, and original in an environment so thoroughly determined by the copy?

The historical formation of the notion of authorship in modern literary culture has of course held originality among its key values. As Raffaella Simone (1996) argues, the closed text that we associate with print carries with it several key assumptions; one of these assumptions, which appears to be a common-sense, baseline prerequisite for publication, is that the text, 'assumed to be *perfectum*, has also to be original, and the well-educated reader takes it for granted that this is the case. The reader assumes that the text derives wholly or mainly from the author's ideational effort and that the author has distinguished himself or herself from the work carried out by others, even if he or she cannot disregard the existence of texts by others' (Simone, 1996: 242). It's thus not enough that the text be self-contained; it also has to be new, springing entirely from the head of the author, and always distinguishing itself from the writing of other authors. Digital technologies, however, force us to reconsider these presuppositions with respect to the published text; writing within the network may both be published and yet, at the very same time, incomplete, remaining open to continued revision. Further, the openness of the digital text implies potential openness in our attribution of authorship, while the closed text carries with it certain ownership rights, including the reservation to the author of the ability to re-open and revise a text. Those ownership rights are accompanied by a number of responsibilities, including the obligation to 'distinguish the original parts (= resulting entirely from his or her own invention) from those which are not original (= resulting from the invention of others)' (Simone, 1996: 240). These two assumptions — that the only author of a text is its named author, and that the author has scrupulously given credit for any borrowings — together produce the borders of our notion of plagiarism, an idea that 'cannot be applied to the author who copies him or herself; only by plagiarizing someone else does plagiarism exist' (241).

The specter of plagiarism makes clear that some of our anxiety about originality in our writing has to do with the dangers presented by its potential failure: we as scholars, as the producers of closed texts, are permitted to interact with the texts of others only in a passive, clearly designated fashion — and, by extension, others can only interact with our texts in a similar manner. Such is one of the most crucial assumptions of the print-based modern literary system. But as the

dominant mode of text delivery shifts from the read-only structure of print to the read-write structure of digital technologies, can this assumption of authorial primacy, and its attendant pressures toward pure originality, continue to make sense?

It's important to note, of course, that the kind of closed text that we associate with contemporary authorship has not always been the norm; numerous other modes of textual production — Simone points to the compilation, the miscellany, and the commentary — have at various times come into popular circulation, and have even at particular historical moments become the dominant form that authorship practices have taken. These forms, in which the words of others achieve pre-eminence over the voice of the author him- or herself, indicate not only that our notion of authorship is 'not native and does not originate together with the texts (not even the written ones),' instead waxing and waning with changing historical circumstances, but also that, under certain of those circumstances, originality presents itself not as a virtue to be sought, but instead a danger to be avoided: 'Theoretic and doctrinal innovation is created only through small increases, *per additamenta*, through additions, always gradual and suitably apportioned. If the text is original and evinces its own claim to originality, it risks being untenable. Originality is dangerous' (Simone, 1996: 246; 247-48). The preferred act of authorship, under such circumstances, is that of bringing together the words of others, such that their juxtapositions, harmonies and dissonances, might produce an argument by implication.

I do not want to suggest that we are in such an era today, in which originality has become once again dangerous; our very language reveals through its connotations our preference for the original over the derivative. On the other hand, I do want to suggest that we no longer inhabit a world in which originality reigns unchallenged. Challenges to the premium placed on originality have been raised by theorists of authorship for some decades, dating back to Roland Barthes: 'We know now that a text consists not of a line of words, releasing a single 'theological' meaning (the 'message' of the Author-God), but of a multi-dimensional space in which are married and contested several writings, none of which is original: the text is a fabric of quotations, resulting from a thousand sources of culture' (Barthes, 1986: 52-53). Barthes refers here not simply to literal miscellanies or other compilations drawing together pieces of many texts, but to all writing; every text is 'a fabric of quotations,' whether its author is conscious of such borrowings or not, as the language

that we use is never our creation, but rather that which has created us. Similarly, Julia Kristeva's development, during the same period, of the notion of 'intertextuality' suggests that even the most ostensibly 'original' of texts is in fact rife with references to other texts, and that it is in fact impossible for a reader to approach any given text without reference to everything she has previously read or seen (Kristeva, 1986).

Such intertextuality becomes even more pronounced in the era of digital networks, as the structure of the hyperlink causes every text in the network to become part of every text that links to it, and thus each text is completed by every other, and becomes raw material for every other. Scholars of hypertext have long explored the ability of the link to make material the previously implicit relationships amongst texts, but in more recent days, scholars in media studies have explored another form of authorship within digital culture which consciously focuses upon the bringing together of that 'fabric of quotations,' under the umbrella of the remix or the mashup. Within the sphere of music, these forms have roots in the Jamaican culture of the late 1960s and early 1970s, attaining broad penetration through the sampling practices of hip-hop artists from the 1970s forward. The phenomenon of the audio mashup may have achieved its greatest prominence with the release in 2004 of Danger Mouse's *The Grey Album*, a coupling of Jay Z's *The Black Album* with *The Beatles*, more commonly referred to as *The White Album*.⁶ More broadly, however, remixes and mashups of multiple media forms have become a significant feature of internet-based fan culture, as inexpensive and widely available audio and video editing tools and a proliferation of digitally available texts have encouraged the grassroots production of new kinds of content from the raw materials of the media.⁷

The question remains, however, whether such remix culture might fruitfully influence our own scholarly authorship practices. If, as Rafaele Simone puts it, the moment is coming when 'the protective membrane of the texts [we produce] will decompose and they will once more become open texts as in the Middle Ages with all the standard concomitant presuppositions' (Simone, 1996: 249), we might be well served in considering the ways that our authorship practices might be affected. We might, for instance, find our values shifting away from a sole focus on the production of unique, original new arguments and texts to consider instead curation as a valid form of scholarly activity, in which the work of authorship lies in the imaginative bringing together of multiple threads of discourse that

originate elsewhere, a potentially energizing form of argument via juxtaposition. Such a practice of scholarly remixing might look a bit like blogging, in its original sense: finding the best of what has been published in the digital network and bringing it together, with commentary, for one's readership. But it might also resemble a post-hoc mode of journal or volume editing, creating playlists, of sorts, that bring together texts available on the web in ways that produce new kinds of interrelationships and analyses among them.

The key, as usual, will be convincing ourselves that this mode of work counts as *work* — that the editorial or curatorial work of bringing together texts and ideas might in the age of the network be worth as much to us, and perhaps even more, than the production of new texts. As I've argued in exploring new models for peer review online, the greatest labor involved in transforming the Internet into a venue for the publication of serious scholarship may well be that of post-publication filtering — seeing to it that the best and most important new work receives the attention it deserves. Moreover, much of the writing we currently produce serves this same function, if in different form: recuperating overlooked texts, reframing past arguments, refuting earlier claims. Today, in the current system of print-based scholarship, this work takes the form of reviews, essays, articles, editions; tomorrow, as new mechanisms allow, these texts might be remixes, mashing up theories and texts to produce compelling new ideas.

From text to... something more

Other issues will of course arise as we start to open up our texts, not least among them concerns about intellectual property, as opening our texts to the intervention of other authors raises some quite serious questions about the 'ownership' of ideas and the relationship of such ownership to our authorship practices. But as we open these texts to explore their networked environment, we're also likely to find that those texts change shape as well. The expansion of our toolset via digital technologies will inevitably allow us to begin to shift our thinking about the mode of our work away from a uniform focus on the text-only formats that scholarship has traditionally taken, encouraging us instead to think about the ways that our work might interact with, include, and in fact *be* something more than just text.

This is of course not to suggest that everyone should be making YouTube videos instead of writing argumentative essays. In fact, as Clifford Lynch has argued, there's a value in ensuring that most of our production in this new network age retains its recognizable, traditional form:

Recently there has been a lot of thinking about how to devise intellectual successors to the scholarly monograph that specifically exploit the online environment. One key idea is that while the definitive and comprehensive version of the work will be digital, there will also be a sensible (though impoverished) 'view' of the work that can be reduced to printed form as a traditional monograph. This is critical in providing scholarly legitimacy in an intensively conservative environment that still distrusts the validity of electronic works of scholarship, and will thus be important in encouraging authors to create these new types of works. It allows authors to exploit the greater expressiveness and flexibility of the digital medium without alienating colleagues who haven't yet embraced this medium. (Lynch, 2001: non-pag.)

As Lynch here suggests, ensuring that our new texts have a sort of reverse-compatibility with the structures of a fundamentally conservative academy has been important in the early stages of the transition to digital publishing; print has served scholars well for the better part of 600 years, and however quickly the world around us seems to be changing, the academy may do well to be cautious in its embrace of the next new thing. However, if we continue to focus our attention exclusively on the production of digital texts that can be translated, in whatever 'impoverished' way, into print, the range of our potential innovation will remain quite narrow. The relative slowness of such change might be put in perspective by noting that Lynch made the claim above in 2001, and yet we remain in exactly the same position, with precious little in the way of forward movement toward thinking about new possible structures for the successor to the scholarly book; we are still required to think of those successors in models that are analogous to print, when we might more productively start thinking of them as being far more multimodal.

What is it that I mean when I say ‘multimodal’? Something more than simply multimedia; it’s not just a new relationship between text and image, or image and audio, or other forms of representation. Those other forms are already embedded in many of the texts that we produce, and scholars have always been required to move ideas from one form to another in the process of writing. Art historians, for instance, have long translated the visual into the textual in the process of analyzing it, and recently somewhat reduced costs of print production have enabled a more widespread inclusion of visual materials, without translation (or, rather, with a different form of translation), in the scholarly text. But such inclusion remains a mode of illustration rather than production, by and large; as Stuart Moulthrop has argued, academics cling tenaciously to an ‘old separation of media, whereby all things not of the letter must be exchanged for letters in order to enter the system of learning’ (Moulthrop, 2005: non-pag.). We can thus write *about* images, but not *in* images; we can write *about* video, but not *in* video. As Moulthrop goes on to suggest, the clear separation among forms during previous eras of media transition made this possible; there was never a threat that the film about which I wrote could somehow bleed into the words with which I wrote about it:

This was good news for academics. It was possible to study just about any medium through the miracle of *content* — by which we meant, written representations of our experience of the other medium — without having to become much more than auditors or spectators. Among other things, this allowed the academy to draw a bright line between production work in various media (mere *techne*) and the writing of criticism and theory (the primary work of scholars).

With the coming of cybernetic communication systems — hypertext, the World Wide Web, soon now the Semantic Web — the conditions of all media are strongly transformed, and writing is clearly included. (Moulthrop, 2005: non-pag.)

Now, when my computer translates my words into the very same digital substance that sound, image, and other modes of representation exist in, we encounter the potential for a radical change, one that doesn’t just break down the boundaries between text and video, for instance, allowing me to embed illustrative clips

within the analysis I produce of them (this is the case that Moulthrop covers by saying that ‘Writing is still writing, even with funkier friends’), but that instead changes the fundamental nature of the analysis itself.

Numerous possibilities exist for this kind of change: remix culture, for instance, suggests that my analysis might itself take the form of video, producing a response to a cultural object in the same form as the object itself. It’s not too much of a stretch, after all, to argue that if authorship practices have changed, the very nature of writing itself has changed as well — not just our practices, but the result of those practices. But there’s something more. At the beginning of this article, I made a number of claims about the significance for the process of academic writing of the technological shift from typewriter to word processor. However, not only did that shift change whose hands were on the keyboard, and not only did it change the ways the thoughts that wind up in our texts come together, but it’s also changed the very thing we wind up producing. A mildly tendentious example, perhaps, but I think a significant one: rather than putting ink onto paper, when my fingers strike the keys, I’m putting pixels onto a screen⁸ — and, it cannot be said clearly enough, the pixels on the screen *are not my document*, as anyone who has experienced a major word processor crash may be able to attest. The image of my document on the screen of my computer is only a representation, and the text that I am actually creating as I type does not, in fact, look anything like it, or like the version that finally emerges from my printer. The document that is produced from all this typing is produced only with the mediation of a computer program, which translates my typing into a code that very, very few of us will ever see (except in the case of rather unfortunate accident) and that even fewer of us could ever read. On some level, of course, we all know this, though we’re ordinarily exposed to the layers of code beneath the screen’s representations only in moments of crisis; computers that are functioning the way we want them to do so invisibly, translating what we write into something else in order to store that information, and then re-translating it in order to show it back to us, whether on screen or in print.

It’s important to remain cognizant of this process of translation, because the computer is in some very material sense co-writing with us, a fact which presents us with the possibility that we might begin to look under the hood of the machine, to think about its codes as another mode of writing, and to think about how we might use those codes as an explicit part of our writing. As Moulthrop says, ‘when

[John] Cayley opens the definition of writing to include programming, he registers a change in the status of the letter itself — crucially, a change that flows into writing from cybernetic media' (Moulthrop, 2005: non-pag.). If 'the letter itself,' the smallest unit of our discourse, has been thus transformed by the computer that encodes and represents it to us, it's arguable that we need to begin wrestling with that encoding process itself, to understand code as a mode of writing, to become literate in markup/computer languages as well as human languages.

The thought of looking under the hood like this, of being asked to understand not simply another publishing format, but another language entirely, will no doubt result in new kinds of anxieties for some authors. Perhaps we don't all need to become comfortable with code; perhaps literacy in the computer age can remain, for most of us, at the level of the computer's representations to us, rather than at deeper layers of the computer's translations. I raise the question of reading code, however, as a means of asking us to consider what a text is, and what it can be, in the digital age. If we have the ability to respond to video with video, if we can move seamlessly from audio files to images to text as means of representing music, it may behoove us to think about exactly what it is we're producing when we write, how it is that these different modes of communication come together in complex new forms. We need to think carefully about textual structures such as this in order to begin to understand the author who will arise in conjunction with these new forms, an author whose literacies and practices may diverge quite radically from those of the codex-oriented author we have long taken for granted.

Endnotes

¹ It should be noted that Lessig goes on to argue that, as these codes are programmable, and thus plastic, they can be reprogrammed to better serve our needs: 'We should expect — and demand — that [technology] can be made to reflect any set of values that we think important' (Lessig, 2006: 32). For the purposes of this article, I want to bracket this quite obviously correct point, and instead think about what the academy can learn from network technologies, rather than vice versa.

² See Heim (1999: 1); Bolter (1991: 5); Poster (1990: 111).

³ Blogger Matthew Baldwin in a recent interview claimed that ‘blogs are so ubiquitous these days that announcing you write one is like announcing you have a liver’ (Stallings, 2008). They are perhaps not quite *that* ubiquitous, but they’re close. One paradoxical sign of the degree to which blogs have become a default mode of publishing online might be seen in recent claims that blogging is ‘dead’, which are surfacing despite the fact that the most read online periodicals are published on blog-based platforms. The blog, in other words, is becoming ubiquitous enough to achieve transparency.

⁴ On this tension in digital scholarship, see Kirschenbaum (2009); see also Brown *et al.* (2009).

⁵ This of course bears enormous consequences for the preservation of digital texts into the future; I discuss these issues in chapter 4 of *Planned Obsolescence* (Fitzpatrick, 2009).

⁶ EMI, holder of copyright on *The Beatles*, ordered the album to be withdrawn from retail distribution, an order that in fact may have created the notoriety that spurred its widespread success on the internet.

⁷ See Lessig (2008), and Jenkins (2006), on the historical development, cultural significance, and legal implications of remix/mashup culture.

⁸ Technically, of course, this isn’t true; striking the keys triggers a switch that completes a circuit that sends an electrical signal to a microcontroller, which then translates that signal into a code sent to the computer processor, which finally uses that code to produce certain effects (instructions to a hard drive causing voltage changes that result in magnetic inscription on its surface; instructions to a display device causing pixels to appear on a screen). But the effect for most computer users is what I describe above.

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