

Technology, Collaboration, and Undergraduate Research

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Abstract

In this article, two professors of Classics present their experiences in incorporating into their professional activity a model of undergraduate research that reflects Ross Scaife's ideals of collaborative, open scholarship, informed by traditional values, and taking advantage of advances in digital humanities

Introduction

We write this essay in memory of our friend and colleague Ross Scaife. Since Classics is what we, the authors, know best, and since Ross Scaife's contribution to Classics is incalculable, we are focusing on Classics as a sub-discipline of the humanities. We hope that others may find our observations, limited as they necessarily are to our own experience, interesting, useful, or provocative. 1

To survive and prosper, colleges and universities have to sell themselves to prospective students (or at least to prospective parents) as nurturing environments, where students and faculty work hand-in-hand, ideally on important-seeming and photogenic tasks. When "undergraduate research" gets pitched on websites, mass-mailed DVDs, and glossy brochures, it invariably takes that form of chemical glassware or a string quartet. Students and teachers in the field of Classics, however, when they appear in such promotional materials, are usually shown in the context of advertising an institution's "dedication to teaching," because in the context of "teaching" it is okay to show the middle-aged professor gesturing at a blackboard covered with scrawled notes. 2

And as Gregory Crane has also described in the introduction to this issue, this picture is not a misleading accident of the demands of superficial marketing but is too often an accurate reflection of an unfortunate truth.^[1] 3

Faculty in Classics have not, in our experience as students and teachers, been very interested in fostering the collection of activities that now go under the general term "undergraduate research". Classics faculty have traditionally claimed to inspire the life of the mind, to teach critical and subtle thinking, and to exercise students' intellects through close reading, rigorous philology, and stimulating discussion, and often these claims are entirely justified. But it would be disingenuous to assert that the most insightful reading, the parsing of the most complex syntax, or the most lively conversation is similar in kind or effect to a public performance of Ravel's "String Quartet: II - Assez - Très Rythme," which in the hands of well-trained undergraduates can send shivers down the spines of an audience, or similar in kind and effect to undergraduates working in a laboratory that is engaged in developing new therapies to cure diseases. We can make comparisons, but they are more metaphors than analogues. The 'cellist or the biochemist, to choose only two examples, can have an immediate and concrete effect on the larger world around them during their undergraduate years, while young students of Classics too frequently do not, and can not, at least not without some creative thinking on the part of their instructors. 4

Undergraduate research in the Classics, as traditionally practiced, is a diluted version of professional scholarship in the field as it developed during the second half of the 20th century — and as it came to be seen by the turn of the 21st 5

century as an absolute touchstone for appropriate professional activity. We teachers send our students forth to read scholarship and produce argumentative essays, carefully and selectively annotated with citations to primary and secondary sources. Ideally, the primary sources served our students as evidence, and the citations to secondary sources provided armor against charges of plagiarism. We call this a “diluted” version of professional scholarship for two reasons. A given undergraduate student — let’s say that she is taking her first course in Roman History, a survey course in a subject of tremendous complexity based on literally centuries of cumulative scholarship in multiple disciplines from epigraphy and numismatics to textual criticism and literary theory — is unlikely in the course of a semester or quarter to be able to develop and advance an idea or interpretation that has never before been produced by a professional scholar in the centuries long history of research in ancient history. For this reason, no responsible teacher of Classics would insist on originality (in this sense of a new and unique idea or interpretation, as opposed to an idea or interpretation that is one’s own and expresses one’s personal intellectual effort) in papers assigned in an introductory survey. (A professional scholar in the field, by contrast, must demonstrate an original thesis, in the sense of an idea or interpretation that is not only his or her own but is also new and unique, as the first condition of publication.) Taking advantage of the kinds of papers that we can responsibly expect our undergraduate students in Classics to write is the subject of the first section of this paper, *An Audience of More Than One*....

The second way in which undergraduate research in Classics tends to deserve the appellation “diluted” is in its approach to citation of sources. Undergraduates cite sources for two reasons: first, because their teacher insisted that they consult a certain number of sources, as an exercise in “learning to do research,” and second, to prove that they did not plagiarize any of the sentences that they have strung together to form an argument. But citation is not a pre-digital anti-plagiarism technology, or at least it should not be in a wholesome intellectual environment. Citation is a pre-digital equivalent to the hyperlink, a way of continuing an ongoing conversation in print, a pathway back from the author’s current words, to previous comments on the topic at hand. This idea, in our experience, is often completely unfamiliar to undergraduates, even now that that they are subjected to rigorous formal indoctrination against the evils of plagiarism. In the second section of this paper, “When All the Sources are Online,” we explore some possibilities for educating our students in a more positive understanding of citation, and we will suggest a mode of scholarship that can make plagiarism less of a temptation for the student and therefore less of a concern for the teacher. When done with insight and method, citation generates the only kind of research that carries conviction: research based on a clearly defined data set whose parameters are unambiguously described, thus opening the way to complementary and, in the best of circumstances truly collaborative, extension of the results.

The traditional mode of Classical scholarship — deep and wide reading yielding new insights which are expressed through rigorous argument — is extremely difficult and has in the past not lent itself to collaboration, especially collaboration between young scholars and their teachers. But there are modes of humanist scholarship that do lend themselves to this collaboration, especially when the environment of scholarship is flexible enough to accommodate that collaboration and value it. In the third part of this paper, *From Each According...*, we discuss one category of work — collation and indexing of primary-source material — that has a long tradition as a respected pursuit in Classics and is appropriate for undergraduates. As Gregory Crane asserts in the Introduction, the value of this kind of work has multiplied in the face of technologically mediated scholarship, as our discipline rebuilds itself from the ground up.

In the final section of this paper, *Shaking the Foundations*, we describe at least one way in which undergraduate researchers in Classics are now, thanks to the mediation of technology, in a position to help re-build the discipline of classical philology on a more sound footing, undertaking projects similar to those done in earlier centuries by figures who are now hailed as giants of Classical scholarship. The late 19th and early 20th centuries saw the publication of authoritative editions of the major Greek and Latin authors. This period can be seen to have culminated with the publication in 1931 of the *editio maior* of T. W. Allen’s *Homeri Ilias*, in three volumes, the work of 44 years. Allen’s monumental edition collects in its critical apparatus variant readings from dozens of the most important Byzantine and medieval manuscripts, and hundreds of papyrus witnesses to the text of the Homeric poem. The kind of work that Allen brought forth remains the essential foundation of Classics, now and into the future. Nevertheless, his effort necessarily was defined and limited by the state of technology in his day. Therefore, to extend and amplify Allen’s results, beginning in the winter of 2007, two teams of scholars, university faculty supervising undergraduates, undertook to use his work

6

7

8

on the *Iliad* as the basis for an entirely new approach to a critical edition of Homeric poetry. In the process, these undergraduate researchers became experts in Homeric text-criticism and pushed forward the boundaries of our understanding of that field and of the poetry it concerns.

An Audience of More Than One...

A traditional writing assignment in an undergraduate Classics course is an essay in which the student-author argues a thesis with supporting evidence from primary and secondary sources. Such assignments are opportunities for teaching students to articulate their thoughts and use sources appropriately. Properly understood, an essay written for such an assignment constitutes a moment in a conversation, in which the student interprets primary sources, understood through the lens of previous scholarship, and makes a statement to the teacher and sometimes to fellow students as well.

9

Responsible teachers judge their students' essays according to the criteria of accuracy, clarity, appropriate scope, and significance. Originality in the sense of "something never before thought or expressed in the history of previous scholarship in Classics" is generally not a criterion, because few undergraduates (and not just they!), however bright, can come up with a new and unique thesis concerning Sophocles' tragedy *Oedipus Tyrannos*, Homer's *Iliad* and *Odyssey*, the career of Alexander the Great, the end of the Roman Republic, or any of the other much-studied and much-discussed topics likely to be covered in undergraduate courses in Classics. In the absence of this kind of intellectual originality, undergraduate essays are poor candidates for traditional publication.^[2]

10

And secondary scholarship in Classics often presents inappropriate models for students. For example, this very interesting article would be of interest to students studying Greek or Roman religion: H. S. Versnel, "The Festival for Bona Dea and the Thesmophoria" [Versnel 1992]. But in 25 very closely argued pages, Versnel refers to 38 works of 20th century scholarship, while including only 16 citations to ancient evidence (and these include several citations to the same passage). Are we to assume that our knowledge of both the Greek rites of the Thesmophorion and the Roman festival of the Bona Dea stands on a mere handful of primary sources? Of course not, and the author adds a footnote at the end telling us that the article in *Greece & Rome* is a "highly abridged" prepublication of a chapter in a then-forthcoming book, which refers "to the ample evidence and argumentation" [Versnel 1992, 55 n1]. But as a publication to be read by students — and why else publish it? — the author's choices in abridgment are regrettable; the current prepublication emphasizes secondary scholarship over primary sources to an overwhelming extent.

11

Secondary scholarship in Classics aimed at a general readership is notorious for failing to give citations to the actual evidence behind its assertions. Paul Cartledge has written a 29-page chapter on Greek religious festivals that spends eight pages talking about the history of the Olympic Games, including a chart listing athletic events and in what year they were added to the Olympic festival, without ever citing an ancient source for this information (by the way, the source is Pausanias 5.8) [Cartledge 1985].^[3] We would argue that non-specialist readers are those readers most in need of access to the fundamental sources, if for no other reason than that they are least likely to have other, better documented, resources at hand.

12

This is a problem, but it holds an opportunity. Undergraduate students, even those in the earliest stages of their exposure to the ancient world, can undertake the too-often ignored task of ascertaining and explaining the primary evidence underlying particular questions. A paper entitled "What are the ancient sources for the Olympic Register?" would be within the ability of almost any student with guidance from a teacher and some dedicated librarians, especially one who has had at least one semester of Greek. Such an assignment would teach techniques of research, would expose the student to various modes of scholarship, and would be relatively straightforward to organize and write. The results would be useful and at least as worthy of publication as any number of specific arguments about the Olympic Register that may certainly stand on a similar list of sources, but which will not bother to cite them explicitly for the benefit of curious readers. As a publication, even a paper entitled "Some ancient sources for the Olympic Register" that defined the parameters of its data set would have recently been extremely helpful to one of the authors of the present paper, since Mahaffy's 1881 article does not cite sources not immediately relevant to his argument (see note 3 above).

13

We have experience enlisting undergraduates as authors of scholarship intended for true publication, essays intended to be read not as demonstration-pieces limited in interest by the context of a particular class but as pieces to inform the public and provide a wide audience with accurate and useful insights. The online encyclopedia *Dēmos: Classical Athenian Democracy*, published by The Stoa, aims to bring the sources for our knowledge of Athenian government in the 5th and 4th centuries to the eyes of a general readership. ^[4] One of the editorial principles of the essays published in *Dēmos* is that every statement must be accompanied by a citation to primary source evidence. There is no claim to exhaustive coverage of sources for a given statement, but at no point does the reader have to take the author's words for granted.

As a further help to readers, *Dēmos* offers short essays about the evidence it cites. Take for example this statement and its cited evidence:

In times of crisis, the Assembly was responsible for voting to mobilize, and the first step seems to have been a vote that the trierarchs (*τριήραρχαι*) get their ships ready for sea . (Dem. 50.4)

“Dem 50.4” will not convey much to most readers outside the discipline of classics or ancient history. Even if the citation is a hyperlink to an online text of that passage, as it is in *Dēmos*, and the reader follows the link, she will see this:

On the twenty-fourth day of the month Metageitnion in the archonship of Molon, when an assembly had been held and tidings of many serious events had been brought before you, you voted that the trierarchs (of whom I was one) should launch their ships. It is not necessary for me to go into details regarding the crisis which had at that time befallen the state; you of yourselves know that Tenos had been seized by Alexander, and its people had been reduced to slavery.

In order to be an informed critic and analyst of any assertion with “Dem. 50.4” as its evidence, a reader must have some understanding of the context of that passage. So *Dēmos* includes, beside its citations, links to short descriptive essays describing the nature of the sources. The one that accompanies this citation describes Demosthenes' speech against Polyclēs; it begins:

(Demosthenes, Against Polycles; see also Oratory) Although this speech comes down to us under the name of Demosthenes, it was almost certainly written by Apollodorus, who was suing Polycles. Apollodorus is trying to recover some expenses that he, Apollodorus, had incurred after his term of duty as trierarch (*τριήραρχος*), that is, after his service as a private citizen responsible for outfitting a warship for service in the Athenian navy. Polycles was the man who was supposed to take over the trierarchy after Apollodorus. Hershhal Pleasant, “Demosthenes 50”, [Pleasant 2003]

This essay, which continues for four more paragraphs, was written by an undergraduate, a classics major in his third year at Furman University. The research involved consisted of his close reading of the speech, with an eye toward explaining the argument and the issues at stake. The essay links to another essay on Greek Oratory generally, which calls attention to the generic problems with these speeches as sources for history. As an assignment for an upper-level seminar on Greek Prose, this piece of writing served to focus the student's reading of the speech, to exercise his command of written prose, and to demonstrate to his teacher his understanding of the complexities of a dispute over a trierarchy. But the product of the assignment is a real publication intended to inform a wider audience. While no different in kind from any number of papers written by students, this work makes a real contribution to knowledge — if not the absolute amount of knowledge in the world, then at least the knowledge of a potentially large number of non-professionals interested in understanding Athenian democracy.

Of course, the example above falls under the much-maligned category of “popularizing” scholarship, works aimed at bringing a topic to the less-informed masses. The malignity with which this kind of writing is often regarded in the professional community of Classicists seems to us to arise from the (supposedly) lighter demands it places on its authors. But this kind of writing has its own exacting demands — a perceptive synthesis, a broad knowledge of the general context and primary sources, and clear, concise expression free of jargon — and these demands align perfectly with those of most assignments given to undergraduate students. Opportunities for having students contribute the fruits

of their research and writing to public forums abound these days — from Wikipedia, whose articles can often profit from educated intervention, to local web-based publications, which can be tightly controlled by their professional editors, and easily discoverable by the world at large, to ongoing, illustrious, and highly regarded web-based projects in collaborative scholarship such as the Suda Online, which has incorporated the work of scores of undergraduate translators, in addition to the millions of words of translation and commentary by professional scholars. [Finkel 2001]

When All the Sources Are Online

If teachers of Classics want to assign students research-based topics for their written work of the kind mentioned above, as opposed to, say, opinion pieces or creative writing, then by the terms of the assignment, the students' analysis must be based on a defined data set of sources (whether primary or secondary or both). To complete the assignment, the student of course needs access to the relevant data, and therefore the teacher must always pay attention to the availability of sources in making such assignments. In today's world of Classics, there are numerous and frequent limitations on the availability of the necessary data, whether primary or secondary. In our fields of Classics and ancient history, only a tiny number of college and university libraries even approach (and none actually achieves) the ideal of possessing and making available to their users the full collection in print form of ancient texts and modern scholarship, which is strongly international and multi-lingual in scope. The costs of acquiring, storing, and lending books and articles are too high and the physical problems of deterioration of printed materials too serious for any library to achieve such a goal. [5]

17

Now, it is certainly not plausible for a college or university library to possess and make available anything near the totality of primary and secondary sources in our field to serve the needs of teachers in creating research-based assignments in Classics, given the limited time and scholarly expertise of undergraduate students. But the problem of the limitations on the accessibility of data remains pertinent nevertheless. No library, for example, can make available sufficient printed copies of even the most commonly available primary texts to allow a significant number of students to work on the same assignment individually. The recourse is, of course, to ask students to buy copies of books or articles themselves if they are not available freely online. This attempted and always partial solution to the problem of the limited accessibility of sources is itself becoming increasingly less feasible as the cost of books continues to rise and students continually experience severe financial pressures from the escalation of the expense of attending college or university in general.

18

The issue of the accessibility of secondary sources in our field is much more pervasive, even if we confine ourselves to modern scholarship in English. Classics and ancient history scholars writing in English produce a large number of increasingly expensive books (scholarly volumes priced at a hundred dollars or more are now common, even the norm). These books are published not just in the United States but also in the United Kingdom, Australia, and indeed other non-English speaking countries (e.g. Denmark, Holland, and India), and this international dispersion of publishing can make acquiring them a challenge sometimes even for those willing to pay the price. The situation regarding scholarly articles is much more complicated and expensive still. Scholars in our fields publish in a wide array of English-language journals published here and abroad. The costs of journals has soared in recent years, and few libraries subscribe to more than a very limited subset of those published around the world. Very few journals in our fields are available electronically, whether by paid subscription or without charge. Reading articles in scholarly journals can require travel to major libraries, use of inter-library loan services, or subscription to expensive electronic databases such as JSTOR (<http://www.jstor.org/>). In short, access to secondary scholarship is often constrained for reasons that are difficult to overcome. For this reason, it is very challenging to make these sources consistently available to students, especially in a group setting, for assignments that are usually due within relatively short intervals of time.

19

The effect of these constraints on the accessibility of source data in our field is to limit the number and type of assignments that can be given to our students with any reasonable expectation that they will be able to complete the work in the time allowed. This fact in turn limits the intellectual goals that we as teachers can set for our students. "When all the sources are online" — the ideal that we envision through the use of electronic technology — is an idea that would change all this. Whether it will actually turn out to be possible to have absolutely all source data online in the future is not the point; rather, the issue is how research-based learning for undergraduates in Classics could change if

20

the presently existing constraints on source data were eliminated as far as possible by making primary and secondary sources accessible to any student who has access to the Internet.

The first change would be that teachers would be able to make assignments based purely on the intellectual value of the work rather than limit their options to those assignments feasible with the limited print resources at hand. Secondly, it would be possible to teach students how to treat primary sources truly as “primary”, meaning to ground arguments and statements in the most foundational evidence extant, while always defining the parameters of the data set being used. Thirdly, students could be taught to examine the evidentiary basis of secondary sources. They would learn the crucial difference between secondary sources that fully and clearly ground their arguments and statements in primary source material and secondary sources that fail to do so. For the former, they could easily access the cited primary sources, so as to control the validity of the interpretation of the primary sources in the secondary source. Exercising this sort of control effectively would naturally require training by experienced teachers who are themselves committed to research-based learning, and it would no doubt take time to learn this skill. But at least the possibility would exist for students to take this major step toward gaining the intellectual power and independence that this approach would support.

21

Admittedly, these sorts of assignments would be onerous work for students and teachers alike, and it is obviously not practical for everyone to track down every primary source for every argument and statement in every case, at least not in reasonable amounts of time. But the very possibility of examining primary sources because they are all available online would change the intellectual climate of undergraduate work. The very effort of examining primary sources and thinking about their possible meanings would bring home the reality that scholarship is always research, in the sense of finding, identifying, interpreting, and presenting evidence. Students could operate as scholars, whether through the process of verifying the plausibility of the presentation of evidence by others, or by presenting arguments and interpretations that are in one way or another original, in all the various senses of that word. In this context, secondary sources that concentrated on making clear presentations of primary evidence would become especially valuable to students because they would model the behavior for this approach.

22

When all the sources are online, then we as teachers of Classics can more effectively engage our undergraduate students as collaborators in research, whether in the collection of, for example, themed primary source collections, or in the interpretation of the countless issues in Classics and ancient history that still await effective investigation based on careful analysis of well-chosen and clearly defined data sets rather than impressionistic assertions. When all the sources are online, the way students and teachers do their work together will change dramatically, and for the better.

23

Another but related point for the near-term future: a concerted and visible effort to put all sources online might have a salutary effect on curbing one of the most frustrating and careless habits of secondary scholarship in our field, one whose unthinking arrogance places onerous and completely unnecessary hurdles in front of students and faculty at the great majority of colleges and universities in their attempts to pursue research-based learning that emphasizes identifying primary sources at the most basic level possible, a research method that requires being able to see the full source of a cited excerpt of text so that its context can be evaluated. That habit is the practice of listing excerpts from “lost” (i.e., no longer directly preserved) ancient works (so-called fragments) and evidence about them or their authors (so-called testimonia) by the arbitrary numbers assigned the fragments and testimonia in modern works collecting the preserved remains of such lost texts. Giving arbitrary numbers to fragments, such as “Fragment 1 of author such-and-such,” is tantamount to asserting that the fragments are somehow free-standing textual entities, when in fact they are for the great majority of cases simply quotations or paraphrases from other, still extant texts. (We leave aside fragments that are indeed fragmentary pieces, found in a partially preserved papyrus or in an inscription.)

24

In truth, of course, the work to which a fragment originally belonged simply no longer exists. It is well and truly lost, unless by some near-miracle a previously unknown copy turns up in a manuscript buried in a library or recovered from a papyrus found in an archaeological excavation. A fragment of an ancient historian or comedian, for example, that is embedded in, say, the text of Athenaeus’ extant work *Sophists at Dinner* is in reality only part of Athenaeus, not a free-standing text. Assigning a number to this excerpt in a modern collection of fragments does not alter that basic fact. To study the fragment in the spirit of research-based inquiry that we envision, it is always necessary to consider this bit of

25

text in the context in the larger text of which it is a part. This being the case, it is astonishing and distressing that modern secondary scholarship in Classics still tends to refer to fragments only by their arbitrarily assigned fragment numbers and often neglects to give in addition the reference to the text to which the fragment in fact belongs, to the true source of the fragment. This habit makes it difficult to track down the true location of a fragment unless one is in the exceedingly fortunate position of personally owning or having immediate access through a major library to the modern collections of fragments in which the actual sources of the fragments are ultimately revealed.

In scholarship on Greek ancient history, to describe the situation in our particular specialty, it remains standard practice to cite fragments from the works of lost ancient Greek historians by the numbers assigned to the fragments by Felix Jacoby in his monumental collection of the remains of “fragmentary ancient Greek historians,” *Die Fragmente der griechischen Historiker* [Jacoby 2004]. Therefore, a student or researcher reading a work of modern scholarship on an ancient Greek historical topic is extremely likely to encounter a reference to this collection

26

Suppose, for instance, that a student in a course on freedom and tyranny in ancient Greece becomes interested in the colorful and controversial career of Dionysius I, the (in ancient Greek terminology) “tyrant” of Syracuse in Sicily in the classical era. There is controversy over his career concerning just how (in modern terms) “tyrannical” Dionysius I really was. To learn more in order to address the question of the nature of the rule of Dionysius I and having been in this case warned away from Wikipedia by her solicitous instructor, our enterprising student begins her inquiry by looking up his name in the standard one-volume print encyclopedia on ancient Greece and Rome commonly recommended by teachers and found in nearly every library in the land, the third edition of the *Oxford Classical Dictionary* [Oxford 1996]. The student reads to the very end of the article on Dionysius I because her teacher has impressed on her the crucial need to try to find the sources on which encyclopedia articles are based. There, on p. 1526, the student finds a reference to “*Timaeus (2)” as a source for the career of the alleged tyrant. Being admirably industrious, the student is aware that the asterisk indicates a cross-reference to another article in the encyclopedia. Turning to the article on Timaeus (pp. 1526-1527), our researcher discovers that Timaeus was “the most important western Greek historian” and that being “a conservative aristocrat, [Timaeus in his work *Sicilian History*] distorted not only the historical picture of Agathocles [another tyrant], who had exiled him (fr. 124), but also of other tyrants, e.g. *Hieron (1) I and Dionysius I (frs. 29, 105).” The article has nowhere explicitly said that Timaeus’ *Sicilian History* is a lost work, but our attentive student deduced this melancholy fact from the earlier comment in the article that Timaeus’ history “is known through 164 fragments, the extensive use of it made by *Diodorus (3) (4-21 for the Sicilian passages), and *Polybius (1)’s criticism in book 12.”

27

Where, then, the inquiring mind of our researcher wants to know, are the fragments to be found? Because her teacher has told her about the situation concerning the publication of fragmentary ancient Greek historians, she realizes that the notation “*FGrH* 566” at the beginning of the bibliography is the key to the mystery of the locations of the fragments. The fragment numbers cited in the article, she realizes, refer to Jacoby’s massive collection. If to verify the accuracy of the encyclopedia article she wants to know what Timaeus actually said in allegedly distorting the picture of Dionysius I, all she has to do is to read fragments nos. 29 and 105 under historian no. 566 in *FGrH*. The problem is that her library does not own a copy of this multi-volume reference work. Why they don’t own it is easy to understand: a quick glance at the web site of its publisher reveals that an institutional license for the CD-ROM version costs US\$3,159.00.

28

If she did by chance have access to *FGrH*, she could easily find out that Timaeus fr. 29 is actually a scholion (a later scholarly comment) on the tenth chapter of the second oration extant from the stylus of the fourth-century BCE Athenian politician Aeschines, while Timaeus fr. 105 is from the second-century CE essayist and biographer Plutarch, in the collection of his essays known as the *Moralia*, at a location (717C) easily found through the canonical reference system applied to this collection. Finding a text of the scholion would remain challenging, as these scholarly comments are themselves available in hard-to-find scarce print editions. Finding the Plutarch passage would be relatively easy, however, as the *Moralia* are available in the commonly available and affordable Loeb Library (which conveniently includes an English translation along with the Greek original). Being able to find only one of the two primary sources that she needs might be frustrating to our motivated researcher, but it is a considerable improvement over not even knowing what the relevant primary sources are, which is the case when one is confronted with references such as “*FGrH* 566 frs. 29 and 105.”

29

At the very least, scholars who subscribe to the value of the ideal of “When all the source are online” would, we hope, never fail to cite the underlying primary source when they need to refer to a fragmentary text. To choose as an example a citation from a book written by one of our organizers, this is the way citation of fragmentary ancient Greek authors should be done: “According to Ion of Chios (*FGrH* 392 fr. 14 = Plut. Kimon 16.8), Kimon ‘inspired the Athenians most of all by calling upon them neither to leave Hellas lame nor to stand by and watch their own city lose its yoke-fellow’ ” [Crane 1996, 112]. Thanks to this form of citation, in which the underlying primary source of a fragment is indicated, readers do not need access to *FGrH* to learn that they can read the fragment of Ion of Chios in an easily found biography by Plutarch.

When authors fail to cite the primary sources for fragmentary works and a researcher has no access to the referenced modern collection of fragments, the only alternative for finding the underlying primary source is to try to identify the fragments by choosing likely words to search for in the *Thesaurus Linguae Graecae* database, which is a cumbersome and non-comprehensive option, even assuming that the researcher has access to the not-inexpensive *TLG*. If in all scholarly publications authors took the trouble of listing all primary sources for all fragments, in the spirit of “When all sources are online,” then students and faculty, regardless of the state of their library, would have a much better chance of pursuing research-based study of fragments in which they were interested. Why? Because it is much more likely that their libraries would own copies of the basic texts from which many of the fragments come than that they would own extremely costly modern collections of fragments such as *FGrH*, or, to give another example lest it appear that *FGrH* is an outlier in price, the collection of fragmentary ancient Greek comedies, *Poetae Comici Graeci*, which costs US\$2699.20.

To conclude this section: a well-publicized effort to reach the time “when all sources are online” might, to be blunt, help shame scholars into doing their utmost to include primary source citation to the greatest degree possible in all their works, whether in the publication itself or in some complementary medium, as, for example, on a web site meant to accompany the main publication (in the spirit of the supplementary “special features” frequently added to films on DVDs these days). With the ideal of “when all sources are online” as an inspiration, we might then hope to avoid situations such as the one in which a recently published book in our field was slammed in a review for its almost total failure to cite primary sources, thereby preventing the reviewer — and future readers, if there are any — from investigating its evidentiary validity (BMCR 2007.09.52). “When all sources are online” can and should be a rallying cry of the kind that the founders of Perseus used twenty years ago when trying to garner external support for work that our discipline at that time condemned and ridiculed: “Democratize access to information!” That is the goal of always thinking, “When all the sources are online.”

From Each According...

Between 1889 and 1907, the Homeric scholar and editor T. W. Allen published a series of articles, each of which amounted to a list of Homeric manuscripts that he had found and identified in the various libraries of Italy:

1. T. W. Allen, “Notes upon Greek Manuscripts in Italian Libraries,” *The Classical Review* 3, no. 1/2 (February 1889): 12-22.
2. T. W. Allen, “Notes on Greek Mss. in Italian Libraries,” *The Classical Review* 3, no. 6 (June 1889): 252-256.
3. T. W. Allen, “Notes on Greek MSS. in Italian Libraries (Continued),” *The Classical Review* 3, no. 8 (October 1889): 345-352.
4. T. W. Allen, “Notes on Greek MSS. in Italian Libraries (Continued),” *The Classical Review* 4, no. 3 (March 1890): 103-105.
5. T. W. Allen, “Manuscripts of the *Iliad* in Rome,” *The Classical Review* 4, no. 7 (July 1890): 289-293.
6. T. W. Allen, “Recent Italian Catalogues of Greek MSS,” *The Classical Review* 10, no. 5 (June 1896): 234-237.
7. T. W. Allen, “Aristarchus and the Modern Vulgate of Homer,” *The Classical Review* 13, no. 9 (December 1899): 429-432.
8. T. W. Allen, “New Homeric Papyri,” *The Classical Review* 14, no. 1 (February 1900): 14-18.
9. T. W. Allen, “Characteristics of the Homeric Vulgate,” *The Classical Review* 16, no. 1 (February 1902): 1-3.

10. T. W. Allen, "New Homeric Papyri," *The Classical Review* 18, no. 3 (April 1904): 147-150.

11. T. W. Allen, "The Greek MSS. in the Ambrosian Library," *The Classical Review* 21, no. 3 (May 1907): 83-85

This impressive list of publications from a most eminent scholar should alone be enough to justify the compiled index as a legitimate genre of publication, but there is no shortage of other examples, such as the invaluable (and ongoing) publication of:

34

John F. Oates, Roger S. Bagnall, Sarah J. Clackson, Alexandra A. O'Brien, Joshua D. Sosin, Terry G. Wilfong, and Klaas A. Worp, *Checklist of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets* [Oates n.d.]

Lists and indices are valuable contributions to scholarship, more valuable perhaps than many tightly woven arguments on matters of interpretation. As more resources become more widely available through open-access publication, and as end-use software applications become increasingly able to draw their data from diverse and distributed sources, lists and indices will play an ever more central role in the universe of knowledge.

This is a genre to which undergraduate researchers can easily contribute. All they need is guidance and access. Guidance should take the form of a professional scholar and teacher describing a need, since this is something an undergraduate will not be likely to identify alone. Access can come in many forms, from the more romantic and exotic, such as Allen's decade-long sojourn among Italian libraries at the end of the 19th century, to the more mundane, such as Oates, *et al.*, combing journals and monograph series for newly published papyri and ostraka. ^[6]

35

In the summer of 2007, as the team from the Biblioteca Nazionale Marciana in Venice, the Center for Hellenic Studies in Washington, DC, and the British Library brought home new, high-resolution digital images of three Homeric manuscripts from the Library of St. Mark, a student in his third year of Greek at Furman University volunteered to produce indices based on this new access to these manuscripts. One of them, the Venetus A [Marcianus Graecus Z. 454 (= 822)] was already well documented; the other two, the Venetus B, much less so. ^[7] James Lanier produced six indices, two for each manuscript. For each, one index consisted of a series of rows, each with two cells. One cell contained a citation to the line of the *Iliad*, written as a CTS URN ^[8]; the other column listed the manuscript's id, the folio, and side:

36

urn:cts:greekLit:tlg0012.tlg001:1.17 msA-12r

urn:cts:greekLit:tlg0012.tlg001:1.18 msA-12r

The other index associated folio-sides of each manuscript with an image of that folio; so for Venetus A, folio 12 recto, there are four images, the full page in natural light and ultraviolet light, and two details:

VA012RN-0013 msA-12r

VA012RND-0892 msA-12r

VA012RUV-0893 msA-12r

VA012RUVD-0894 msA-12r

These indices not only contribute to the online publication of these images (http://chs.harvard.edu/chs/manuscript_images), but serve a variety of other scholarly purposes as well; for instance, from them, we can determine at which points the scribe skipped lines when moving from one folio to another [for example, on the Venetus B, Marcianus Graecus Z. 453 (=821), folio 140 recto ends with *Iliad* 10.530 and 140 verso begins with 10.532]. From here, it is not difficult to imagine countless other rigorous and challenging tasks, requiring knowledge of Greek but within the capabilities of smart undergraduate students, that might promote and enhance scholarship on these images. An index associating regions of each image to discrete passage of text — where, on a given image, can we find the notes to a particular line of the poem? On which folios, and where on the images thereof, are there diagrams?

Projects like this can promote a healthy collaboration between students and their teachers, and can be rewarding and exciting to students in direct proportion to the extent to which the value of such work is celebrated. If all scholarship is

37

expected to take the form of an argument, then an accomplishment like Lanier's becomes menial (but terribly difficult and time-consuming) drudgery. Seen in the context of traditionally honored work such as Allen's catalogues of Homeric manuscripts in Italian libraries, and acknowledged as a vital contribution to the future of the discipline, projects like this can be thrilling.

Shaking the Foundations

The introductory page of the Homer Multitext Library site (<http://chs.harvard.edu>) describes the project thus: "The Homer Multitext project, the first of its kind in Homeric studies, seeks to present the textual transmission of the *Iliad* and *Odyssey* in a historical framework. Such a framework is needed to account for the full reality of a complex medium of oral performance that underwent many changes over a long period of time. These changes, as reflected in the many texts of Homer, need to be understood in their many different historical contexts. The Homer Multitext provides ways to view these contexts both synchronically and diachronically." The Homer Multitext Library (hereafter, HMT), in its fundamental set of data, stands one hundred and fifty years of philological scholarship on its head: While enormous effort on the part of classical philologists has been spent comparing manuscript "variants" in an effort to describe an "original text," the HMT seeks out different texts of the Homeric poems and seeks to preserve, highlight, and understand their very points of difference.

38

The scholarly background and philosophical foundation of the HMT is treated elsewhere.^[9] We are interested in discussing one portion of the work of building this library. In 2006, Professor Case Dué of the University of Houston, one of the editors of the HMT, secured a grant to pay undergraduate research assistants to push forward work on the project. Dué secured the collaboration of colleagues at the College of the Holy Cross and Furman University, and set two teams of undergraduates to work on the texts of the Homeric *Iliad*.

39

These undergraduates, the HMT Fellows, were assigned the task of preparing transcripts of the specific texts of five Byzantine and medieval manuscripts of the *Iliad*. According to Allen's sigla, these are:

40

1. A (= Venetus 454, 10th c.)
2. B (= Venetus 453, 11th c.)
3. T (= British Museum, Burney 86, ad 1059)
4. E3 (= Escorialensis 291, 11th c.)
5. E4 (= Escorialensis 509, 11th c.)

Since it was utterly impossible for the HMT Fellows to work from autopsy of the manuscripts themselves, they secured the so-called *Editio Maior* ("Greater Edition") of T.W. Allen's *Homeri Ilias*. [Allen 1931] This three volume critical edition of the *Iliad*, in its critical apparatus, notes all significant manuscript variants, albeit in a highly compressed format.

The HMT Fellows divided the books of the *Iliad* between the two teams, and set to work. At Furman University, the students photocopied Allen's edition and put the photocopies into a 3-ringed binder; they then interleaved each page of Allen with a lined page for notes. They then began with a close reading of Allen's apparatus, looking for sigla referring to variants in any of the five manuscripts with which they were concerned. These references, when they found them, they marked using colored highlighting pens: pink for B, yellow for T, green for E3, blue for E4, orange for A.

41

Where they found references in the apparatus the noted places where the text of a certain manuscript differs from Allen's edited text, they noted the difference on the page of notes. The matter was not always straightforward. Allen's apparatus will sometimes report a variant reading as being "vulg.", for "vulgate", or as appearing in "codd.", for "the (Byzantine and medieval) codices." Variants may appear as corrected text on a manuscript, and be recorded by Allen as "B corr.". The HMT Fellows had to master this cryptic discourse.

42

The apparatus is compressed, and the compression is "lossy" at times. For example, for Book 1, line 93, Allen's apparatus reads, in part, as follows: "93 ... οὐτὰρ A: οὐτ' ἄρ' (ἄρ) vulg." In other words, Manuscript A has οὐτὰρ, while the "medieval vulgate" has either οὐτ' ἄρ' or οὐτ' ἄρ. Allen has lumped together a whole category of manuscripts, without differentiating which have οὐτ' ἄρ' and which have οὐτ' ἄρ, because he does not think the difference is

43

significant enough to preserve, given the economic realities he faced. But anyone interested in a serious study of variant texts among Byzantine and medieval manuscripts might well be very interested in where we see an acute accent and an apostrophe, and where we see a grave accent and no apostrophe. That data is lost, as far as we readers are concerned, although T.W. Allen had that information at his disposal.

So the HMT Fellows have been careful to characterize their work as producing facsimiles of A, B, T, E3, and E4 according to the apparatus of Allen's editio maior. Their transcriptions will necessarily fall short of capturing perfectly the texts of the manuscripts, but should nevertheless serve well as the basis for initial comparisons, and as drafts for further revision, as future scholars gain access to the manuscripts or good images of them.

Having marked the variants in the apparatus and written them down on the facing pages of notes, the HMT fellows entered those changes into their working-copies of the *Iliad*. They began with five identical electronic texts of the *Iliad*, the text of Allen's edition, taken from the *Thesaurus Linguae Graecae* and edited with a bare subset of the Text Encoding Initiative's document type definition. [Sperberg-McQueen 2001] The Fellows edited each of these according to the variants found in Allen's apparatus for one manuscript. Where the text of a manuscript was simply different from Allen's, they made the change in that manuscript's XML file with no comment or further markup. Where Allen noted correcting hands or other editorial intervention in the original manuscript, the Fellows added the text and markup, following the EpiDoc guidelines wherever possible [Elliott].

We will present one example of their work, which should serve both to illustrate the importance of this approach to the Homeric texts and to highlight the depth and rigor of the scholarly contribution that these undergraduate research fellows are making. The example begins with Allen's apparatus at the entry for *Iliad* 1.97. At this point in the poem, the seer Calchas is explaining to the Greeks why Apollo has afflicted them with a plague. He says that Apollo is angry over how the Greek king Agamemnon treated one of Apollo's priests, specifically, that Agamemnon would not return the priest's captured daughter, even in exchange for a generous ransom. Line 97, in Allen's edited reads:

“οὐδ’ ὄ γε πρὶν Δαναοῖσιν ἀεικέα λοιγὸν ἀπώσει”

“[Apollo] will not drive off the loathsome pestilence from the Danaans until...”

In the apparatus, however, we see this long, difficult note:

“97 οὕτως Ἀρίσταρχος· καὶ ἡ Μασσαλιτικὴ καὶ ἡ Ῥιανοῦ [καὶ σχεδὸν πᾶσαι add. Li T] τὸν αὐτὸν ἔχει τρόπον· ἔοικε οὖν ἡ ἑτέρα Ζηνοδότου εἶναι ἢ οὐδ’ ὄ γε πρὶν λοιμοῖο βαρείας χεῖρας ἀφέξει S A T : hanc codd. (λιμοῖο Ca2 O2 P3 Pal(2) R7 U6 V11: ἐφέξει C V16)” Freed from any constraints of space, we may translate and expand the text and note thus:

“[Apollo] will not drive off the loathsome pestilence from the Danaans until...” — a marginal note, or scholion, on Manuscript “A” and another on Manuscript “T” both have this to say about the line just quoted: The 2nd century BCE scholar Aristarchus has the line this way, as just quoted, and so do both the version of the *Iliad* from Massalia and the edition made by the 2nd century BCE scholar Rhianus (and almost all the others. This last phrase is added by a note that appears on the manuscript “Li” and is echoed on the manuscript “T”). And so it seems that the edition of Zenodotus is the different one, because it has this line: “[Apollo] will not lift his heavy hand of plague until...”: and this last version is what all the medieval manuscripts have (with a certain number spelling the word for “plague” differently, and a couple having a slightly different version of the verb).

In yet other words, there are two utterly different versions of this line floating around the ancient and medieval world. Both are Greek; both are poetry; both make sense. Marginal notes on various medieval manuscripts are our evidence for these two lines – notes that preserve the contents of editions and commentaries on Homer that date back to the library at Alexandria.

One version appeared, evidently, in the edition of Zenodotus, the earliest Alexandrian scholar of Homer, in the 3rd century BCE This same line appears in every medieval bound manuscript (that is what the abbreviation “codd.” means, “codices”).

Another version appeared in the editions of Aristarchus of Samothrace, the 2nd century BCE librarian of Alexandria who was the greatest ancient scholar of Homer. This version also appeared in the city-edition of the *Iliad* from the city of Massalia, what is now Marseilles. And the edition of Rhianus (2nd century BCE) also contained this line. [Note: the actual scholion says, “ Δαναοῖσιν ἀεικέα λοιγὸν ἀπώσει. ” οὕτως αἱ Ἀριστάρχου. The plural definite article *αἱ* suggests that the two “editions” (*αἱ ἐκδόσεις*) compiled by Aristarchus included this reading.] 54

So, the 3rd century BCE editor of Homer and all the medieval manuscript witnesses say X, while two 2nd century BCE editors and a “city edition” say Y. 55

Allen picks Y, relegating X to the rhetorical “basement” of his apparatus. The Homer Multitext Fellows were faced with no such choice. They “restored” the proper text into its place on each of the manuscripts they are transcribing; the scholiastic texts, which preserve the other valuable reading, will be transcribed independently, with comparison of this “horizontal variant” made accessible by means of end-user applications that draw on all of this data. 56

The editors of the HMT are, of course, deeply interested in the precise contents of the *ekdoseis*, or editions, of Aristarchus, but they are specifically interested in how that scholar’s editions differ from the medieval vulgate, since such a “drift” of the language of the poem over a millennium supports the notion of an ongoing tradition of multiformity. T.W. Allen’s choice — a choice determined by the conventions of the traditional critical edition — obscures that difference. So, in their XML transcriptions of medieval manuscripts, the work of the HMT Fellows will highlight a problem in the history of the Homeric text, thus contributing a point of conversation and analysis to the ongoing study of the *Iliad*. 57

The work of assembling transcriptions from Allen’s apparatus is a valuable start to reproducing specific manuscripts as XML files. The next step would be to remove the need to have Allen mediate between our research and its objects. After May of 2007, the HMT Fellows had access to preliminary versions of digital images of the A and B manuscripts, taken at the Biblioteca Nazionale Marciana. These they found helpful in decyphering some of Allen’s more cryptic notations regarding those manuscripts. And they found some places where Allen’s apparatus was not entirely precise. For example, at 11.525, Allen’s text reads: 58

“Τρῶες ὀρίνονται ἐπιμιξ ἵπποι τε καὶ αὐτοί.” 59

“The Trojans were driven in confusion, both their horses and themselves.” 60

Allen’s apparatus notes that Manuscript A has *αὐτοί* in ras., that is, written over an erasure; other texts, according to the apparatus, have “both the horses and men” (*καὶ ἄνδρες*), or “both the horses and others” (*καὶ ἄλλοι*). This notice “in ras.” moved the HMT fellows to look at the image of folio 147-verso of the Venetus A. Here they saw that the words *τε καὶ αὐτοί*, “and themselves” were indeed written over the erasure, but that the erasure was in fact almost three times as long as that phrase, far longer than necessary if the erased text were either of the alternative texts given in Allen’s apparatus. Allen, too, had noted only the last word, *αὐτοί*, as having been written over the erasure, which was clearly not the case. So whatever Manuscript A originally had, it replaced *τε καὶ αὐτοί* and contained many more letters than that phrase. Our undergraduate researchers noted that fact and recorded it in their XML transcription. This information, now discoverable and machine-readable, will be new information to anyone who has relied on the century-old Comparetti Facsimile of the manuscript, which, as T.W. Allen says, “imperfectly renders erasures and corrections.” [Comparetti 1901], [Allen 1931, 11] 61

The task of reading and transcribing the texts of specific manuscripts is skilled work, but easily within the abilities of good, advanced students of Greek, once they have some familiarity with the language of Homeric poetry, and have access to some reference materials on Byzantine palaeography. That this work is valuable scholarship needs little argument, and certainly is not limited to advocates for any particular school of interpretation, or to devotees of technological innovation in humanities. T.W. Allen, in the closing paragraph of his *editio maior* of the *Iliad*, that most imposing monument of traditional scholarship, unintentionally presents an argument for a project precisely like that of the Homer Multitext Fellows. He has listed a number of categories of textual phenomena that he has intentionally ignored in compiling his apparatus criticus; these include things like mute iota, *vu ephelcysticon* (that is, the letter “n” added to the end of a word for the sake of euphony), accented versus unaccented *τε* and *ῥα*, and questions of 62

accentuation on words such as ἄρ, ἐμε, μιν, νυ, οί, τιν', τις, μευ, σευ, θην, πως, που, πη, accentuation on Aeolisms καγ, καδ, κακ, and καμ, and accentuation on the various forms of the verbs εἰμί and φημί. [Allen 1931, 272, 226–247]. He explains these omissions thus:

Various reasons made these omissions necessary: to lighten the apparatus, which would have swelled to almost unprintable proportions; the fact that the collations, though considerable, were not exhaustive and therefore did not admit of statistical conclusions; and that the phenomena belong to the history of medieval Greek accentuation and the usage of Byzantine scribes rather than to the Homeric texts. On these subjects further I have paid little attention to the evidence of quotations, whether in scholia, which being divorced from their context are peculiarly at the mercy of copyists, or of authors, especially in the older editions where the editors may be suspected of adding conventional prosody. [Allen 1931, 272]

Allen limited his apparatus due to the constraints of the printed text, lest it become “unprintable.” His scholarship was further limited by the fact that he was its sole author; he could not do exhaustive collation (by himself), and had to rely on secondary scholarship (earlier editions) for manuscripts that he did not collate himself. Allen’s apparatus is, therefore, represents a least-common-denominator, limited by the most careless of the earlier editors on whose work he relied. He admits that the omitted information would be the subject for statistical analysis, were it collected in a systematic way. But his most regrettable criterion for omission is that of “interest” — he excluded material that he deemed of interest only for Byzantine palaeography and bibliography, and of interest only to scholars of medieval Greek accentuation.

A humanist scholarship that is unwilling to divide itself along strict (but strictly arbitrary) lines — where the “Homeric text” of a manuscript is somehow divorced from questions of “the usage of Byzantine scribes” and “the history of medieval Greek accentuation” — should take note of Allen’s list of obstacles and work to overcome them. The answer, we think, is clear: model of collaborative research, the products of which are electronic texts (not required to be “printable”) in transcription (rather than collation), involving scholars who may be senior professors or juniors at a liberal arts college, working with high-quality images of the primary texts, the papyri, the Byzantine and medieval manuscripts.

The rewards of such work are manifold. The results would be subject to statistical analysis, and any other kind of analysis that interested readers might envision, even if they are asking questions that have never occurred to the editors of these electronic texts. The undergraduate members of such a team have the experience of engaging without mediation the very stuff of philology, the most ancient witnesses to a literary tradition; the task is within their abilities while being extremely challenging, and they know that they are doing real work of real value, not merely exercising an arbitrary set of skills before the judging eyes of a single teacher. The faculty of Furman University and the College of the Holy Cross who have worked with the Homer Multitext Fellows as they meticulously transcribe these texts and explore the problems that those texts reveal have witnessed a degree of dedication and excitement that turns the glowing rhetoric of undergraduate research from a marketing pitch to an honest appraisal.

Conclusion

Because technology has lowered the economic barriers to academic publishing — a reality that too few publishing Classicists have fully understood — it is easy to guide student - writers into becoming student-authors. We who teach Classics can add to our pedagogy the technological tools of the information economy, thus arming ourselves against charges of impracticality and at the same time possibly attracting students whose interests lie outside the Classics. And as digital libraries begin to inter-operate, they breathe new life into largely disregarded scholarly genres and invent entirely new ones — geographic information systems, computational linguistics, and so forth. We have presented some very specific examples of the kind of work, and the kind of thinking, that we have found to be fruitful in encouraging undergraduates in their research. We believe in scholarship; we believe that scholarship should be rigorous; we believe that scholarship demands precision and dedication; but we also believe that scholarship can assume many useful forms, and we are convinced that scholarship, if done properly, should not seem like the kind of burdensome task the ancient Greeks called a *ponos*. In the community of professional scholars, each must find for her- or himself the

63

64

65

motivations for doing the reading, thinking, and typing necessary to produce an article, a monograph, an edition. But our students have not yet made any such commitment, and many of them never will, preferring to find their lives outside of the academy. But even to those students, and perhaps especially to them, we have an obligation, to help them experience scholarship that is not a *ponos*. It is our experience that the closer we can bring our students to the real sources of knowledge — the ancient texts, the archaeological remains, the papyri and parchment — and the real reward of scholarship — the joy of producing a piece of work that one knows will be discovered and read with interest and pleasure by people we may never meet — the closer we can bring students to the experience of being true scholars, working beside other scholars, the more enthusiasm we find. Rather than students writing five-paragraph essays under constant suspicion of plagiarism in order to win the dubious prize of a high grade among already inflated grades, we prefer to see a student reading a speech in Greek and summarizing it for a non-Greek-reading audience, a student compiling perhaps for the first time the primary source texts for a problem in ancient history, a student paging through an 11th century manuscript and noting the text that appears on each folio, a student correcting the text-criticism of one of the great classicists of the 20th century. Seeing these makes our teaching, like our scholarship, seem less a *ponos* and more a joy.

Notes

[1] The topic of undergraduate research, and in particular undergraduate research in the humanities, is the topic of enthusiastic study and ongoing publication. For some recent discussions whose scope is perhaps broader than the present subjective account, see, among others: [Hu 2007], [Ishiyama 2007], [Kinkead 2003], [Lopatto 2006], [Malachowski 2003], [Merkel 2003], [Roger 2003], [Wilson 2003].

[2] For two recent explorations of challenges and possibilities in undergraduate research and writing, see [Grobman 2007]; [Robillard 2006]

[3] Cartledge based his version of the “Olympic Register,” we suppose, on a century-old article: J. P. Mahaffy, “On the Authenticity of the Olympian Register”, [Mahaffy 1881]. This particular problem of history and its sources has been ameliorated by the publication, in 2007 of Paul Christesen, *Olympic Victor Lists and Ancient Greek History*, [Christesen 2007].

[4] For a more lengthy description of this project, see [Blackwell 2004].

[5] For discussions of online sources, undergraduate researchers, history, and historiography, see Hanlon, Christopher. 2005. “History on the Cheap: Using the Online Archive to Make Historicists out of Undergrads.” [Hanlon 2005] Willison, John, and Kerry O'Regan. 2007. “Commonly known, commonly not known, totally unknown: a framework for students becoming researchers”. [Willison 2007]

[6] We are certainly not alone in advocating in finding fruitful areas for collaboration between students and faculty in the area of undergraduate research in humanist areas: [Maddormon 2004], [Norcia 2008], [Stephens 2005], [Thomas 2008].

[7] Marcius Graecus Z. 453 (= 821)] and what T.W. Allen identified in his edition of the *Iliad* as U4 [Marcius Graecus Z. 458 (= 841).

[8] CTS URN: A “Canonical Text Services Universal Resource Name, a concise method of identifying with precision a particular passage of a particular text”; see chs75.harvard.edu/diginc

[9] See <http://chs.harvard.edu>, and the chapter in [Nagy 2004].

Works Cited

Allen 1889a Allen, Thomas W. “Notes upon Greek Manuscripts in Italian Libraries”. *The Classical Review* 3: 1/2 (February 1889), pp. 12-22.

Allen 1889b Allen, Thomas W. “Notes on Greek Mss. in Italian Libraries”. *The Classical Review* 3: 6 (June 1889), pp. 252-256.

Allen 1889c Allen, Thomas W. “Notes on Greek MSS. in Italian Libraries (Continued)”. *The Classical Review* 3: 8 (October 1889), pp. 345-352.

Allen 1890a Allen, Thomas W. “Notes on Greek MSS. in Italian Libraries (Continued)”. *The Classical Review* 4: 3 (March 1890), pp. 103-105.

Allen 1890b Allen, Thomas W. “Manuscripts of the Iliad in Rome”. *The Classical Review* 4: 7 (July 1890), pp. 289-293.

- Allen 1896** Allen, Thomas W. "Recent Italian Catalogues of Greek MSS". *The Classical Review* 10: 5 (June 1896), pp. 234-237.
- Allen 1899** Allen, Thomas W. "Aristarchus and the Modern Vulgate of Homer". *The Classical Review* 13: 9 (December 1899), pp. 429-432.
- Allen 1900** Allen, Thomas W. "New Homeric Papyri". *The Classical Review* 14: 1 (February 1900), pp. 14-18.
- Allen 1902** Allen, Thomas W. "Characteristics of the Homeric Vulgate". *The Classical Review* 16: 1 (February 1902), pp. 1-3.
- Allen 1904** Allen, Thomas W. "New Homeric Papyri". *The Classical Review* 18: 3 (April 1904), pp. 147-150.
- Allen 1907** Allen, Thomas W. "The Greek MSS. in the Ambrosian Library". *The Classical Review* 21: 3 (April 1907), pp. 83-85.
- Allen 1931** Allen, Thomas W. *Homeri Ilias*. Oxford: Clarendon, 1931.
- Blackwell 2004** Blackwell, Christopher. "Opening a Door on Athenian Democracy". *The New England Classical Journal* 31: 1 (February 2004), pp. 23-32.
- Cartledge 1985** Cartledge, Paul. "Greek Religious Festivals". In P.E. Easterling and J.V. Muir, *Greek Religion and Society*. Cambridge: Cambridge University Press, 1985. pp. 98-127.
- Christesen 2007** Christesen, Paul. *Olympic Victor Lists and Ancient Greek History*. Cambridge: Cambridge University Press, 2007.
- Comparetti 1901** Comparetti, Domenico, ed. *Homeri Ilias cum Scholiis*. A. W. Sijthoff, 1901.
- Crane 1996** Crane, Gregory. *The Blinded Eye: Thucydides and the New Written Word*. Lanham, MD: Rowman and Littlefield, 1996.
- Elliott** Elliott T., et al. *EpiDoc: Epigraphic Documents in TEI XML*. <http://epidoc.sourceforge.net>.
- Finkel 2001** Finkel, R., W. Hutton, P. Rourke, R. Scaife and E. Vandiver, eds. *The Suda Online*. The Stoa: a consortium for electronic publication in the humanities, 2001. <http://www.stoa.org/>.
- Grobman 2007** Grobman, Laurie. "Affirming the Independent Researcher Model: Undergraduate Research in the Humanities". *CUR Quarterly* 28: 1 (2007).
- Hanlon 2005** Hanlon Christopher. "History on the Cheap: Using the Online Archive to Make Historicists out of Undergrads". *Pedagogy* 5: 1 (January 1, 2005), pp. 97-101.
- Hu 2007** Hu, Shouping, G. Kuh and J. Gayles. "Engaging Undergraduate Students in Research Activities: Are Research Universities Doing a Better Job?". *Innovative Higher Education* 32: 3 (24 October 2007), pp. 167-177.
- Ishiyama 2007** Ishiyama, J. "Does Early Participation in Undergraduate Research Benefit Social Science and Humanities Students?". *College Student Journal* 36: 3 (2002), pp. 380-387.
- Jacoby 2004** Warning: Biblio formatting not applied. Jacoby Felix. *Die Fragmente der griechischen Historiker*. Leiden and Boston. E.J. Brill. 2004.
- Kinkead 2003** Kinkead, J. "Learning Through Inquiry: An Overview of Undergraduate Research". *New Directions for Teaching and Learning* 93 (2003), pp. 5-18.
- Lopatto 2006** Lopatto, D. "Undergraduate research as a catalyst for liberal learning". *Peer Review* 22: 1 (2006), pp. 22-26.
- Maddorman 2004** Maddorman, T. "Undergraduate Research in the Humanities: Three Collaborative Approaches". *CUR Quarterly* 25: 1 (2004), pp. 39-42.
- Mahaffy 1881** Mahaffy, J.P. "On the Authenticity of the Olympian Register". *The Journal of Hellenic Studies* 2 (1881), pp. 164-178.
- Mahoney 2003** Mahoney, A., and R. Scaife. *The Stoa: a consortium for electronic publication in the humanitie*. 31 January 2003. <http://www.stoa.org/>.
- Malachowski 2003** Malachowski, M. "A Research-Across-the-Curriculum Movement". *New Directions for Teaching and Learning* 93 (2003), pp. 55-68.

- Merkel 2003** Merkel, C. "New Directions for Teaching and Learning". *New Directions for Teaching and Learning* 93 (2003), pp. 39-54.
- Nagy 2004** Nagy, G. "The Homeric Text and Problems of Multiformality". In G. Nagy, *Homer's Text and Language*. University of Illinois Press, 2004. pp. 25-39.
- Norcia 2008** Norcia, M. "Out of the Ivory Tower Endlessly Rocking: Collaborating across Disciplines and Professions to Promote Student Learning in the Digital Archive". *Pedagogy* 8: 1 (2008), pp. 91-114.
- Oates n.d.** Oates, J.F., R.S. Bagnall, S.J. Clackson, A.A. O'Brien, J.D. Sosin, T.G. Wilfong and K.A. Worp. *Checklist of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets*. <http://scriptorium.lib.duke.edu/papyrus/texts/clist.html>.
- Oxford 1996** Hornblower, S., and A. Spawforth. *Oxford Classical Dictionary*. Oxford: Oxford University Press, 1996.
- Pleasant 2003** Pleasant, Hershah. *Demosthenes 50. Dēmos: Classical Athenian Democracy. The Stoa: a consortium for electronic publication in the humanitie*. Edited by A. Mahoney and R. Scaife. 31 January 2003. <http://www.stoa.org/>.
- Robillard 2006** Robillard, AE. "Young Scholars Affecting Composition: A Challenge to Disciplinary Citation Practices". *College English* 68: 3 (2006), p. 18.
- Roger 2003** Roger, D. "Surviving the "Culture Shock" of Undergraduate Research in the Humanities". *CUR Quarterly* 23: 3 (March 2003), pp. 132-135.
- Sperberg-McQueen 2001** Sperberg-McQueen, C. M., and L. Burnard, eds. *TEI P4: Guidelines for Electronic Text Encoding and Interchange*. Oxford, Providence, Charlottesville, Bergen: Text Encoding Initiative Consortium. XML Version, 2001.
- Stephens 2005** Stephens, R., and J. Thumma. "Faculty-Undergraduate Collaboration in Digital History at a Public Research University". *History Teacher* 38: 4 (2005).
- Thomas 2008** Thomas, E., and D. Gillespie. "Weaving Together Undergraduate Research, Mentoring of Junior Faculty, and Assessment: The Case of an Interdisciplinary Program". *Innovative Higher Education* 33: 1 (1 June 2008), pp. 29-38.
- Versnel 1992** Versnel, H.S. "The Festival for Bona Dea and the Thesmophoria". *Greece & Rome* 39: 1 (April 1992), pp. 31-55.
- Willison 2007** Willison, J., and K. O'Regan. "Commonly known, commonly not known, totally unknown: a framework for students becoming researchers". *Higher Education Research & Development* 26: 4 (2007), pp. 393-409.
- Wilson 2003** Wilson, R. "Researching "Undergraduate Research" in the Humanities". *Modern Language Studies* 33: 1/2 (2003), pp. 74-79.



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