Praxis, through Prisms:
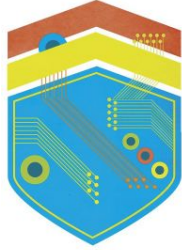## A Digital Boot Camp for Grad Students in the Humanities

image: Chad Hagen for The Chronicle

by Bethany Nowviskie

From any angle, it's easy to see: this is no ordinary humanities seminar.

Our graduate students' first task was not to consult a pre-made syllabus, but to draft their own charter—a document to guide our working relationships and govern the ways the scholarship we'd produce together should move outward, into the wider world. Two semesters later, they won't hand in typical papers or jotted bluebooks, nor will their final tasks feel imbued with finality at all. A budding Victorianist will revise a line or two of code and commit it to an open-source repository. A student of medieval architecture will nervously scan our social-media streams: Is there a question to be answered? A problem we've failed to address? Their peers will push buttons that publish, to an audience of thousands, a few more reflections and designs, or execute commands to deploy our joint creation to the Web. Then we'll all stand up—students, librarians, and software developers alike—and welcome the next team through the door.

Last August, on a shoestring budget, the faculty and staff of the Scholars' Lab—the digital humanities center I direct at the University of Virginia Library—launched the Praxis Program. Praxis, which has since garnered two-year support from the Andrew W. Mellon Foundation, is a digital-methods workshop and competitively awarded, yearlong, paid apprenticeship, designed to train emerging scholars and tech-savvy knowledge workers in the humanities.

Our goal is to provide a small team of graduate students with soup-to-nuts training in software development for humanities research and exchange. Along the way, they will gain hands-on experience in knowledge representation and design: the most fundamental, formal activities underlying the production of digital scholarship. It's pretty geeky stuff—but our students also exercise so-called softer skills. They learn to collaborate effectively across disciplinary borders and class lines in the academy, and with practitioners from profoundly different intellectual traditions. They plan and manage projects with aggressive timelines, complex moving parts, and personnel who are also peers (including not only fellow students, but librarians and information-technology professionals). And they hone their ability to communicate—to scholars, to potential supporters, and to a broad and public audience.

One challenge facing our students also confronts others new to the rapidly expanding digital humanities (in fact a 60-year-old community of practice until recently called it "humanities computing"). How can scholars who have up to now been selected and rewarded almost exclusively for their facility in *argument* engage effectively with the most audacious contribution of the field? The great project of humanities computing is the development of a hermeneutic—a concept and practice of interpretation—parallel to that of the dominant, postwar, theory-driven humanities: a way of performing cultural and aesthetic criticism less through solitary points of view expressed in language, and more in team-based acts of building.

Products of digital work in the humanities are evident all around us, but the arguments that they instantiate remain deceptively tacit to those who have not learned to appreciate their sites of discourse, their languages and protocols. Humanities-computing arguments are made collectively and tested iteratively. The field advances through craft and construction: the fashioning and refashioning of digital architectures and artifacts. It is little wonder that bibliographers, archivists and textual critics, and archaeologists and other specialists in material culture were the first to grasp the implications of digital technology for humanities scholarship. Methodological, embodied, and quiet knowledge transfer lies at the heart of our work, which can remain frustratingly illegible to scholars whose experience rests more in verbal exchange.

The Praxis Program joins another offering of the Scholars' Lab: our Graduate Fellowships in the Digital Humanities, through which we have financed, advised, and provided technical training to nearly two dozen emerging scholars in a range of disciplines over the past five years. Like Praxis, these fellowships are designed to foster a vibrant and intellectually diverse digital-humanities community—offering, well, *fellowship* alongside consultation and cash. But they are intended for late-stage dissertation writers and are awarded on the traditional model of individual merit. This means that, while highly innovative, our grad fellows' digital projects augment private research and (unlike the shared work of the Praxis Program) are invariably *theirs,* alone. Only rarely does a project see the light of day before it has been shaped and polished and positioned perfectly, like a hoarded, highly valued gem.

Such solitary sparkle comes not by choice alone, nor is it a reflection of the ethos of the Scholars' Lab. Our fellowship winners are motivated to align their digital productions with time-honored publishing practices from print scholarship and with longstanding customs in the evaluation of humanities scholars *as individuals*, for the granting of degrees, tenure, and promotion in rank. Most of us who work full-time in the Scholars' Lab received our own graduate training in this tradition. We value it, just as we value the solo contributions of the humanities faculty our fellows emulate. But it feels increasingly alien to the collaborative and publicly iterative modes in which we and our colleagues at other digital centers now operate to produce and disseminate knowledge.

The Praxis Program, on the other hand, admits six students at a time. They form a single, interdisciplinary team with a variety of complementary strengths and diverse perspectives. While also winners of Scholars' Lab fellowships, these humanities students are much more likely to be at early stages in their graduate careers. They join us not to refine a private interpretation or instantiate a predetermined argument in digital form, but to become co-creators and systems-builders. They seek a kind of pragmatic digital-methods training and shared, journeyman learning experience difficult to find in traditional graduate coursework. We hope they will leave better prepared to teach and do research as faculty members who are producers—not just critics—of new media. And we expect some of them will blaze trails off the tenure track, as knowledge-workers in alternative academic careers (the fostering of which provides higher education's

best chance to keep a generation of passionate humanities scholars productively employed in arts, letters, and cultural institutions).

It is fitting that our first Praxis team christened its yearlong practicum project "Prism." Together, we are building a Web-based tool for collective annotation, done by color-coding passages from literary and historical documents. In its initial form, Prism's texts will range from Jefferson to Joyce, with stops at Edgar Allan Poe and Dr. Seuss along the way. Users of the tool share a painterly palette with which they can highlight a common set of documents, offering their own interpretations according to constrained, shared vocabularies.

This is not a device for rich, individual exegesis. Its expressive power becomes evident only at scale, when the individual markings of many readers—students, scholars, an interested public—are compiled, analyzed, and visualized, generating spectra of similarity and difference. In this, our students mount a fundamental challenge to notions of "crowdsourcing" as they have become prevalent in the digital humanities: They treat the crowd not as a source of labor (for, say, transcription of hard-to-read manuscripts or correction of errors in mass-digitized books), but as a community of readers, whose divergent and congruent interpretations of texts may themselves be read computationally.

Our Praxis team is part of that community. We develop and reveal our own arguments about humanities interpretation in the construction of Prism itself. In other words, we are consciously fashioning an instrument through which new observations and interpretations will be made. The software is on track for a beta release at the end of this academic year. Next year's team will likely extend the tool, adding more provocative visualizations and using its crowdsourced data to mine large textual corpora, like Google Books. In this way, we can leverage human intelligence to refine algorithms that permit us to read computationally, at a distance. This is not a replacement of close reading, but rather a new employment of it—for the purpose of drawing scholarly attention to neglected texts and eliciting interpretations.

Like the scholarly tool we are building, our work in the Praxis Program is public and iterative, an exercise played out individually and collectively. There are no polished jewels here: Our students are cobbling together a framework for future scholarship even as the warts-and-all mandate of our charter drives them

to fashion, for themselves, hybrid scholarly identities as newly refractive and contextual as anything on the Web. The digital-humanities community values process as much as product, so we're sharing everything as we go: the software we're building, our students' reflections on the experience, and our curriculum as this year's practicum shapes it, at praxis.scholarslab.org. Also under way, with support from UVa's Scholarly Communication Institute, is the creation of an international Praxis Network. This effort will spotlight like-minded departmental and extracurricular digital-humanities apprenticeship programs, willing to share materials and articulate possible institutional models for training the next generation of humanities scholars.

None of these model programs will be set out as gems to admire, but rather as lenses to position—providing outlooks on a field always prismatic and a little blurred.

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