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The Changing Nature of the Text

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The Changing Nature of the Text:

Implications for Scholars and Libraries

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It is always dangerous to give speakers a free choice of topic. Today I intend to draw on my interests in classical philology, the history of classical scholarship, and libraries to examine the symbiotic relationship of philology and libraries [slide 1], to consider how the papyrus roll and codex have defined libraries for most of their history, to survey changes in text and philology over time [slide 2], and to look at some current trends and possible future directions. In some ways this combines intellectual biography with my current reading and reflection. My academic formation began in the very traditional *Altertumswissenschaft* program at Cincinnati in the 1970s, which integrated philology, history, and archaeology. This was followed by graduate work at Illinois, one of the most hard-core philological programs in North America, where I specialized in Later Latin and Greek papyrology. I have continued to work on texts, papyri for a number of years and more recently various fragmentary Greek historians, whose work has preserved only in quotations and paraphrases in later writers. My subsequent studies in library school and work in libraries have focused on archives, rare books, cataloging, and collections. Thus, I think early and often about the nature of texts and also their relation to libraries.

Some History

Let us begin with some history. It starts with stones [slide3]. Our earliest surviving texts, broadly interpreted, include paintings on walls, such as those in the caves of Lascaux, and, later, actual writings incised on stone and clay tablets. Characteristics include fixity of text, which is indeed 'written in stone,' and difficulty of replication and wide distribution. Later papyrus became the norm for literary texts and documents [slide 4]. Papyrus held sway for centuries, although inscriptions and ostraka continued to be important carriers of text, and animal skins (parchment from *carta pergamena*), also stitched together in rolls, were used as well. Papyrus rolls, with text written in a series of columns, offered greater portability and could be reproduced more easily (though still only one copy at a time). Since it was difficult to find a specific passage in a papyrus roll, most scholars of the day would quote from memory.   Indeed, the rolls could be dangerous as well as difficult to consult. A memorable letter of the younger Pliny (*Ep.* 9.19) tells of the aged Verginius Rufus, who became entangled in a papyrus roll, fell, broke his hip, and died of complications.

The greatest collection of papyrus rolls resided in the Alexandrian Museum with its library, founded by Ptolemy I of Egypt around the beginning of the third century BC. Ptolemy and his successors attempted to get a copy of every work ever written for the library. The library of Alexandria has inspired, plagued and haunted librarians ever since as a model of unachievable completeness. Beyond that, one can argue that philology was

invented there. Zenodotos, the first librarian at the Museum, was also the first known editor of Homer. He tried to bring order to the various texts that had come down, expunging some lines as interpolations, transposing others, changing words. All of these editorial corrections will be familiar to editors of ancient and modern texts. This was continued by many of his successors. His immediate successor Callimachus, a notable poet and creator of the first library catalogue, the *Pinakes*, seems to have been more interested in lexicographical oddities and obscure myths than textual editing, but later Alexandrian librarians, such as Aristophanes of Byzantium, also edited Homer and other texts. So as there was an Alexandrian ideal of completeness and order in the library, there came to be an ideal of a definitive text with explanatory commentary. This, of course ignored the messiness that created many of the ancient texts. There is a long prehistory of the Homeric text, as it grew from the performances of traditional stories by bards using metrical formulae.   Most scholars believe that written versions of the *Iliad* and *Odyssey* were created in the eighth century BC. Recently Mark Pagel and his collaborators published an evolutionary linguistic statistical analysis that examined differences between Hittite, Homeric Greek, and Modern Greek vocabulary (specifically the rate of replacement of cognates), which places the epics squarely in the mid-eighth century. Their study appeared earlier this year in *Bioessays*, a journal not found on the nightstands of most classicists.   We have little evidence of the state of the text from that time or before. Down to the Alexandrian scholars we have at best indirect evidence of the text from quotations and allusions in writers of the sixth to fourth centuries. The earliest version that we can hope to reconstruct, with difficulty, is the Alexandrian text. In this case, not only does the book define the library, the Alexandrian Library and its

scholars defined the text. The Hawara Papyrus of the *Iliad* (from around AD 150) reflects this, preserving some of the critical signs of the Alexandrian scholars. These early texts exist only in fragments, leaving us largely dependent on medieval manuscripts such as the tenth century Venetus A of Homer, which is now available digitally on the Homer Multitext site [slide 5] and as an Ipad app with accompanying English translation.

Moving forward to the fourth century AD, we have another shift in format between the second and fourth centuries: from papyrus roll to the codex, which might be papyrus or parchment [slide 6]. Instead of a column of text on a long papyrus scroll, we now have leaves and pages that are essentially like modern book leaves and pages. With their covers, they very much resemble modern books except that the text is still handwritten. Like papyri, they continue to be slow to reproduce, with all the attendant errors of hand copying. No two texts are exactly alike. In spite of the efforts of the Alexandrian scholars and their successors, fixed and accurate texts remained an elusive and illusive goal. This was also the transition in which much of classical literature was lost. The transition from papyrus roll to codex paralleled a larger transformation of late antique society from pagan to Christian, which is reflected in the contents of the codices [slide 7]. Christian writings in the form of scriptures (Jerome's Vulgate in the west and the Septuagint and Greek New Testament in the East), voluminous commentaries on these, and the writings of the Church Fathers became the dominant literature of the codex in late antiquity and the Middle Ages. Authority was vested in these texts, but after Jerome relatively little attention was given to creating authoritative versions of them. Much pagan literature, aside from that which was commonly used in schools (selected works of

Cicero, Sallust, Terence, and Vergil), survived in a few manuscript codices or not at all. While the codex was a more durable format, a text had to survive the transition. Many didn't; a few have been rediscovered among Egyptian papyri, but most are lost. The long-lost *Constitution of Athens*, ascribed to Aristotle, was found in the bowels of a mummified crocodile in Oxyrhynchus in the late nineteenth-century. Much of what we have of the comic poet Menander and of the early lyric poets is from papyri discovered in the last century.

Imperial authority in the West, what was left of it, collapsed in the course of the fifth and sixth centuries. The philosophical schools of Athens were closed by Justinian in 529 and, whatever of the Alexandrian Library had survived the vicissitudes of nearly a millenium was destroyed in the Arab conquest of Egypt in 641. The preservation of ancient books fell largely to the monasteries. This had its own dangers, as monks were likely to scrape away the unedifying literature of antiquity to write sermons or commentaries on the psalms. Sometimes works survive only in this palimpsest form and modern scholars have been able to recover them. One of the first texts recovered from a palimpsest was a significant portion of Cicero's long lost *De re publica* by Cardinal Angelo Mai the early nineteenth century; the Cicero manuscript dates from the fourth century AD, which is an exceptionally early witness to the text [slide 8]. The recovery of such texts continues, with the Archimedes Palimpsest being the most recent example [slide 9]. This text, which contains seven treatises and was rediscovered only in the last decade, has been studied through digital imaging. The images and much supporting documentation is available on the Archimedes Palimpsest Project web site.

Whatever the losses due to monkish tastes, we owe much of the classical literature that was preserved to the monastic scriptoria. The monastic libraries and scriptoria were the primary agents of preservation through the Middle Ages. Texts were copied through the mini-transitions in scripts from the old majuscule hands to the Carolingian minuscule of the ninth century, thence to Gothic blackletter and the humanistic hands of the early Renaissance. Marginalia and scholia (some dating back to antiquity) were copied or added. Textual editing was not a theoretical activity; obvious errors might be corrected, which included correct texts that the scribes could no longer understand. Texts became more or less corrupt, both through copying errors and editorial efforts at improvement. Renewed interest in classical texts in the fourteenth and fifteenth centuries led to book hunting by such figures as Niccolò Niccoli and Poggio Bracciolini. The invention of printing soon followed the rediscovery of the classics.

Printing is, of course, the great turning point for texts [slide 10]. Relatively cheap reproduction had arrived, making texts in codex form much more affordable. While I am interested primarily in classical texts here, it is worth noting that printing also spawned a vast market for popular texts and totally changed the nature of the book market, as recently shown by Andrew Pettegree's *The Book in the Renaissance*. Aside from more rapid and cheaper reproduction of texts, printing assured the relative uniformity of texts. The uniformity and fixity of text in a printed edition also inspired editors and publishers to strive for correct, definitive editions, hearkening back to the scholars of Alexandria. Having the best (or at least best-known) scholars was a marketing point for printer-

publishes such as Froben, who published many of the works of Erasmus. Renaissance textual criticism was largely a matter of taste and style [slide 11]. Over the next few centuries a series of textual scholars would put it on a more scientific basis, though never entirely removing individual sensitivity to style and language (*Sprachgefuhl*). On the other side of the ledger, since transitions always include some loss, whatever was not printed dropped off the map. Manuscripts, which included precious evidence for the text, were sometimes discarded once a printed book was available. There are famous images of printers throwing leaves of ancient manuscripts onto the trash heap as each page was set in type. Many Medieval Latin works never made the transition and still languish in obscure corners of European libraries, if they have survived at all.

Religious controversies also played a role in early modern publishing and in philological endeavors. Erasmus' 1516 edition of the Greek New Testament, for example, omitted the Johannine comma (a clause in 1 John 5.7-8), which is not found in any of the older Greek manuscripts [slide 12]. The transmission of the passage in the Latin Vulgate is equally problematic, athough it had long since become an accepted part of the text by Erasmus' day. It is probably a marginal gloss that found its way into the text. Erasmus later restored it (in the third edition of 1522) under pressure from the Church. This particular textual issue has had a long life, in part because it was key passage for Trinitarian doctrine. The comma was again rejected by the great eighteenth-century classical scholar and Regius Professor of Divinity Richard Bentley in a now lost lecture and was finally demolished for good by Richard Porson, Regius Professor of Greek at Cambridge in the late eighteenth century [slide 13]. This is one example of many that illustrate the famous

dictum of Joseph Juste Scaliger, the seventeenth century clasical scholar: *Utinam essem*

bonus grammaticus. Non aliunde discordiae in religione pendent quam ab ignoratione

grammaticae [slide 14]. It also illustrates Sean Gurd's recent contention in *Philology and*

Its Histories (2010) that every age has its own somewhat different philology. In the

Hellenistic era, Homer was central to Greek culture and was central to philological

activity. In the early modern era, religious controversy was central and likewise

influenced philology. And it can hardly be surprising that textual authority was central to

religions founded on authoritative scriptures, Judaism and Islam as well as Christianity.

This is a single example for one tradition that could be multiplied many times. And

finally, it illustrates the inherent instability of even authoritative texts over time.

The rise of printing also enabled the growth of the great modern university and national

libraries, which replaced the monasteries as preservers of textual culture. Philologists

both depended on and helped build these libraries. Bentley, for example, was the King's

Librarian, with responsibility for such valuable manuscripts as the Lindisfarne Gospels,

the Codex Alexandrinus and the bulk of the Codex Sinaiticus of the Bible. He also

devoted great efforts to building up the university library at Cambridge and also to the

refounding of Cambridge University Press in 1698; as Master of Trinity College he gave

attention to its library. Among other things, Bentley sent agents to the continent to buy

printed books not available in England.

Bentley and many of his era were radical textual critics, who emended texts extensively.

Bentley, one of the best critics, was often better at spotting textual problems than

resolving them, although his editions of Horace, Terence, and Manilius remain of lasting value [slide 15]. His famous Milton, in which he reedited Paradise Lost to his own taste on the grounds that Milton's amanuensis had not accurately followed his dictation, is a monument to the perils of conjectural emendation.

The tradition of conjectural criticism continued into the nineteenth century, although Karl Lachmann's work on stemmatics (aimed in large part at bringing the unruly mass of Biblical manuscripts to heel) began to put the study of texts on a somewhat more scientific basis [slide 16]. Lachmann showed how to sort manuscripts into families based on common errors, enabling the editor to work back toward a common archetype. While this would help restore the text to an early state with more or less confidence, it could only go as far back as the exemplar or exemplars of existing manuscripts, still far short of those contemporary with the author. We are also unable to see the prehistory of texts before they achieved the form that came down to us. We have already seen this with Homer. But Homer is not a special case in this regard, in spite of the uniqueness of oral composition. We know that many classical authors revised their work over time. Sean Gurd's recent book *Work in Progress* marshals the evidence for ongoing revisions by a number of Latin authors in the late Republic and early empire, such as Cicero, Quintilian, and Pliny. Cicero gave orations and then later revised them; likewise his philosophical and rhetorical works circulated among friends and he revised them based on their suggestions. Under the empire works were normally first presented at *recitationes*, oral performances. They also were privately circulated among the author's friends. Substantial revisions might take place over a long period of time. Gurd places all of this

activity in a social context. This approach will recall the genetic approach to modern literary texts of recent years, for example, some of Jean-Michel Rabaté's work on Joyce and other modernist writers. But not only does every critical trend tend to arrive late for the party in classical philology, we do not have the archival collections of manuscripts, letters, etc. that scholars of modern literature enjoy.

So our twentieth-century texts largely follow the traditions of nineteenth-century philology. They are based on a better grasp of the manuscripts and their relationships and generally reflect a healthy moderation of the urge to rewrite the text to our taste through emendation. Better availability of manuscripts through facsimiles (not to mention greater ability to travel to the originals) and the discovery the new textual evidence from the papyri has also improved the state of classical texts. And given that we still rely heavily on editions of texts produced in the nineteenth century, we are still deeply seated in that tradition.

Where Are We Now?

Now I would like to look at a few specific examples of current trends in texts and textual study. Almost everyone who trained in classics much more than a decade ago experienced the scholarly austerity of Teubner and Oxford Classical Texts, with a bare text in the original language along with selected manuscript variants and emendations in

the apparatus at the foot of each page. These represent the end product of the long journey from Alexandria. They are, of course, supplemented by the vast body of commentaries, indices, concordances, dictionaries, and the like produced over the last two centuries. As we sit in the middle of another long, messy transition, we still use all of these mostly in the form of printed codices. We do increasingly use online avatars of texts as well. Most of us have used Google Books or Hathi Trust texts for works out of copyright. These merely move the codex into a fairly basic digital form, whether html or pdf. Searching is crude, the ability to manipulate the text or annotate it limited. New e-books sometimes offer better features, but remain the printed book moved online with a few additional features such as the ability to do keyword searching, annotate the text, and sometimes to link directly to other texts. This description applies to secondary scholarly works as well as the primary texts.

The Perseus Digital Library offers perhaps the widest array of classical texts and translations online [slide 17]. It is possible to search texts, toggle back and for the between the Latin or Greek text and English translation, and to click on any word for an immediate link to a standard Greek or Latin lexicon. It also provides some archaeological reference works and many images of material remains. While a great tool, it has drawbacks. It does not cover all texts. It offers mainly public domain texts (which are not always the best editions) and the texts are shorn of their critical apparatus (if they had one). Little is offered in the way of commentary on the text or links to the secondary literature. And while it is possible to cross-search both texts and material remains, these are not well integrated.

The Packard Humanities Institute databases Searchable Greek Inscriptions (http://epigraphy.packhum.org/inscriptions/) and Classical Latin Texts (http://latin.packhum.org/) between them offer access to a wide range of Greek inscriptions and nearly all of Latin literature from the beginnings to late antiquity [slide 18]. While these are wonderful resources, and free as well, they offer bare texts without apparatus, commentary, or translation. The *Thesaurus Linguae Graecae* (http://www.tlg.uci.edu), while not free, provides nearly the full corpus of Greek literature from the beginnings to the fall of Byzantium with links to the standard Greek lexicon, but again a text shorn of apparatus.

Some of the more specialized sites show promising features. One example is the Vindolanda Tablets Online (http://vindolanda.csad.ox.ac.uk/). [slide 19] This site includes the texts from the first two published volumes of Vindolanda tablets with text, translation, notes, bibliography, and images. The tablets can be browsed a number of ways (including subject) or searched (full text). Supplementary materials include an online exhibit to set the context and brief reference materials to help in understanding the tablets (Roman names, military organization, etc.). Vindolanda was a Roman fortress just south of Hadrian's Wall in the north of England. The sample text shown is apparently from a family member sending warm socks to their soldier on a cold, wet border post, as well described by Auden in his "Roman Wall Blues:"

Over the heather the wet wind blows,

I've lice in my tunic and a cold in my nose,

The rain comes pattering out of the sky,

I'm a Wall soldier and I don't know why.

At least our Vindolanda soldier had warm feet.

A similar collection is P. Oxy: Oxyrhynchus Online. The Oxyrhynchus Papyri is one of the largest collections of papyri in the world, all from a single site. Many still await publication in an ongoing series now up to volume 79. The site as a whole has much to recommend it: an online exhibit that sets the scene and describes the material remains of Oxyrhynchus, a glossary, and a searchable database of the papyri, which can also be browsed by author, title, genre, and date (but not, alas, by subject). A typical entry for a papyrus includes metadata and images (although images only for papyri physically held at Oxford). For transcripts, translations, and commentary, one must go to the physical published volumes.   These two collections both illustrate two trends: better integration of texts with remains and an attempt to bridge popular and scholarly audiences. There is clearly a way to go in both of these, but Vindolanda and P.Oxy represent a good start.

Online publication of texts also allows greater opportunities for collaboration. One example that I have been involved with is Brill's *New Jacoby*, which is a new edition of all of the fragmentary works of the ancient Greek historians [slide 20]. Many years ago Felix Jacoby produced *Die Fragmente der griechischen Historiker* in a dozen volumes; the work was unfinished at his death as he was unable to complete all the projected volumes of commentary. The *New Jacoby* is the work of 104 scholars in 16 countries

producing editions, translations, and commentaries. All editorial work is done online, editions of individual authors are published online as soon as they pass editorial review and go through copy-editing. The entire online edition has extensive hyperlinks within the work, to the original edition of Jacoby, and also to various Brill reference works.

Another significant trend is crowd-sourcing editorial work. One of the links on the P.Oxy Online homepage is the Ancient Lives Project, which lets volunteers from the general public have a go at some of the many unpublished Oxyrhynchus papyri by transcribing and measuring them [slide 21]. Anyone can attempt this and the work will be reviewed by the Oxyrhynchus series editors and subsumed into future editions. Another such project, which has been around a bit longer is the *Suda On Line* [slide 22]. The *Suda* is a tenth-century Byzantine encyclopedia that preserves much information about Greek literature and history, including testimonia and fragments of many now lost works. Anyone with a reasonable knowledge of Greek can volunteer to be a translator (which includes writing commentaries on the translations); those with a scholarly track record in Greek can become editors and revise the work of others.

To summarize some of the current trends, we are in the early stages of moving texts online, still preserving many of the characteristics of printed texts. Some are taking advantage of linking to reference works, including images, and placing the written texts in their broader cultural context. There are also greater opportunities for collaboration among scholars and also for involving undergraduates and even the general public in online editing projects.

Where Might We Go?

I have noted some of the advances over time in editing and presenting texts and also some of the advantages brought by technology. What should we look for in future electronic editions of classical texts? I think there are three notable trends, already in incipient stages, that we should watch.

One is greater integration of material remains with texts. This includes links to manuscripts, but also relevant images of archaeological remains, with suitable documentation. An ideal online edition would include a full critical text with apparatus, commentary, and translation, along with links to manuscript images, relevant material remains, and standard lexica and reference works. The second trend is more collaborative projects, often involving an international cast. As the demands of specialized scholarship and digital expertise tax the ability of any one individual to do it all, we will need to do more in teams that bring together a variety of expertise. This was very recently pointed out by Neville Morley, an ancient historian at Bristol, apropos of a debate on the Classicists list about the linguistic qualifications of classical scholars [slide 23]. The nature of text editing will have to become more of a social enterprise, just as was the original production of some of them. This is a major cultural shift for many classical philologists, who have traditionally worked quietly on their own in their study or library carrel.

The third trend is the destabilization of the text. The cult of the authoritative edition has long held sway in classics. Few things can cost credibility faster than citing the wrong editions. Online editions will lack the stability of our cherished Oxford Classical Texts. Revision will be ongoing. Texts themselves will be revised continuously; commentary amplified, rewritten, deleted; supplementary material will come and go. All of this will be done by multiple editors and readers. How do we cite and refer back to an ever-changing text? Who gets credit (or blame) for what? How will we track the history and evolution of scholarship? Will we use the Wayback machine to find earlier iterations? The *Stanford Encyclopedia of Philosophy* saves earlier editions as it each quarterly update occurs. They now have around 60 editions in their archives. As long as each user cites the correct edition, it is possible to retrieve the text as cited. This is obviously a cumbersome process that slows updating and will not work for many projects. It consumes enormous amounts of storage as well. And that will be another problem in the future: will low use materials vanish from servers? Old books long survived quite well while neglected on library shelves. Digital works can vanish with a single delete command. There will be no electronic palimpsests, once the bytes are overwritten. Who will preserve the electronic texts? Monasteries preserved much of our written heritage throughout the Middle Ages, universities and their libraries, along with a few national libraries, have carried out that function in the modern era [slide 24]. Will we continue to do it in the postmodern, largely postprint world? Will intellectual property law allow us to do it? Do we have the resources to do it? These are all questions to be answered.

The text is once again becoming the Herakleitean river and we must adapt to it [slide 25].