Towards a Theory of Digital Editions

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A THEORY OF SCHOLARLY editions should offer a set of principles to guide practice. What is a scholarly edition? how should a scholarly edition be made? who should make it? By appeal to principles, a theory may then explain why one way of thinking, one way of acting, one form of edition, is preferable to another — or, at least, better explain how our views and our editions differ. Debates have emerged in the last decades among scholarly editors, around questions of intention, of the weight to be accorded the material documents, of the meaning of key terms such as "document", "text", "work", "original", of the contingency of editions upon the community and circumstances in which they are made.

All these issues are as pressing and relevant for digital editions as they are for print editions. However, the title of this article presumes that there is an emergent theory of digital editions, distinct from the theory of print editions. It took some time for the need for such a theory to manifest itself. One can find, in the first years of production of digital editions, numerous descriptions of what individual digital editions might contain, in terms of content and facilities.³ Often these descriptions glance at their print predecessors, usually with expressions of how much more these digital editions can contain

¹ This essay has been shaped by a series of discussions with Paul Eggert, to the degree that I could not be sure which ideas are his, which mine: except that the misunderstandings and errors are mine alone. I am grateful to him also for his comments on successive drafts of this paper.

² See the definitions of "theory" offered by the Oxford English Dictionary: "a set of principles on which the practice of an activity is based" (http://oxforddictionaries.com/definition/english/theory); Merriam-Webster "the general or abstract principles of a body of fact, a science, or an art" (http://www.merriam-webster.com/dictionary/theory) [accessed 14 September 2012].

³ Among many articles which have focused on what digital editions might contain are Deegan and Robinson 1994; Jerome McGann's article "The rationale of hypertext", first disseminated as a conference paper and on the web in 1994 and 1995, with selections published in 1995 (McGann 1995) and finally published in full as chapter 2 of his *Radiant Textuality* (McGann 2001, 53–74); and the essays collected in Burnard, O'Brien O'Keeffe and Unsworth 2007.

than ever could be included in print editions, and how much more the reader can do with them. A description is not a theory. We have seen enough examples of digital editions in the last decade, indeed, to know what they may be. Unavoidably, perhaps, we had to explore the medium and test its limits, to establish what we as editors could and could not achieve, before asking: what should we do? We could even justify this course, along the lines of declarations that practice must precede theory: that by doing, we would learn what we should do. For the first heady years, we who made digital editions told ourselves we did not need to make choices. We could include everything; we could enable every way of using everything we included. There were no limitations beyond our imaginations: resources alone bounded what we could and could not do. There was no need for theory. Practical possibility alone was our guide.

Now, however, the time for theoretical innocence is over. Partly, this is because our resources are finite, and require us to choose where we place our effort. Theory, even of the most rudimentary kind, can help us choose, and help us justify our choices. But most significantly, it is because several scholars who had previously concentrated on the theoretical underpinnings of traditional print editions have become engaged with the possibilities of digital editions (Eggert 2009, Shillingsburg 2006, and Gabler 2007, 2010, 2012). The continuity of their thinking about digital editions with their previous contemplation of print editions is significant. We cannot suppose that digital editions are so revolutionary that all previous discussions about scholarly editing are irrelevant. Quite the reverse. Digital editions confront us with the same fundamental problems as do print editions, transposed to a new medium. Further, debates about scholarly editing in the last decades have themselves been part of larger discussions within the humanities (and in the wider world) about concepts of authority, agency, text and meaning, which have in turn shaped scholarly editing. In the decades before digital editions became possible, positivist editing, associated in the anglophone world with Greg and Bowers, gave way to more anxious and selfaware modes of editing through the seventies and eighties. Over the

⁴ Thus, my own edition of the Chaucer's *Wife of Bath's Prologue* (1996); McDermott's edition of *Johnson's Dictionary* (1996); the Blake and Rosetti Archives (1997; 1993), and the electronic editions discussed in Burnard, O'Brien O'Keeffe and Unsworth 2007.

same period, many scholars — Shillingsburg, Greetham, McGann to name just three — argued that scholarly editing is much more than provision of an edited text, following well-established procedures. Rather, editing comprises a series of acts heavy with implications: texts are embedded in complex webs of discourse, with multidimensional relations between author, text, everyone involved in the making and reception of a text, editor and audience (McGann 1991, Shillingsburg 1996, Greetham 1999).

A theory of digital editions, then, must be rooted in the debates about scholarly editing which have unrolled over the last decades. Three terms lie at the heart of any theory of scholarly editions: document, work, text. What does it mean to edit a document, a work, a text? What does it mean to read a document, a work, a text? How is our thinking about these questions changed in the digital environment? Behind these questions, lie yet others: how do we relate documents, works and texts to narratives of authorship, publication, production, dissemination, reception, authority, agency and meaning? What, precisely, is a "text"?

The justification for the claim in the title of this essay, that a distinct theory of digital editions is required, is this: the digital realm offers different answers to the questions asked in the last paragraph than does the print realm. Document; work; text: classically, editors from the age of print saw their task as creating an edition of the work. It is not that they regarded documents as unimportant, just that they saw the editions they made as representing something other than the documents: the edition represents the work. But two decades of making digital editions, and recent papers about digital editions, have moved the needle away from the "work" to the "document", to the point where we might need only think of "documents". Because a digital edition can present facsimiles of every form a text ever had — every copy of every Shakespeare folio or quarto, every copy of every Chaucer manuscript or incunable — then, we can do just that. Indeed, this is what the great majority of "digital editions" so far created have done, to the point that a debate has arisen about whether such objects should be called archives or editions. We might declare

⁵ See, for example, the careful discussion of the terms "digital archive" and "digital edition" by Kenneth M. Price (2008): "In fact, electronic editorial undertakings are only imperfectly described by any of the terms currently in use: edition, project, archive, thematic research collection" and "In an electronic

that this frees the documents from all the difficult questions invoked by the terms "text" and "work", and so allows the reader a completely transparent view of the documents, untainted by all the prejudices which might otherwise constrain an open and fresh encounter with the documents. One could invoke substantial arguments in favour of this way of thinking. Leah Marcus, for example, argues in favour of reading renaissance documents containing versions of texts stigmatized as "bad", yet highly revealing of discourses otherwise lost (1996). One could also read various of Randall McCleod's writings, with their emphasis on study of the most fundamental material forms of the document, to support the exclusive focus of digital editing on the document alone (2004). This would be consistent, too, with the marked shift towards study of the "material text" (which one could identify as the document, and the document alone) in the writings of many recent thinkers about textual editing (Bornstein 2001, O'Brien O'Keeffe 2006, the essays collected in Van Mierlo 2009) — and, of course, McGann's foregrounding of bibliographic codes (1991).

There is an attractive simplicity in this narrow focus in digital editing on documents alone. It plays well with the advances in digital imaging in the last decades, which have made it feasible to gather and distribute vast numbers of digital images at low cost. One might produce an edition of a document containing high-resolution, fullcolour images, capable of magnification so that the tiniest detail of the page may be analysed, which would be very useful for the kinds of document-centred analysis advocated by the writers mentioned in the last paragraph. Nor, indeed, does this mean that one need regard questions of text and work as unimportant: just that consideration of these could be deferred. It means too that the editor can concentrate on the document alone, and (if he or she chooses) leave other questions to others. It should be observed too that such editions are almost impossible in the print world. One can produce high-quality print facsimile editions of individual documents, but one could certainly not do so for every document in the Blake Archive, or every manuscript of The Canterbury Tales.

Two recent articles by Hans Walter Gabler present a lucid rationale for this view of scholarly editing as document-based: "The

environment, archive has gradually come to mean a purposeful collection of digital surrogates".

primacy of the document in editing" (2007) and "Theorizing the Digital Scholarly Edition" (2010). In the first of these he focusses on the words "document" and "text". In the light of his experience working with digital tools on James Joyce and other manuscript materials, Gabler is led to assert the primacy of "document" over "text". As he describes it, he now wants to put "the horse of the document properly before the cart of its eventually emerging text" (2007, 201). To those of us used to decades of talk about material texts and such like, this may not sound very exciting. However, Gabler's densely argued article is far more than a simple plea for editors to pay more attention to the documents. He proposes a complete refocusing of editorial perspective: away from a concentration on the finished product, the editorial text which is supported by reference to various documents, towards a concentration on the documents themselves, from which an editorial text may (or may not) emerge. This is an immense shift. Gabler proposes that the intense editorial effort which for centuries has seen as its goal the construction of an editorial text, should now focus on the construction of the text of the documents. To put this another way: for centuries we have thought of the scholar editor as distant from the documents. He or she constructs an editorial text and apparatus, often on the base of an existing editorial text, diving now and then into the documents to find or deny a reading. In place of that, we are now to imagine the scholar gazing intently at a single document, pondering exactly what is happening, what messages we can extract from this page.

Gabler's insistence on the primacy of the document is, we may argue, a key characteristic of digital editions, not print editions. For three reasons: first, in his discourse, it appears that the confrontation of material document with immaterial digital media has problematized the notions of text and document, leading to the reversal of their positioning in the editorial gaze fundamental to his argument. Secondly, due to the omnipresence of digital images, what the editor sees, the reader can see too. Thirdly, and I think most importantly (though Gabler does not touch on this), the digital medium permits a level of involvement by reader and editor with the document which is not possible in the print medium. Gabler notes (2007, 200) that typically "critique génétique" presents a narrative analysis of the document. The digital medium can do something very different: it

can allow the reader to see the text of the document construct itself, layer by layer, from blank page to fully written text.

Gabler's argument that the editorial gaze should focus on the single document may surprise readers familiar with his edition of Joyce's *Ulysses*, which famously presents a text based not on any one single document, but on Gabler's own extraordinarily careful examination of all the documents: not, indeed, the text of one document, but of Joyce's work *Ulysses* as realized by Gabler from the documentary evidence. One can trace a tension between the two editorial perspectives, on text as document and on text as work, in various Gabler articles, composed close to the time of his edition of *Ulysses*. His 1981 address to the Society for Textual Scholarship (Gabler 1984) plays on the tension between "synchronous" and "diachronic" texts, a dichotomy which looks towards document and work; a later article (1990) worries at the problems of the different versions of King Lear, with text and work shadowing the proposition (which he neither rejects nor approves) "that even a single revision constituted a new version of a text" (1990, 162). A clear shift towards his recent emphasis on the document appears, however, in a 2002 article published in the first number of Variants, in which he discussed, in intricate detail, Joyce's writing of a single page of the "Circe" episode of *Ulysses* (several of his later articles reference this same page).

Over the same period as Gabler was developing these arguments, roughly from 2001 on, other scholars were also working their way towards a theory of digital editing focused on the document, but from a different starting point to that of Gabler and others. For Kevin Kiernan and Elena Pierazzo the starting point was the making of digital editions of unique documents. For Kiernan, the document was the manuscript of the Old English poem Beowulf, and his creation of an edition of the manuscript based around the remarkable digital images created in the early 1990s: the first such digital edition of any single document for any English work. In the following years, he developed a theory of the "image-based scholarly edition", in which editorial work was predicated on the availability of high-quality digital images of the document (2006). Pierazzo follows Kiernan, but centres the edition on the creation of a precise and information-rich transcription of the document: hence, a "digital documentary edition" (2011). For Pierazzo, the possibilities of the digital medium have created new possibilities, which enable the making of detailed

digital representations of the document using complex encoding, which in turn permit multiple perspectives on the edited document.

Thus, we now have a convergence of opinion. For both Gabler and Pierazzo, digital editing is rooted in the document: it is difficult to imagine a more articulate and forceful exposition of a theory of digital editing as focused on documents than that given by Gabler. However, Gabler sees an editor as far more than a collector of documents, and a digital edition as much more than an archive. In this document-centred editing, Gabler argues that the central responsibility of the editor is to explain to the reader the tale told by the documents. This is the theme of his second article, "Theorizing the Digital Scholarly Edition" (2010). In this he emphasizes, repeatedly, that it is the editor who creates the "web of discourses" which is, to him, the scholarly edition (2010, 44). Indeed, just as his first article foregrounded "document" over "text", in this article he foregrounds the "editor" over "author" and "text". The editor (who might be a team of editors) is "pivotal to an edition"; the text of an edition and by this he means the entire "web of discourses" which compose the edition — is "the editor's text of the text or work cited".

However, there are areas where his arguments are incomplete. Consider Gabler's formulation cited in the last sentence of the last paragraph: the edition is the "editor's text of the text or work cited". Suddenly, Gabler has introduced the concept of the "work" into his discussion. Further, he identifies the "text of the work" with the text of the "web of discourses" created by the editor. But this "web of discourses", as he insists throughout his articles, must be the text of the document as carefully laid-out by the editor. Does this mean that the "work" is completely represented by the "document"? Now, we can see that for many works, and many documents, it can indeed be argued (as do Marcus and McLeod) that the work may be completely represented by a single document. This is particularly true for authorial manuscripts and papers. Indeed, one may read Gabler's edition of *Ulysses* as built on a direct equation between work and document. Gabler asserts that in *Ulysses* document and work are together "the totality of the Work in Progress" (1984, 325); hence, the work is the totality of all the documents, conceptually collapsed into a single document as Gabler traces the record of Joyce's writing as it winds through all the typescripts, scraps, galleys which constitute what he calls the "continuous manuscript text" (1984, 318).

One might in these cases argue that the work is best edited and best read from a single document, edited as Gabler advocates. But how could we do this in the case, for example, of the Greek New Testament, or of Dante's *Commedia*, or of Shakespeare's *King Lear*, or of any work which exists in many versions, in many documents, none of which can claim pre-eminently, completely and singly to represent the work?

In a later article, Gabler distances the document-based editions he envisages from the "work" (2012). He distinguishes between what he sees as "endogenous" to the document — essentially, what can be deduced directly from the document itself — and what he sees as "exogenous" to it. For him, everything which cannot be deduced directly from the document, including all knowledge of the author, of the circumstances of the document's creation and transmission, of other versions of the work understood as present in the document, indeed everything normally understood by "work", is "exogenous". Gabler acknowledges that this "exogenous" information is important, but he specifically and categorically excludes it all from the editorial act, as applied to the document. "Text-critical investigations would continue to be directed towards them, and these would continue to be accounted for in introduction and commentary discourses of editions": thus, not in the edition of the documents which lies at the heart of these editions (Gabler 2012, 32). In particular, this leads Gabler to distinguish sharply between the author as present "endogenously" in the text of the document, and as he or she may be conceived "exogenously": the actual historical personage who wrote the document. To effect this distinction, Gabler adapts Foucault's famous "author function" (1984). In his formulation, the "author function" can be deduced by the editor from the evidence of variation in the document alone: "their variability is an expression of the author function which is inscribed into them, and thus contributes to constituting texts as texts" (2012, 24). That is: the editor scrutinizes the document, and from the traces of the writing processes there found constructs a narrative of its writing, and hence an expression of the "author function" posited as responsible for the writing acts which the document presents.

The advantage of Gabler's formulation is that it keeps the text created by the editor very close to the document. Only what the editor sees as directly attested by the document is to be included in its edition. As Eggert (forthcoming) points out, this places his thinking directly in line with the arguments of Zeller and others from the German text-editing tradition, with their aspiration to an "objectification of editing", free from necessarily speculative matters such as "authorial intention" (Zeller 1995, 54). Thus, Gabler separates the "author function", which can be shown as materially and actually present in the physical document (thus, "endogenous"), from "authorial intention", which must be conceived on the basis of (say) biography, letters, articles all outside the document (thus, "exogenous").

There is, indeed, a self-contained perfection about this model of document-based editing. But the problem with a self-contained model is that it achieves an impeccable consistency by rigorous exclusion of everything which does not fit into it: in this case, everything which Gabler regards as "exogenous" to the document and its text. This means that almost everything which interests us about a literary work — what it means, who wrote it, how it was distributed and received, how it is differently expressed — is excluded from Gabler's model. Gabler certainly does not say that these are not important, just that they are irrelevant to the editor's work with the document. The effect of this is to separate entirely what we do as editors with a document, and what we do as readers trying to understand the work which this document presents. Thus, we have to separate completely the "author function" responsible for the marks on the page from the historical individual who actually wrote these marks. We have to do this even if we know, as certainly as anything can be known, that all the marks on this paper were made by (say) James Joyce, and that the document can be precisely related to a series of other documents which together show how Joyce was shaping the novel we know as *Ulysses*. Gabler requires that we completely disassociate the "author function" implicit in the editor's analysis of the document from the James Joyce who we know actually made these marks, in the course of writing the work *Ulysses*. This seems counter-intuitive.

Indeed, there is a deeper problem in Gabler's formulation, which lies at the root of the difficulties it has with the concept of document and text as work. The problem is this: exactly what is the text which the editor represents as present in the document? Gabler presents the text of the document as an object in a hermetically sealed universe, distinct from anything else: an object in and of itself, which

the editorial subject discovers and presents. But it is not. Gabler's own use of the term "the author function" betrays it. Any attempt to account for variation in a text must implicate editor and reader in a series of judgements about intention, about agency, about authority, about meaning. There is a stroke though a word: as soon as we say "this indicates that this word is to be deleted" we are declaring that, in our judgement, the person who put the stroke through the word intended that the text here should be read without that word: intention. We are saying that this stroke was made by someone: agency. We are saying that this stroke is not to be ignored (as we might ignore much else on the document surface): authority. We are saying that this stroke through this word has an impact on what we read: meaning. Intention, agency, authority, meaning: the four terms an editor, a critic, a reader must grapple with when trying to understand the work Ulysses. Gabler would move all consideration of these four terms out of the "endogenous" editing of the document, to the "exogenous" commentaries we might erect around the work of which this document is a witness: thus, the wall he places between "the text of the document", considered as editorial object, and the "work", considered as an object of readerly contemplation. But there is no such wall. Exactly the same issues of intention, agency, authority and meaning which engage us on the broadest plane, when considering (say) Joyce's design for Ulysses engage us on the most narrow plane: what did Joyce mean when he made this mark on this page; did he make it; how does it affect what we read? It might appear that by hewing close to the document, we can avoid the difficult questions of intention, agency, authority, and meaning. But we cannot.

In place of Gabler's attempt to divide document from work, it can be argued that document, text and work exist in a continuum, and that the questions of intention, agency, authority, and meaning exert pressure at every level of reading. Indeed, the fundamental editorial act of document-based editing, transcription of the text, involves a complex sequence of editorial acts, intimately intertwined with these four questions. The account that follows draws on experience of transcription of the manuscripts of Dante's *Commedia*. If the documents with which Gabler works are at one end of a continuum (single authorial manuscripts, which might stand for the work itself) the documents in the *Commedia* tradition are at the other: multiple versions of a work, none of which can claim to stand for

the work itself. There are other differences. The manuscripts are the product of distinct and rich iconographic histories; the linguistic and semiotic systems underlying the writing of the text itself were in flux, and every page contains many signs of no clear textual significance. Accordingly, the transcription of these documents passes through two distinct stages. I describe here the practice of the *Commedia* transcription, as performed for Shaw's edition of the *Commedia* and as developed and described by Barbara Bordalejo in her appendix C ("The Encoding System") to the edition (Bordalejo 2010). Bordalejo distinguishes between two separate stages of transcription. In the first of these, "the text of the document" is transcribed; in the second, the "variant states of the text" are recorded:

In this article, I use the phrase the "text of the document" to refer to the sequence of marks present in the document, independently of whether these represent a complete, meaningful text. That is: the reader sees a sequence of letters, occurring in various places in relation to each other (perhaps between the lines or within the margins) and carrying various markings (perhaps underdottings or strikethroughs). These make up what I here refer to as the text of the document.

The reader understands the marks present in the text of the document as meaningful and constructs one or more specific senses from them. Where more than one sense can be constructed from the text of the document, I refer to these as the "variant states of the text", or as the "constructed" texts.

Bordalejo illustrates this with the example of a single word from *Inferno* iii.9, in Ms Riccardiana 1005 ("Rb"). This appears in the manuscript as

The sequence of potentially textually meaningful marks here is identified by the transcriber as "d u r a-with-an-underdot o". Using the characters available to the transcribers, this is transcribed as:



In Bordalejo's terms, this is "the text of the document". It is a sequence of marks in the document identified as potentially meaningful by the editor. Note that even at this first stage the transcriber has made a series of decisions. The first is that this is a text in Italian, written by an Italian scribe around 1340 and so using letter forms and conventions characteristic of Italian vernacular manuscripts of that period. This determines the decision that the first letter be transcribed as "d" (and not an "o", as it might have been in some scripts), the second as "u" (although in other contexts the same two minims might be transcribed as "n"), the third letter as "r" (even though the stroke to the right top, without which this letter is identical to a single minim, and hence either could be "i" or part of "m" with the preceding minims), the fourth letter as "a" with a dot beneath it, the fifth as "o". Note that once the first letter is identified as "d", in Italian the second letter must be "u", not "n", and the third letter must be "r". Note too that the transcriber does not ignore the dot under the "a". In many contexts, dots on the manuscript serve non-textual, apparently calligraphic, functions and are ignored. But here, the dot is identified by the transcriber as textually meaningful and is transcribed.

One might seek to identify this first stage of transcription with Gabler's "document-centred" edition, including only "endogenous" information derived from the document alone. But this account shows that even at this level, we may not exclude intention, agency, authority and meaning. The first three letters are transcribed as "dur" because this is the only sequence of these marks which makes sense in Italian. The dot under the "a" has meaning because we think it shows that the scribe intended this letter to be read in a particular way. In the next stage of transcription, the transcriber "constructs one or more specific senses" from the transcribed text of the document. The sequence



actually means nothing in Italian. Here, the transcriber constructs two variant states of the text: "dura" and "duro". Further, the transcriber places them in sequence. The scribe first wrote "dura", realized this was mistaken, marked the "a" for deletion by underdotting it, and then wrote a final "o", so transforming the "dura" to "duro".

Bordalejo observes that these are two distinct activities:

Firstly, the reader realizes that there is a set of marks on the page that are text. Secondly, the reader constructs meaning out of those marks on the page. The first is an act combining perception and interpretation, the second is an act purely of interpretation.

As Bordalejo notes, in normal reading the two acts occur so closely together that we do not distinguish them. We see marks; we immediately identify these as letters; we read these as a sequence of words. The process is so natural to us, and in well-printed modern books so unproblematic, that we think we are reading a text which is actually present in the book we are reading, independent of our reading of it. But we are not. When we read, we construct a text from marks on the page. We give that text meaning according to our knowledge of what has come earlier; who wrote it; what work it is part of, and what other works were written by that author; even, what other versions exist of this work and of this particular passage. In this case, the transcriber knows (as did the scribe, and as does any likely reader) that this word is part of the *Inferno* by Dante and that it occurs in the context of Dante's description of the gates of Hell, concluding with the famous line "Abandon all hope, you who enter":

Dinanzi a me non fuor cose create se non etterne, e io etterno duro. Lasciate ogne speranza, voi ch' intrate'

Further, the reader knows that the terza rima scheme used throughout the *Commedia* requires that the reading is "duro", rhyming with "oscuro" and "duro" in the next three lines, and may deduce that the scribe too knew this, recognized that "dura" was incorrect, and changed this to "duro".

We see here that as we move along the scale of reading, from deciphering the marks on the page to considering how they contribute to our understanding of Dante's *Commedia*, we pass between minute scrutiny of the document to contemplation of the work. We can now begin to answer the question: what, exactly, is the "text" which we, as editors, extract from the document? First, we can say what it is not. It is not a fixed object existing independently of the reader, awaiting

only the editor who will discover it and pass it on to the reader. It is an object we as editors and readers create, first from our recognition of the potentially meaningful marks we see on the page, and second from our construction of one or more texts from these marks, a construction influenced by our knowledge of the work of which these words are part, our knowledge of its author, indeed by everything we know about intention, agency, authority and meaning. We use our understanding of the work whose text we identify as present in the document to help us interpret that document, just as we must use our knowledge of the documents towards our understanding of the work. The movement from document to work is not a one-way process: we look backwards and forwards, as we read from document to work and back again.

The "work" is part of our reading of the document: what do we mean by "work"? While Gabler and others have focused on text as document, Paul Eggert has been examining the concept of the "work". In Securing the Past (2009), he extends the concept of the work beyond textual productions, however conceived (the "works" of Shakespeare, his Hamlet, Sonnet 100), to buildings and works of art, taking in along the way issues of forgery, authenticity, conservation and presentation. Indeed, while Eggert confines his discussion to art, architecture and literature, his arguments may apply to any object created by human agency: anything we make is a "work". Anything we make, his last chapter argues, is subject to questions of intention, agency, authority and meaning. Across all these domains, we who read books, look at paintings, walk through historic buildings, must ask ourselves the same questions: what is it I see here; who made it and how does what I see relate to its original making; what has happened to it since its first making; how does this affect what I see? These questions, Eggert shows, take us into philosophy, into concepts of being, epistemology and semiotics, and the first part of Eggert's key chapter "The Editorial Gaze and the Nature of the Work" summarizes how philosophical moves through the twentieth-century, from Husserl's phenomenology to Adorno's negative dialectic, have changed our understanding of the "work". Eggert maps out, firstly, how the work has ceased to be seen as an object independent of our perception, which editing might present in approximations increasingly close to a perfect representation, and traces how editorial thinking shifted (often belatedly) in response to the rethinking

of authorship, text, work, discourse and meaning by Heidegger, Saussure, Foucault, Barthes and Blanchot (221-27). In Eggert's analysis, the impact of these ideas has been to problematize in useful ways our thinking about text and work, as we have had to shed misleading assumptions about (for example) originality and intention. In the last part of the chapter, he introduces the thinking of Charles Sanders Peirce and Theodor Adorno, focusing on their presentation of meaning as an ongoing semiosis involving three elements: the object which is known, the subject which knows, and the process of knowing (Eggert 2009, 231). He finds particularly attractive Adorno's "negative dialectic", in which subject and object are locked in a "experiential embrace" in which "[e]ach requires the other's difference in order to secure its own identity". This dialectic, Adorno argues, never achieves resolution. Rather, our knowing is "an ongoing, antithetical but interdependent identity-relationship that unfolds over time" (Eggert 2009, 234). Thus, what we know changes as we change; and we change as what we know changes. Eggert applies this to the formation of texts, as an intricately unfolding process implicating document, work, and reader in a continuing generation of meanings. His conclusion is worthy of full quotation:

The document, whether hand-written or printed, is the textual site where the agents of textuality meet: author, copyist, editor, typesetter and reader. In the acts of writing, copying or reading, the work's documentary and textual dimensions dynamically interrelate: they can be seen as a translation or performance of one another. They are, in this sense, one another's negative constituting principle. Document, taken as the material basis of text, has a continuing history in relation to its productions and its readings. Any new manifestation of the negative dialectic necessarily generates new sets of meanings. (Eggert 2009, 234–235)

Eggert goes on to define "work", in this environment, as "a regulative idea that immediately dissolves, in reading, into the negative dialectic of document and text" (235). I believe that we can put this differently, in a way which offers a stronger, more positive definition of "work" than does Eggert. In accordance with the

⁶ As this phrasing implies, my formulation of the document-text-work triad is not a departure from Eggert's perception, but rather a rephrasing, or at most an extension.

subject-meaning-object triad, the "work" is the object we seek to know. This operates at many levels. As we explore the document we seek to discover the work in the text we draw from the document. At every point, questions of agency, authority, intention press upon us as we seek the meaningful object which is the work. For a work which exists in just a single page (or less) of a document — a letter, an authorial manuscript, a unique copy of a poem, even anonymous materials with no title — we find ourselves asking: who wrote this? What did the writer intend; what meaning can I extract? As we look across many documents, all offering different versions of a work, with the work made of many parts, extending over many pages of many documents, the same core questions of intention, agency, authority and meaning recur, complicated as we puzzle our way through variation heaped on variation. The process never ends. The work is not a fixed object, apprehended in some marvellous epiphany by a reader, so that forever after the unchanging reader holds an unchanging image of the work in mind. Rather the work changes as we know it, and we change too as we know. We see this most easily when we return to a well-loved book and read it again. Suddenly meanings we had not seen before crowd upon us. We think: the book has not changed. But the meaning of the book, the work we apprehend, has changed, and this is all the book that we know. We know too that the change is in us, that while we were not looking, we changed, and in each instant of apprehension, we change again.

We can now arrive at a definition of text. The text is the site of meaning which links the document and the work. The work can never have a fixed physical expression. It can only be apprehended (and ever only incompletely) in the text we construct from the document. The document without the text of the work we construct from it is mute, simply marks on a surface. Our construction of the text of the work, from one document, from a thousand documents, demands all our attention, all our knowledge, all we know of intention, agency, authority. There is no end to this knowing. At the very beginning of our work on *The Canterbury Tales*, Elizabeth Solopova and I defined transcription thus:

[T] ranscription of a primary textual source cannot be regarded as an act of substitution, but as a series of acts of translation from one semiotic system (that of the primary source) to another semiotic system (that of the computer). Like all acts of translation, it must be seen as fundamentally incomplete and fundamentally interpretative (Robinson and Solopova 1993, 21).⁷

Now, we can see that what this describes is not just transcription; it is an instance of how we know, so that the many acts of transcription are each separate forays into meaning, as our gaze moves from the marks on the paper, to the text we seek to construct from these marks, to the work we seek to know from this text, then back again through text and to the document. We know now too that the work we seek is not just instanced in a linguistic text: how the marks are arranged on the page, images on the page, these too may be part of the work we seek. Indeed, as Eggert demonstrates, what we seek may not be linguistic at all: it might be a painting or a building.

Evidently, this conceptualization of document, text and work is not unique to digital editions. It is not even unique to linguistic objects, but might apply to any meaningful object created by human agency. Its roots in the thinking of (especially) Peirce and Adorno, who died in 1914 and 1969 respectively, date it well before the digital age. However, one can see how the thinking of Peirce and Adorno resonates with the radical instability of the digital medium. The time for this idea has come. While Eggert makes few references to digital editions in his discussion, one suspects that his long acquaintance with digital editions has influenced his intellectual trajectory. Further, digital editions, which may remake themselves from instant to instant in response to the reader's ever-changing requests, are perfectly adapted to this manner of thinking. They are objects in need of this theory. In contrast, the plausible fixity of print editions may be seen to have encouraged the view which this theory counters, that the work can achieve a knowable fixed form and be expressed forever within the covers of a book. In addition, digital editions may include tools which allow the reader to engage with the work by creating new texts, for example through the emergent use of phylogenetic methods to generate visualizations of the relationships between different texts in different documents (Robinson and O'Hara 1992, Van Reenen 2004). We may explore as we read, and read as we explore.

⁷ The core of this formulation, placing semiosis at the heart of a neverending process, was suggested by Solopova.

While applicable to any form editions might take, this theory is specially amenable to digital editions.⁸

There is one area where a theory of digital editions may have to advance where a theory of print editions need not. The rise of social media in the last decade has led to the contemplation of a new kind of edition: the "social edition", discussed extensively by Siemens and his co-authors (forthcoming). Siemens' article concentrates on the technical achievement of social editions, leaving no doubt that editions made by many people freely co-operating with one another are now feasible. While Siemens deliberately eschews theoretical discussion (asserting rather that "the social edition is something that we will articulate and define, through theory and functional prototyping, together") the core elements of the social edition — its fluidity, its ever-continuing reshaping as new materials are added, new perceptions generated — sits perfectly with the view of document, text and work here set out, without extending it. However, in one area the social edition appears to require an extension of the theory here expressed. In Peirce and Adorno's formulations, and in Eggert's representation of their arguments, the subject which seeks to know is, we presume, an individual. But what if it is not an individual, but a group, a community? Siemens specifically invokes the developing concept of "communities of practice" as agents and creators of knowledge: meaning may be made not just by an individual, but by a group. Of course, even when I read as an individual, I am aware of the readings of others. I am aware that when I see a vertical stroke with a dot over it, after a mark which I interpret as "h" and before another which I interpret as "t", that my reading of this mark as "i" and hence part of the word "hit" is likely to be the interpretation of everyone who looks at these marks on this page, and accordingly I can write about these marks, confident that others will understand what I say. 10 At another level, I know when I speak of

 $^{^8\,}$ Thus, the digital "work-sites" which Shillingsburg (2006) conceives as the places where readers encounter the documents which witness a work.

⁹ I am grateful to Ray Siemens for giving me access to a pre-publication draft of this article.

Compare Robinson 2009, 44: "An 'i' is not an 'i' because it is a stroke with a dot over it. An 'i' is an 'i' because we all agree that it is an 'i'." Pierazzo (2011) agrees with this assertion, that the text created by any transcription is not "objective"; the declaration in her article (466) that "if scholars as competent readers agree on something, then by this definition that thing is objective" is out of step

the work *The Canterbury Tales* I am basing my understanding of the work ultimately on the same documents (a few manuscripts and a few modern editions) upon which others base their understanding, and that the meanings we attach to this work will be sufficiently close for us to be able to speak to each other, not past each other. We can imagine individuals within a community discovering a work together, through the texts they construct from the documents, and discovering both where they agree and disagree, in an ever-continuing shared semiosis. In the print world, this shaping of shared knowledge takes place in a kind of slow motion, as a book is published and generates a counter-argument, resulting in another book, another argument. In the digital world, it can take place as fast as we can think, write what we think, and read what others write.

A theory of scholarly editions is a set of principles to guide practice. The preceding analysis suggests a defining principle, upon which our editions in the digital age might be built: that "text is the site of meaning which links the document and the work". Thus "text" in scholarly editing has a dual aspect. It is both "text-as-document" and "text-as-work". The two are indissolubly linked. We may only know the text through the documents we read, and may only communicate any text we make through documents we create. But every time we look from one document to another, or look away from the document to consider what we have read, or try to express what we think we are reading, we look to the work, shadowy but omnipresent. One cannot know the work without the documents equally, one cannot understand the documents without a comprehension of the work they instance. From this, a principle appears: a scholarly edition must, so far as it can, illuminate both aspects of the text, both text-as-work and text-as-document. Traditional print editions have focused more on the first. An evident advantage of digital editions is that they might redress this balance, by including much richer materials for the study of text-as-document than can be achieved in the print medium.

However, the view of digital editions offered by Gabler, Pierazzo and Kiernan (among others) appears indifferent to this principle of the two-fold nature of text. Instead, the model of editions they offer focusses on the documents, to the point where the concept of

"work" disappears altogether. This has real-world implications in the practice of digital editions. It means that encoding the text of the document may concentrate (and, according to Gabler, must concentrate) only on the document itself: offering a "recording of as many features of the original document as are considered meaningful by the editors" (Pierazzo 2011, 475). Accordingly, the Text Encoding Initative workgroup on Genetic Editing (Burnard et al., n.d.) specifies a system for representing a text of in terms of a single document containing it: thus, the text is dispersed through "document", "writing surface", "zone" and "line". In terms of its own aims, this is extraordinarily successful: one may easily link the transcribed words of the text to their place in the physical document, making possible such effects as the text "floating" over the image. It is extremely well suited to the making of "genetic editions", where the aim is to present, in the greatest possible detail, the text of a single document of extraordinary significance: usually, an author's own draft (thus, the Joyce manuscripts of which Gabler writes). But what of the case where the text is not present in a single document; when it exists in thousands of manuscripts and print editions? Indeed, this is true even for genetic editions: what Joyce wrote in this one page of the "Circe" manuscript made its way through a series of proofs and galleys into the 1922 edition, and then through all the editions down to this day, including Gabler's own. An edition which ignores all this would be a pale thing indeed. One might reasonably expect that a digital edition would allow the reader not just to see the text of any one page alongside an image of the page; the reader would like to see how the words changed through the proofs on their way to the first printed edition, and then all the later printed editions. To do this, one needs to encode not the divisions of the document, as "surface", "writing area", "zone"; one needs to encode the divisions of the work, as "chapter" and "paragraph", or "verse" and "line", so that one can locate the different parts of the work within the particular documents containing them. Indeed, the Text Encoding Initiative guidelines have long offered comprehensive means of encoding text-as-work (line one of the General Prologue of *The Canterbury* Tales), as well as the recently developed system for encoding text-asdocument offered by Burnard and others.

On the face of it, the answer is simple: one should encode both text-as-document and text-as-work. But there is a problem with this.

The model of text encoding prevailing in the digital community at this time is that each text may be organized according to a single hierarchy of "ordered content objects" (DeRose 1990; Renear 1996). One may define a text as a set of logical structures, with each book containing chapters, each chapter containing paragraphs, each paragraph containing sentences: text-as-work. Or one may define a text as it appears in a particular document: as composed of a volume, containing a sequence of quires, each quire containing a sequence of pages, each page made up of a sequence of writing spaces. The current digital tools for scholarly editing make it easy to encode either view of the text. However, it is much more difficult to do both to the same degree of detail in the one encoding. It is usual to encode one view as the primary structure (say, the text-as-work view, organizing the text into sentences contained in paragraphs contained in chapters), with information on the other view recorded in the document (say, the locations of page-breaks, and perhaps line-breaks), but not used to structure the content.¹¹

In the early days of digital editions, it was common for encoders to privilege the text-as-work view: thus, my own editions of Chaucer (1996, 2004), and those of *Piers Plowman* initiated by Hoyt Duggan (1994, 2005). In recent years, this has been exactly reversed. Indeed, while the earliest digital editions did at least include information on the text-as-document in their encoding of the text-aswork, the pendulum has now swung so far that many encodings of texts now present only the text-as-document. The online edition of Jane Austen's manuscripts at http://www.janeausten.ac.uk (Austen 2010), for which Pierazzo was the technical research associate, and which uses a form of the "genetic edition" encoding described in Burnard et al. (n.d.) and developed by a team in which Pierazzo was a key member, provides an extraordinarily rich representation of each written page. Yet the transcription offers no information whatever about the text-as-work. We are given full page-by-page transcriptions of (for example) three volumes of Austen juvenilia, containing

This is a version of the long-known "overlapping hierarchies" (or "concurrent hierarchies") problem: that "content objects" may nest, but not overlap. In other words, text may be contained within a paragraph, or contained within a page, but it cannot be contained in both if page and paragraph overlap. There are ways about this problem, typically ingenious and demanding to implement (e.g. DeRose 2004; see the ongoing discussion in Porter 2005).

some twenty-seven works by her, in various genres. But we are offered no way into any of the manuscripts, except page-by-page. There is no table of contents of the work; no way, for example, of locating her playlet "The Mystery" except by going through the whole transcription a page at a time (it begins on page 141 of the first volume). Nor is there any encoding of structural divisions in the text. Austen provides "The Mystery" with a list of dramatis personae and diligently sets out the play as a single Act divided into three scenes. None of this is reflected in the encoding of the edition. A reader might want to extract the first scene of this play and compare it to various printed versions: in this edition, he or she cannot. Nor is this an isolated example. As I write, there is a ferment of activity in the creation of transcription tools: Brumfield (2012) lists twenty-eight online collaborative transcription editing systems. Every one of these is designed to record text-as-document. Not one of these offers the possibility of recording text-as-work.¹²

Principles may define practice. But practice may become so accepted, so ingrained, that principles are determined by practice, and not the other way about. The dominance of the document model of textual editing in the digital realm suggests that a theory of digital editions is emerging, based on page-by-page transcription of individual documents, which asserts that a digital edition should concentrate on the documents alone. Gabler's articles explicitly formulate this: scholarly editing must perforce concentrate on the text of the document alone. Gabler is writing of modern documents. Matthew Driscoll (2010) would extend this focus to medieval documents, even to editions of works existing in many manuscripts, as he argues that traditional stemmatic attempts to investigate whole manuscript traditions are flawed, and that instead one should focus on the edition of individual documents. Some of his language echoes Gabler's search for an objective mode of editing, as he argues that a transcription should make clear "what is actually written in the source, as distinct from however the editor has decided this is to be interpreted" (Driscoll 2010, 103).

 $^{^{12}\,}$ One tool, T-PEN (Ginther n.d.), did appear to permit embedding of limited text-as-work information (in the form of paragraph information) when accessed in May 2012; I was unable to find this facility when accessing the site again in September 2012.

One can welcome this attention to documents as a long overdue correction to the millennia-long concentration of scholarly editors on the work rather than the document. But there are dangers here. Should this model of the digital edition prevail, we will see a flood of facsimile editions in digital form ("digital documentary editions", to use Pierazzo's term), such as those of the Austen Manuscripts project. Notoriously, facsimile editions in print form are of very little use to the reader, or even to scholars, whose interest (so far as it touches on the documents) is likely to be in questions of how the received text changed over time, how it was received, how it was altered, transformed, passed into different currencies. If we make only digital documentary editions, we will distance ourselves and our editions from the readers.

Of course, there will be a place for digital documentary editions, as there long has been for facsimile editions. But such editions, with their narrow focus on editor and document, fall far short of achieving the potential of editions in the digital world. The digital medium is perfectly adapted to enactment of editions as an ever-continuing negotiation between editors, readers, documents, texts and works. The involvement of whole communities of practice — indeed, everyone who reads documents in pursuit of the work, and so every reader — in the making of editions may lead us to a completely new kind of edition, made by many people. Documents may not change. But the advent of the digital medium has changed the texts we construct from them, and the works whose meaning we seek change too, and will change endlessly with every new reader, every new document, every new text. Finally, the theory we attempt to make for digital editions, itself a work whose meaning is shaped and reshaped by readers, will itself change.

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