Digital Studies and Methods: Seminar

Benjamin Miller DSAM 3000, Class Number 31842 / HAA 2045 (CN 29870)

email: millerb@pitt.edu Fall 2023, Monday 9:00–11:50am

office: Cathedral of Learning 617-N class location: CL 512

office hours: drop-ins TuTh 1:00-2:00pm, or by appointment

All this information and more will be posted on our website,

<https://benmiller314.github.io/dsam2023fall/>.   
Please check there for the most up-to-date versions!

# Course Description

The DSAM Seminar is designed to prepare students to undertake independent digital projects in scholarly or creative modes. Each week, we'll divide time between reflective discussion informed by assigned theoretical readings, addressing the relationships between digital computing and the humanities and allied social sciences, and hands-on practice with digital tools and platforms. In addition to smaller skill-building exercises, students will iteratively develop a more sustained project of their own choosing – with feedback from the professor and peers to help keep the scope both tractable and compelling. No prior experience in digital research is necessary.

This course serves as one of the core requirements for the Digital Studies and Methods (DSAM) Graduate Certificate.

# Course Outcomes and Responsibilities

**Students** in this course can expect to…

* respond orally and in writing to the ideas and strategies in both fellow students’ and assigned texts
* practice offering and receiving feedback on your work, examining *process* as well as products
* appreciate the human subjectivity involved in parsing real-world phenomena to make them tractable by computers
* develop basic programming skills, even if you’ve never programmed before
* propose, design, iterate, and present an original investigation in your own scholarly domain whose construction relies on the use of digital technologies
* reflect frequently, including in writing, on the larger implications of the theories and tools we study as a class

Students in this course can expect **their professor** to…

* respond orally and in writing to the ideas and writing strategies in both students’ and assigned texts
* provide example arguments of the kind he asks students to produce, and lead discussion of their organizational and rhetorical features
* provide theoretical frameworks for understanding and/or generating questions about disciplinarity and data
* discuss rationales for what each exercise is designed to do, and why it ought to work
* encourage students to retry earlier exercises in later contexts, to support the development of expertise
* share and reflect on his own work, subject to the same principles of critical generosity and generous criticality that will govern peer review in the class
* encourage collaboration in both formal and informal learning projects throughout the course
* build flexibility into per-class and semester-long schedules, with extension activities and fallback options, to be responsive to the different speeds and competing pressures students bring to bear on the work of the course

# Required Reading

All assigned texts will be available electronically, whether as open educational resources, through the library’s database access, or in scanned copies shared via Canvas. Please do not redistribute scanned texts beyond the class, so as to honor the fair use of these materials. You are certainly also welcome to obtain print copies if you prefer, especially if you want more context for excerpts or less eye strain from longer books.

Given the time constraints of the semester, we will not discuss any of these books in their entirety. However, we will read from the following books at some length, and they are well worth having in your collection.

D’Ignazio, Catherine, and Lauren F. Klein. *Data Feminism*. Cambridge, MA: MIT Press, 2020. <http://ebookcentral.proquest.com/lib/pitt-ebooks/detail.action?docID=6120950>.   
  
A cogent and compelling series of arguments about ethical questions surrounding the nature and use of data, especially with regard to people and power. Pointing out that many of the “narratives around big data and data science are overwhelmingly white, male, and techno-heroic,” D’Ignazio and Klein ask, “Data science by whom? Data science for whom? Data science with whose interests in mind?” While ours is not a class in data science, the questions raised are quite pertinent for digital methods more broadly, and the book itself models a humanistic approach to digital studies. You have access to the full e-book through Pitt Libraries.

Montfort, Nick. *Exploratory Programming for the Arts and Humanities*. Second Edition, The MIT Press, 2016. <https://mitpress.ublish.com/ebook/epah2e-preview/12629/C1>.

Montfort is an author of interactive fiction and computer-generated poetry, and that creative background colors his approach to teaching programming. My own goal in assigning this isn’t to guarantee you’ll all be expert programmers, but more to help you build familiarity with the kinds of workflows (and some key terminology) involved in programming more generally. The Pitt Library catalog will tell you we only have this in print, but if you go to the MIT Press page and select the e-book format, you’ll see an option to “Read Open Access”: that’s where the link above should lead.

These core readings will be supplemented with articles and chapters that variously model or frame ways of thinking about digital studies and/or methods. Please see the weekly lesson plans online for the most up-to-date list of required and recommended readings.

# Required Writing

In addition to shared in-class assignments and weekly [reading responses](#readings-and-responses), everyone in the class will be expected to [work on an independent project](#mindful-practice-journal) for several hours a week outside of class, and to iteratively update a [public archive](#palimpsest-of-public-iteration) of your progress as you go. You will [present your project to the class](#presentations-and-peer-review) three times over the semester for generous, formative review by your professor (me) and each other (writing two letters each).

These projects can vary as much as your interests do, and should incorporate tools and theories appropriate to the questions each person is asking. I’ll expect everyone to [meet with me](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/office.md) before the end of week 3 (in 2023, that would be by Friday, September 15th) – and **ideally before the end of week 2 (September 8th)** – so I can help point you in productive directions.

We’ll have some time in class to collectively troubleshoot your independent projects-in-progress, which will surely help everyone to learn both about a wider range of tools and about the process of finding paths forward! But you can also always ask me for follow-up advice during office hours.

*MA students and auditors are invited to talk to me about possible workload modifications.*

## Readings and Responses

In most weeks, I will assign several texts or videos to review as preparation for the subsequent class. I’ve tried to keep these relatively light, so you can continue working on your own research, analysis, and/or programming – they peak at about 81 pages, and average closer to 50. That said, I will also suggest some optional extended readings for those of you who want to dig in deeper. (Some of these are already in the [schedule](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/schedule), marked with EXT.)

To help you process what you’re reading, and to seed our in-class conversation, each week I’ll ask you to post a *reader response* on a shared [discussion forum](https://github.com/benmiller314/dsam2023fall/issues). These should be grounded, where possible, in at least one quoted passage from the text, and can include questions, confusions, connections, excitements, or incitements. If you aim to write at least 100 of your own words, that should give us a place to begin.

Direct responses to other students’ posts are optional but encouraged; to make that more possible, please try to post by Friday evening when you can.

## Mindful Practice Journal

*h/t to Alison Langmead for some of this language*

There is a myth that “computers make things faster,” but this is as misleading as the idea that “practice makes perfect.” In both cases, repeating certain tasks can indeed make them more automatic, but defining those tasks and refining how they’re carried out requires a great deal of time, effort, and mindfulness. In the context of interpretive disciplines, mindful work with digital computing can, in fact, take much *longer* than working in modes you’re already used to.

**You should plan to spend at least two to six hours on your project *each and every week*.** Some of that time will be spent reading documentation, debugging or reformatting, searching for answers to questions about provenance of your objects of study; some will be spent in direct analysis or composing; some will be spent in preparing presentations, translating notes-to-self into a format more amenable to a wider audience. It is common, faced with this kind of “grey” work, for students to become frustrated with their research because it is hard to see how far they have progressed week by week; what’s more, the heart of their transformative learning is often not visible in the products they are producing, but is rather a transformation in mental state.

To keep you present in this work, and in fact to help you see all the learning you’re engaged in, I ask that you **keep a daily journal of what hours you worked on your project and what you did in those hours.** I will not ask you to share the journal itself with anyone, but as you will see below, you will be asked to draw on it – to interpret and present *what you have learned from the journaling* for our classroom community.

NB: Because of the private, reflective nature of the mindful practice journal, I expect this will be separate from the more public commit messages you may compose for git / GitHub, if you're using it. That said, it's not a bad idea to commit frequently, e.g. at the end of working sessions in which your project's product changes, and to use these commit messages mindfully.

## Palimpsest of Public Iteration

In addition to your private accounting for time, I am asking that you periodically update **a “deliverable,” public-facing version of your project** that you host on the web. This will develop iteratively: whether you begin with ideas in pursuit of materials or materials in pursuit of ideas, you will most likely need to move back and forth between those poles multiple times, each time sharpening your sense of what you need or what you have. The **palimpsest** of these over-writing refinements will be a core component of your final portfolio for this class.

Note that while your Mindful Practice Journal is written for yourself, this web-based palimpsest is best written for an audience that includes me as well as your peers.

You may use any web-based publishing platform you’re comfortable with, e.g. Wix, WordPress, SquareSpace, Medium; there are many free options. One option you should be aware of, if you’re not already, is GitHub Pages, which integrates with the git version control software I’ll already be asking you to try out for tracking your changes. Perhaps the easiest path to making a public-facing website with GitHub is [Open Fuego](https://open-fuego.github.io/Open-Fuego-Coding-Tools/): a templating structure designed from the outset to make it easier to work with HTML, and developed right here at Pitt by Dr. Stephen Quigley (English).

## Presentations and Peer Review

In several designated weeks across the semester (see the [course calendar](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/schedule)), you will prepare a **short presentation** to the class. In addition to sharing the latest iteration of your palimpsest, these presentations afford the opportunity to talk about process breakthroughs and moments of stuckness. By discussing these together, we gift each other the chance to learn about more subjects, more tools, more questions, than we would have time to engage with individually – as well as a chance for a change in perspective that might suggest a promising way forward (or, for that matter, around).

Toward that end, after each in-class discussion of the projects, I will ask you to prepare **written comments to your peers**. This act of writing will help you as a reviewer articulate what you’re noticing, what you’re wondering, and what you’re taking away; it will also ensure for the person and project under review that the conversation doesn’t simply vanish into air. At the end of the semester, I will ask you to review the notes you’ve received and cite the most helpful ones in your final reflection.

To prepare for your presentations, you should begin by asking yourself the following questions:

* What was I trying to do?
* What happened? (check in with your [Mindful Practice Journal](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/mindful-practice-journal))
* What questions was I able to answer, with what evidence? (Even if your “answer” is “I can not yet support or refute my hypothesis, because…”)
* What am I excited about?
* What am I wondering?

This being an introductory seminar, I’m not expecting everyone to get to a complete, publishable, argument or exhibit; I *am* expecting everyone to make progress toward defensible claims and presentable artifacts. By the end of the course, you should be ready to propose a semester-long project you *could* take to completion in DSAM 3100: Practicum. Follow your curiosity, and be prepared for some frustration. As long as you can find some pleasure in the difficulty, you should be in a good spot for learning.

## Final Reflection

Reflecting on what you learn in the process is at least as important as reaching any particular goals you set early on. The last assignment for the semester is a **reflective letter to me**, both articulating your learning in the class and illustrating your claims about that learning by calling attention to features of your products or your processes. The goal here is less a restatement of what you’ve already written than an opportunity to think synthetically, across iterations and into the future.

To help you get there, I’ll periodically ask you to take stock in writing of both your projects and our in-class discussion, linking the theories we’ve read to your independent work and vice versa.

# Policies

* [Attendance](#attendance)
* [Inclusion and Access](#inclusion-and-access)
* [Avoiding Plagiarism](#avoiding-plagiarism)
* [On Artificial Intelligence](#on-artificial-intelligence)
* [Feedback, Assessment, and Grades](#feedback-assessment-and-grades)

## Attendance

This class meets only once a week, and several of those weeks include holidays that mean we will not meet as a group at all. In a small seminar such as this one, the loss of even a single member of the class can have a major impact on the work we’re able to do and the insights we’re able to reach. I therefore expect everyone to be present whenever class is in session.

That said, I know life is complex, and we have a lot going on – including conferences, illnesses, families, and other legitimate claims on our time and energy. If you know in advance that you will not be able to attend, please let me know and we can try to arrange an alternative form of participation. If you must be absent unexpectedly, please try to reach out to me and your classmates as soon as you’re able. It won’t be the same as if you were here, but something may yet be gleaned as we try to catch you up.

## Inclusion and Access

I strive to set you up for success. If there are circumstances that may affect your performance in this class, please let me know as soon as possible so that we can work together to develop strategies for succeeding, which might include adapting assignments to meet both your needs and the requirements of the course.

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Resources and Services, 140 William Pitt Union, 412-648-7890 / 412-624-3346 (Fax), as early as possible in the term. Disability Resources and Services will verify your disability and help determine reasonable accommodations for this course. For more information, visit [www.studentaffairs.pitt.edu/drsabout](https://www.studentaffairs.pitt.edu/drsabout).

I also ask that everyone in the class strive to help ensure that everyone can learn in a supportive and respectful environment, including [gender-inclusive language](https://www.gsws.pitt.edu/resources/faculty-resources/gender-inclusivenon-sexist-language-statement-syllabi).

For my part, I will work to ensure multiple ways of accessing class materials, including written lesson plans in screen-reader compliant html, alternative text for images, and transcriptions for recorded videos. Because proofreading the latter is particularly time-consuming, I ask that you please [let me know](mailto:millerb@pitt.edu) if you will be relying on transcriptions.

While we’re on the subject of email, I am obligated to include the standard statement on using your University-issued email address:

*Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications.*

*The University provides an e-mail forwarding service that allows students to read their e- mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address. To forward e-mail sent to your University account, go to* [*http://accounts.pitt.edu*](http://accounts.pitt.edu)*, log into your account, click on Edit Forwarding Addresses, and follow the instructions on the page. Be sure to log out of your account when you have finished. (For the full E-mail Communication Policy, go to* [*www.bc.pitt.edu/policies/policy/09/09-10-01.html*](https://www.bc.pitt.edu/policies/policy/09/09-10-01.html)*.)*

## Avoiding Plagiarism

This is a collaborative class, in which we offer each other suggestions and constructive criticism. However, the goal of all this collaboration is to clarify the expression of original ideas – never to substitute someone else’s ideas for our own, or to impose our ideas on someone else. To misrepresent the origins of an idea is plagiarism, and it is a problem both for your own learning and for the well-being of the community, which depends on mutual trust. If you want to incorporate materials that others have created, you can do so if you give credit to your source. At a minimum, readers of your work should be able to get back to the original, so be sure to provide at least the author’s identity; the original title; the publication venue; the date of publication and/or access; and a URL if appropriate. The English department has some useful resources at [www.english.pitt.edu/undergraduate/plagiarism](https://www.english.pitt.edu/undergraduate/plagiarism).

(And if you want to collaborate with an AI, there are ways to do so without sacrificing your learning. [See below](#artificial-intelligence) for starters, but let’s talk!)

If you have any questions, don’t hesitate to ask, because Pitt takes a very hard stance on plagiarism. It could get you expelled. Here’s an excerpt from the official Policy on Academic Integrity, to give you the flavor:

*Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity, from the February 1974 Senate Committee on Tenure and Academic Freedom reported to the Senate Council, will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the quiz or exam will be imposed.*

*A student has an obligation to exhibit honesty and to respect the ethical standards of the profession in carrying out his or her academic assignments. Without limiting the application of this principle, a student may be found to have violated this obligation if he or she: […]*

1. *Depends on the aid of others in a manner expressly prohibited by the faculty member, in the research, preparation, creation, writing, performing, or publication of work to be submitted for academic credit or evaluation.*
2. *Provides aid to another person, knowing such aid is expressly prohibited by the faculty member, in the research, preparation, creation, writing, performing, or publication of work to be submitted for academic credit or evaluation.*
3. *Presents as one's own, for academic evaluation, the ideas, representations, or words of another person or persons without customary and proper acknowledgment of sources.*
4. *Submits the work of another person in a manner which represents the work to be one's own.*
5. *Knowingly permits one's work to be submitted by another person without the faculty member's authorization.*

You have the right to a fair hearing, and I’ll talk to you before I talk to anyone else, but it’s far easier just to avoid plagiarism in the first place. All clear cases of deliberate plagiarism will be referred to the appropriate Dean for disciplinary action, including an Academic Integrity Board hearing. For the University’s full policy on Academic Integrity and the adjudication process for infringements, including plagiarism, go to <http://www.pitt.edu/~provost/ai1.html>.

## On Artificial Intelligence

In this class, you are responsible for the integrity and accuracy of anything you turn in; if you draw on an outside source, I expect you to provide a citation that would allow me and other readers to return to that source and understand its context. Note that so far, I haven’t said anything specific to AI: this is just a standard statement about academic honesty and courtesy.

In the case of a generative AI, including both large language models (LLMs) like GPT/ChatGPT, BERT, or Sudowrite and image generators like Stable Diffusion or Dall-E, an element of randomness means we can’t go back directly to the original and see the same thing you saw. Even so, the knowledge that you consulted such a model as part of your process adds important context to your work, much as a citation does, and our understanding of that context is further improved if you can share the prompt you submitted. (In some cases, it may even make sense to save the transcript, e.g. to make it available as an appendix or upon request.)

I do not believe LLMs spell the end of writing as part of education – for one thing, the epistemic process of trying to figure out what you mean by trying to put it in language is often the greatest benefit of writing in the first place (see [Perl](https://compcomm.commons.gc.cuny.edu/feltsense/part-one-what-is-felt-sense/); [Vee](https://compositionstudiesjournal.files.wordpress.com/2023/06/vee.pdf)), and LLMs’ outputs aren’t designed for that kind of learning. Working to find the right prompt, though, has some potential for writing-to-learn, and so does figuring out what *doesn’t* work for you in an LLM-generated response. These are still early days, and AI-assisted writing isn’t going away; rather, how to learn and teach writing alongside AI is an open question that I’m genuinely curious about.

Therefore, I will allow AI-assisted submissions in this class, provided that you agree to the following:

1. Along with your submission, you will acknowledge and name the AI tool you used, and describe what you used it for. If you are copying text or an image directly from the model’s output, include the text of your prompt in an appendix or footnote.
2. Whenever possible, you will avoid the temptation to accept a single default output, instead requesting multiple responses from the model and selecting or remixing among them. This will require you to draw on your own discernment and allow you to write reflectively about your choices.
3. You must recognize that LLMs are not search engines: they hallucinate and fabricate citation-like structures without regard to their actual existence – even when they come attached to hyperlinks. Any references, as well as article or book summaries, should be checked for accuracy.
4. The work you submit is ultimately your responsibility, and should serve your goals in light of your understanding of your task and your audience. Therefore, you should review and edit any AI-generated output to ensure you feel satisfied that it represents your views, your voice, and your learning goals.

I’m also happy to talk more about any of this!

## Feedback, Assessment, and Grades

*Much of the language below is adapted from Alison Langmead’s 2022 fall syllabus for DSAM 3000, if not the particular scholarly conversation I situate it within.*

As composition theorist Peter Elbow has written in a number of places (see especially his [“Ranking, Evaluating, and Liking”](https://www.jstor.org/stable/378503)), grades are a surprisingly crude way of measuring or producing learning: they reduce complex phenomena to a single letter or number, and thus obscure the differences between, say, public speaking skills and ability to support an argument. Some teachers might try to get around this by assigning percentages of their grades to particular skill-sets, but I find I can’t know, in advance, what any one of you will need to work on: I want us to be free to give more targeted feedback, and set more targeted goals, than any pre-set percentage allows us to do. As I see it, each of you is here to do more than you could before, not be better than anyone else. Grades distract from that, and distract from the particular reactions and suggestions that can help you improve and grow.

Assessment, though, is different from grading. Throughout the semester, you will be assessing your own work, through your [Mindful Practice Journals](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/projects#mindful-practice-journal) and reflections; you will be offering feedback to each other at presentation time and in conversation; and I will be offering my own formative guidance, based on years in the profession, as you iteratively develop your projects. You will not be lacking in moments of evaluation, even as you will not have specific grades ranking your success on any given project against some putative norm.

Nevertheless, at the end of the term, I will be required to submit letter grades to the Registrar. So, **at the end of term, I will ask *you* to select the grade that you will receive in this seminar.** While I am required to reserve the right to change these grades as appropriate, I will not do so.

I am more than happy to talk through what it means to produce a self-assessment with each of you individually or together as a group, but given that this request is not (yet) widespread in academia, I also feel that it is important to offer some written guidance on this process for you here so that you can refer to it on your own time.

I have requested specific types of course engagement and deliverables from you. These have all carefully been designed to guide you through the process of learning what it means to use digital computers mindfully in the context of the humanities and allied social sciences. In a way, my work requests aspire to be tools for learning in and of themselves, and can serve as signposts of worthwhile engagement. I have offered some metacognitive questions below to help you think through how the work of this course forms a coherent pedagogical point of view and structures for you to inhabit.

You can be confident that you are successfully working through this seminar by:

* Completing the iterations as described in the course plan, and on the schedule recommended.
  + Example questions you might ask yourself about this task: *Why is completion important? Why is the schedule important? Why can I not be “answering my question” and still succeeding in the context of this seminar?*
* Offering cogent and professional presentations that stay within the requested time limit.
  + Example questions you might ask yourself about this task: *Why is professionalism important? Why is the time limit important?*
* Offering a content-rich, web-based palimpsest that you are proud to share with others.
  + Example questions you might ask yourself about this task: *Why pride? Why do we share our findings publicly at this point in our (different) careers?*
* Writing two peer evaluations after each iteration is due.
  + Example questions you might ask yourself about this task: *Why are these evaluations requested? How can I help someone else improve when I am still so unsure of what I am doing? How can evaluating someone else help me improve?*
* Working at least 2-4 hours on your project every week, and documenting this effort in your Mindful Practice Journal.
  + Example questions you might ask yourself about this task: *Why is consistency important? Why is so much self-reflection a part of this seminar?*
* Engaging productively with the community in our weekly conversations, whether in class or in any other manner that you deem fit.
  + Example questions you might ask yourself in conversation about this task: *What is the purpose of seminar conversation? How do we learn from it? How do we balance speaking up, sitting back, and listening to produce the most effective learning environment for ourselves?*

Insofar as grades have always been a part of your educational experience, you may have strong feelings about what they have meant to you over the years, and what they might mean to you still. In the context of this seminar, I ask that we separate the practice of offering insightful, engaged feedback (which is essential to the learning process) from summative ranking (which is not), and tightly focus on what it takes to produce meaningful intellectual change over time rather than striving toward/against standards of normative success.

# Available Resources at Pitt

NB: Additional resources can be found on the course site.

## Digital Scholarship Services at Pitt Libraries

<https://library.pitt.edu/digital-scholarship-services>. As their website says, DSS is "a front-end to the library's resources, expertise, and services in support of a broad range of digital and data-intensive scholarly activities. From designing a digital humanities project to making a data management plan for a grant application, [they]’re here to help." You can make an appointment for a consult on coding and computation; research data services; digital creation and stewardship; geospatial or textual data and analysis; and more. See especially their subscribe-able calendar of free [workshops](https://pitt.libcal.com/calendar/today/?cid=2274&t=d&d=0000-00-00&cal=2274&ct=26796,28278&inc=0) and/or [sign up for their newsletter](https://confirmsubscription.com/h/t/DF8BAC3FE84F3E2D) to get email updates and reminders.

## Take Care of Yourself

Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep, and taking time to relax. Despite what you might hear, using your time to take care of yourself will actually help you achieve your academic goals more than spending too much time studying.

All of us benefit from support and guidance during times of struggle. If you or anyone you know experiences academic stress, difficult life events, or difficult feelings like anxiety or depression, I strongly encourage you to seek support. Consider reaching out to a friend, faculty, or family member you trust for assistance connecting to the support that can help. The University Counseling Center is here for you: call 412-648-7930 and visit their website at <http://www.studentaffairs.pitt.edu/cchome>.

### If you or someone you know is feeling suicidal, call someone immediately, day or night:

University Counseling Center (UCC): 412 648-7930

University Counseling Center Mental Health Crisis Response: 412-648-7930 x1

Resolve Crisis Network: 888-796-8226 (888-7-YOU-CAN)

Psychological Services and Sexual Assault Services (412-648-7930)

***Pitt Writing Center***

<https://writingcenter.pitt.edu/>. Though not every consultant will have experience in multimodal composing or digital media, some will; but more importantly, the Writing Center's emphases on process-oriented reflection and rhetorical thinking makes every consultant a useful sounding board for developing ideas, getting feedback from an outside reader, and getting organized for revision and reflection. It's a good idea to [plan for your visit](http://writingcenter.pitt.edu/undergraduate-services) and to make an appointment before you go.

# Assignment Schedule

Assignments are listed (as HW) *on the day they are assigned*. Readings should be completed, if possible, **by end-of-day Friday**[[1]](#_Week_16:_Mon,), so you can post to our [discussion forum](https://github.com/benmiller314/dsam2023fall/issues%7D%7D). Exercises and presentations are due the following class meeting, unless otherwise specified, and given our early start time I recommend endeavoring to complete them *by 9pm the night before* at the latest.

You should in general also have access to all your work in class, so we can discuss and/or revise. Possible methods of access include [GitHub](https://github.com) (recommended), Pitt’s [OneDrive](https://www.technology.pitt.edu/services/cloud-collaboration-box-and-onedrive) instance (next best thing), an external service like Dropbox, or flash drive.

Follow the links from the course website to individual class days for more information, including class notes and more complete homework instructions. **NB: This schedule is subject to revision based on our needs.**

## Outline of the semester:

| Week | Date | Lesson Title |
| --- | --- | --- |
| 1 | Mon, Aug 28 | [Digital affordances](#week-01) |
| 2 | Mon, Sep 04 | no class: Labor Day (getting ready) |
| 3 | Mon, Sep 11 | [Programming as literacy, as exploration](#week-03) |
| 4 | Mon, Sep 18 | [Critical code studies](#week-04) |
| 5 | Mon, Sep 25 | no class: Yom Kippur (reflection and planning) |
| 6 | Mon, Oct 02 | [Presentations 1](#week-06) |
| 7 | Mon, Oct 09 | [Data 1: By whom? For what?](#week-07) |
| 8 | Mon, Oct 16 | [Data 2: Exploration and slicing](#week-08) |
| 9 | Mon, Oct 23 | [Data 3: Analysis and visualization](#week-09) |
| 10 | Mon, Oct 30 | [Presentations 2](#week-10) |
| 11 | Mon, Nov 06 | [People’s choice 1](#week-11) |
| 12 | Mon, Nov 13 | [People’s choice 2](#week-12) |
| 13 | Mon, Nov 20 | no class: Thanksgiving Break (digesting) |
| 14 | Mon, Nov 27 | [People’s choice 3](#week-14) |
| 15 | Mon, Dec 04 | [Presentations 3](#week-15) |
| 16 | Mon, Dec 11 | [Overflow day, iff needed](#week-16) |

### [Week 1: Mon, Aug 28](https://benmiller314.github.io/dsam2023fall/plans/week-01) – Digital affordances

By Friday, **watch**:

* Posner, Miriam. “How Did They Make That? The Video!” Miriam Posner’s Blog, April 17, 2014. <http://miriamposner.com/blog/how-did-they-make-that-the-video/>.

and **read**:

* Posner, Miriam. How Did They Make That? 29 Aug. 2013, <https://miriamposner.com/blog/how-did-they-make-that/>.
* Risam, Roopika, and Alex Gil. “Introduction: The Questions of Minimal Computing.” Digital Humanities Quarterly, vol. 16, no. 2, 2022, <http://www.digitalhumanities.org/dhq/vol/16/2/000646/000646.html>.
* EXT for eager readers:
  + Murray, Janet H. “Affordances of the Digital Medium.” *Inventing the Medium: Principles of Interaction Design as a Cultural Practice*, The MIT Press, 2011, pp. 51–85. <https://ebookcentral.proquest.com/lib/pitt-ebooks/reader.action?docID=3339350&ppg=66>.
  + N Katherine Hayles. “PRINT IS FLAT, CODE IS DEEP: The Importance of Media-Specific Analysis.” *Transmedia Frictions*, edited by Tara McPherson and Marsha Kinder, 1st ed., University of California Press, 2014, pp. 20–33. pitt.primo.exlibrisgroup.com, <https://doi.org/10.1525/j.ctt6wqc2f.6>.

**Schedule** a meeting with Ben for some time next week (that isn’t Monday); see the [office hours](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/office) page for how to claim a slot or request an alternative if the usual slots won’t work for you.

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### Week 2: Mon, Sep 04 – (getting ready)

**No class: Labor Day**

Meet Ben in [office hours](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/office) some time this week.

By Friday, **read**…

* Ford, Paul. *What Is Code? If You Don’t Know, You Need to Read This*, Bloomberg.com, <http://www.bloomberg.com/graphics/2015-paul-ford-what-is-code/>. Accessed 19 June 2015.
  + Section 1: “The Man in the Taupe Blazer.”
  + Section 6.5: “And Now for Something Beautiful.”
* Montfort, Nick. “1: Introduction.” *Exploratory Programming for the Arts and Humanities*, 2nd ed., The MIT Press, 2021, pp. 1–22, <https://mitpress.ublish.com/ebook/epah2e-preview/12629/1>.
* EXT for eager readers:
  + D’Ignazio, Catherine, and Lauren F. Klein. “Chapter Seven: Show Your Work.” *Data Feminism*, MIT Press, 2020, pp. 97–124. mitpressonpubpub.mitpress.mit.edu, <http://ebookcentral.proquest.com/lib/pitt-ebooks/detail.action?docID=6120950>.

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### Week 3: Mon, Sep 11 – Programming as literacy, as exploration

By Friday, **read**…

* Montfort, Nick, Patsy Baudoin, John Bell, Ian Bogost, Jeremy Douglass, Mark C Marino, Michael Mateas, Casey Reas, Mark Sample, and Noah Vawter. “10: Introduction.” *10 PRINT CHR$(205.5+RND(1)); : GOTO 10*, The MIT Press, 2012, pp. 1–17. direct.mit.edu, <https://doi.org/10.7551/mitpress/9040.001.0001>.
* Whalen, Zach. “Any Means Necessary to Refuse Erasure by Algorithm: Lillian-Yvonne Bertram’s Travesty Generator.” *Digital Humanities Quarterly*, vol. 017, no. 2, July 2023, <http://digitalhumanities.org:8081/dhq/vol/17/2/000707/000707.html>.
* Raja, Tasneem. “Is Coding the New Literacy?” *Mother Jones*, 16 June 2014, <https://www.motherjones.com/media/2014/06/computer-science-programming-code-diversity-sexism-education/>.
* Benjamin, Ruha. “Preface” and “Introduction: The New Jim Code.” *Race after Technology: Abolitionist Tools for the New Jim Code*, Polity, 2019, pp. 16–101, but you can stop at p. 78 if you want. [Available on Overdrive](https://pitt.primo.exlibrisgroup.com/permalink/01PITT_INST/e8h8hp/alma9999863389206236).
* EXT for eager readers:
  + Vee, Annette. “Introduction: Computer Programming as Literacy.” *Coding Literacy*, MIT Press, 2017. pitt.primo.exlibrisgroup.com, <https://doi.org/10.7551/mitpress/10655.003.0003>.

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### Week 4: Mon, Sep 18 – Critical code studies

By the time we get back in Week 6, [**prepare a presentation**](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/projects#presentations-and-peer-review) on your independent project: what are you looking at? what questions do you have about that? what are your next steps?

Optionally, schedule a meeting with Ben in [office hours](file:///Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/office) for early feedback as you build your presentation.

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### Week 5: Mon, Sep 25 – Reflection and planning

**No class this week: Yom Kippur.**

By Sunday, **pre-record** a 5-minute presentation to show in class, and be ready to discuss! NB: *bring your own dongle*, if you need one.

### Week 6: Mon, Oct 02 – Presentations (iteration 1)

By Friday, **read**…

* Montfort, Nick. “7: Standard Starting Points.” Exploratory Programming for the Arts and Humanities, Second Edition, The MIT Press, 2016, pp. 93–118. pitt.primo.exlibrisgroup.com, <https://mitpress.ublish.com/ebook/epah2e-preview/12629/C1>.
* Ford, Paul. “3: Why Are Programmers So Intense About Languages?” What Is Code? If You Don’t Know, You Need to Read This, Bloomberg.com, [http://www.bloomberg.com/graphics/2015-paul-ford-what-is-code/. Accessed 19 June 2015](http://www.bloomberg.com/graphics/2015-paul-ford-what-is-code/.%20Accessed%2019%20June%202015).
* D’Ignazio, Catherine, and Lauren F. Klein. “Chapter Four: ‘What Gets Counted Counts.’” Data Feminism, MIT Press, 2020, pp. 97–124. mitpressonpubpub.mitpress.mit.edu, <http://ebookcentral.proquest.com/lib/pitt-ebooks/detail.action?docID=612095>.

and **watch**:

* Beshero-Bondar, Elisa. “How to Grow Data Forests with XML Trees.” What Are Digital Humanities?, 11 Nov. 2022, <https://cmu-lib.github.io/dhlg/project-videos/besherobondar/>.
* Brown, AmyJo. “Building Your Own Data Set: A Journalist’s Approach.” What Are Digital Humanities?, 11 Nov. 2022, <https://cmu-lib.github.io/dhlg/project-videos/brown/>.

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### Week 7: Mon, Oct 09 – Data 1: By whom? For what?

By Friday, **read**…

* D’Ignazio, Catherine, and Lauren F. Klein. “5: Unicorns, Janitors, Ninjas, Wizards, and Rock Stars.” *Data Feminism*. MIT Press, 2020. ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/pitt-ebooks/detail.action?docID=6120950>.
* Schöch, Christof. “Big? Smart? Clean? Messy? Data in the Humanities.” Journal of Digital Humanities, Nov. 2013, <https://journalofdigitalhumanities.org/2-3/big-smart-clean-messy-data-in-the-humanities/>.
* Rawson, Katie, and Trevor Muñoz. “23: Against Cleaning.” Debates in the Digital Humanities 2019, edited by Matthew K. Gold and Lauren F. Klein, [https://dhdebates.gc.cuny.edu/read/untitled-f2acf72c-a469-49d8-be35-67f9ac1e3a60/section/07154de9-4903-428e-9c61-7a92a6f22e51#ch23. Accessed 18 Aug. 2023](https://dhdebates.gc.cuny.edu/read/untitled-f2acf72c-a469-49d8-be35-67f9ac1e3a60/section/07154de9-4903-428e-9c61-7a92a6f22e51#ch23.%20Accessed%2018%20Aug.%202023).
* Gradek, Bob, and Liz Monk. “Dataset Summaries: Pivot Tables”, 2022. vimeo.com, <https://vimeo.com/703773939>.

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### Week 8: Mon, Oct 16 – Data 2: Exploration and slicing

By Friday, **read**…

* Cairo, Alberto. “5: Basic Principles of Visualization.” The Truthful Art: Data, Charts, and Maps for Communication, New Riders, 2016. learning.oreilly.com, <https://learning.oreilly.com/library/view/the-truthful-art/9780133440492/ch05.html>.
* Cairo, Alberto. “6: Exploring Data with Simple Charts.” The Truthful Art: Data, Charts, and Maps for Communication, New Riders, 2016. learning.oreilly.com, <https://learning.oreilly.com/library/view/the-truthful-art/9780133440492/ch06.html>.
* D’Ignazio, Catherine, and Lauren F. Klein. “6: The Numbers Don’t Speak for Themselves.” *Data Feminism*. MIT Press, 2020. ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/pitt-ebooks/detail.action?docID=6120950>.

### Week 9: Mon, Oct 23 – Data 3: Analysis and visualization

By Sunday, prepare an updated presentation to class, now with a stronger sense of your argument and evidence, even if they’re still works in progress. **Pre-record 5 minutes** to show in class, and be ready to discuss! NB: *bring your own dongle*, if you need one.

Optionally, I also recommend that you **read**:

* Ford, Paul, *What is Code?* section 6.2: “What is debugging?” <https://www.bloomberg.com/graphics/2015-paul-ford-what-is-code>.

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### Week 10: Mon, Oct 30 – Presentations (iteration 2)

By Friday, **read**… *TBD! One possible cluster might be on ways the digital is still physical. That could include…*

* Ford, Paul, “What is Code?” section 2: Let’s Begin. <https://www.bloomberg.com/graphics/2015-paul-ford-what-is-code/#lets-begi>.
* Crawford, Kate, and Vladan Joler. “Anatomy of an AI System: The Amazon Echo As An Anatomical Map of Human Labor, Data and Planetary Resources.” AI Now Institute and Share Lab, 7 Sept. 2018, <https://www.anatomyof.ai>.
* Gries, Laurie, et al. “New Materialisms, Networks, and Humanities Research.” *Networked Humanities: Within and without the University*, edited by Jeff Rice and Brian McNely, Parlor Press, 2018, pp. 85–102.

*Another way forward might be to go deeper into programming as an exploratory, epistemic process. That could include…*

* Montfort, Nick. *Exploratory Programming for the Arts and Humanities, 2nd edition*. MIT Press: 2021.
  + “Appendix A: Why Program?”
  + “6: Programming Fundamentals”
  + “10: Image I: Pixel by Pixel”
* Miller, Benjamin. “Chapter 17: The Pleasurable Difficulty of Programming.” *Methods and Methodologies for Research in Digital Writing and Rhetoric Centering Positionality in Computers and Writing Scholarship*, Volume 2, edited by Victor Del Hierro and Crystal VanKooten, The WAC Clearinghouse; University Press of Colorado, 2022, pp. 159–83. DOI.org (Crossref), <https://doi.org/10.37514/PRA-B.2022.1664.2.17>.

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### Week 11: Mon, Nov 06 – People's choice 1

By Friday, **read**… *TBD! One possible cluster might be on topic modeling and distant reading. That could include…*

* Underwood, Ted. “Topic Modeling Made Just Simple Enough.” The Stone and the Shell, 7 Apr. 2012, <http://tedunderwood.com/2012/04/07/topic-modeling-made-just-simple-enough/>.
* Meeks, Elijah, and Scott B Weingart. “The Digital Humanities Contribution to Topic Modeling.” *Journal of Digital Humanities*, vol. 2, no. 1, Apr. 2013, <http://journalofdigitalhumanities.org/2-1/dh-contribution-to-topic-modeling/>.
* More from that issue of *Journal of Digital Humanities*
* Cottom, Tressie McMillan. “47: More Scale, More Questions: Observations from Sociology.” Debates in the Digital Humanities 2016, University of Minnesota Press, 2016, <https://dhdebates.gc.cuny.edu/read/untitled/section/55e48b34-543a-41f7-97c9-8c8643bf8844#ch47>.
* EXT for eager readers:
  + Underwood, Ted. “A Genealogy of Distant Reading.” *Digital Humanities Quarterly*, vol. 11, no. 2, 2017. <http://www.digitalhumanities.org/dhq/vol/11/2/000317/000317.html>.
  + Guldi, Jo. “Critical Search: A Procedure for Guided Reading in Large-Scale Textual Corpora.” *Journal of Cultural Analytics*, Dec. 2018. <https://culturalanalytics.org/article/11028>

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### Week 12: Mon, Nov 13 – People's choice 2

By the time we get back from break, **read**: *TBD! One possible cluster might be on AI and large language models. That could include…*

* Onuoha, Mimi and Mother Cyborg (Diana Nucera). “A People’s Guide To Tech: Artificial Intelligence.” Allied Media Projects, Aug. 2018, <https://alliedmedia.org/resources/peoples-guide-to-ai>.
* Crawford, Kate, and Trevor Paglen. “Excavating AI: The Politics of Training Sets for Machine Learning.” 19 Sept. 2019, <https://excavating.ai>.
* Vee, Annette. “Large Language Models Write Answers.” *Composition Studies*, vol. 51, no. 1, Spring 2023, pp. 176–81.
* more from that *Composition Studies* “Where we are now” section

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### Week 13: Mon, Nov 20 – no class: Thanksgiving Break (digesting)

### Week 14: Mon, Nov 27 – People's choice 3

By Sunday, prepare your final presentation to class. Pre-record 10 minutes, and be ready to discuss! [*~jump back~*](#_Assignment_Schedule)

### Week 15: Mon, Dec 04 – Presentations (iteration 3)

Work toward your final reflections. If we collectively agree that we need another studio day, we’ll use week 16; otherwise, the final portfolio (reflection plus last iteration on your palimpsest) is due Wednesday, December 13 at 2pm. [*~jump back~*](#_Assignment_Schedule)

### Week 16: Mon, Dec 11 – Overflow day, iff needed

Enjoy the break!

[[1]](#_Assignment_Schedule) This early deadline is not my way of being mean; it's just that sometimes things will take longer than you expect, and I'd really like for you to be able to sleep, and for me to be able to look over your work in the morning before class. Those latter two things are the real priorities that the "night before" policy is meant to achieve. [*~jump back~*](#_Assignment_Schedule)

# Letter from Ben

Hello and welcome to DSAM 3000, the informatively named Seminar in Digital Studies and Methods! (I hope that, midway through the first lesson, you’ll see that I’m only half-joking.) I like to start the semester with a letter for a few reasons: one, because it feels more personal than a syllabus, which tends to be more about policy than personality; two, because I feel like part of my job is always to help you as writers and presenters, so it’s only fair to present some of my own writing; and three, because the act of writing the letter actually helps me think about the semester more synthetically than planning individual lessons or reading assignments, and once I’ve got that synthetic sense of how it all hangs together, I see no reason not to share it with you.

The way I see it, this seminar is here to help you open methodological doors: to give you a sense of what’s possible with digital tools, sure, but even more so to give you the confidence to keep trying new things, even when they’re hard, and enough experience to know where to look for things to try. I can’t find all those things for you; for starters, there just isn’t enough time, and for another, you’d then be limited to the kinds of questions that drive me, or the particular tools I’ve come across so far.

Maybe this is the moment to say what kinds of things I know best. My own path to this room is through Writing Studies, or Rhetoric and Composition, and my research has mostly involved visualizing metadata, especially about written sources, but including things like where they were written and when that might be applicable to other kinds of corpora. For the kind of analysis I’ve done most, word order isn’t as important as how many times words come up. I end up saying “in the aggregate” a lot. I work with code, though I’m not a brilliant programmer, and that combination gives me a deep appreciation for the scale of what brilliant programmers have been able to achieve, as well as an even deeper appreciation for how many tutorials and walkthroughs and whole open codesets have been seeded generously across the internet. There’s just a ton out there to discover, and I see my role in DSAM 3000 less as an expert tour guide and more as a fellow traveler who’s been on the road a while. I can tell you my enthusiasms (and I probably will, if you get me started), but I’ll be equally excited if you find something I’ve never seen before, and to explore it with you.

If we’re being real, you’re kind of stuck with my experience-thus-far as far as shared readings and demos go – I can’t yet know what I don’t know yet – which is why there’s a good chunk of time devoted to playing around in code, and why some of that code writes poetry. (I got my MFA in 2007 before switching to Composition for the PhD.) But the shared assignments are really just a kind of crossroads inn to bring us back together after repeated excursions, and to give us a shared vocabulary for talking about our trips. And toward the end of the semester (starting around Election Day), I’ve planned three weeks of “people’s choice”: I wrote up assignments for four possible conversations, and if there’s a topic you’d rather dig into that’s not on that list, give me a week’s warning and we can pull together something on that.

One of the first shared assignments, due by the end of this week, is to watch a video that Miriam Posner put together as a “field guide to digital projects,” trying to trace the recurring patterns she saw in the work students and faculty were doing in the Digital Humanities. (This was back in 2013–2014, but a lot of the patterns still apply.) Beyond the clusters of project-types she identifies – which she’s the first to admit is not an exhaustive list – she highlights the way that a lot of digital projects come down to “sources, processed and presented.” In other words, you take some source material – a book, a film, an archaeological site, an archival collection, etc – and you do something to it to make it tractable by digital machines. And then you use the digital machines to make some aspect of that source material more tangible, visible, accessible, present.

Maybe some of you are already thinking of what your sources could be; maybe you have questions that will lead you to define that source material, or maybe you have some material in mind to work with, and want the machines to help you find the questions. Either approach is fine! In my experience, those are two poles of an alternating current that powers most projects, including writing projects: exhibits need arguments for interpretation, arguments need exhibits for evidence. Wherever you start, you’ll likely need to go both ways.

That’s one reason the independent projects for this class are designed to be produced through *iterations*: you really, truly, don’t want to build a digital project as a one-and-done, no matter how quickly you can turn out a draft of a seminar paper. Some parts may feel automatic, and fast; but figuring out which automations to run, and what to do with the outputs, and – ha! that’s assuming there will even *be* an output without lots of experimentation matching your inputs to what the software expects – suffice it to say, [as Paul Valéry said of poems](https://www.jstor.org/stable/4333487), a digital project is “never really finished, only abandoned.”

So you need to build some resilience, and some momentum. You need to see the incremental progress you’re making, even if it feels sometimes like you’re moving backwards or sideways or not moving at all. And you need to know that you’re not alone in feeling that way.

I’ve built in a few ways of facilitating this.

First, I’m going to ask you to privately account for your working time. Record it in whatever way you see fit, but it must be recorded somehow: write down what hours you worked on your project, and what you did in that time. We’ll call this (borrowing the title from Alison Langmead, who taught this course for many years), your *Mindful Practice Journals*. See the [Projects](file:////%257B%257Bsite.course.base_path%257D%257Dprojects#mindful-practice-journal) page for more. Looking back at these notes, you’ll know you weren’t wasting time: you were reading documentation, or you were cleaning messy data, or so on and so forth. And maybe even writing! Who knows. But you were moving.

Second, I’m going to ask you to publicly present your project, before it’s finished, and multiple times. Three times, to be exact – once every four weeks. (I actually began planning the schedule using “sources, processed and presented” as the recurring titles of each four-week chunk of time, cycling back again after each presentation. If you squint, you can still kind of see it, starting in week 3.) These presentations can be informal – they’re about work in progress, after all – and will draw not only on whatever you think you’ve “accomplished,” but also on the processes you’ve written down in your Mindful Practice Journals. What habits or patterns you notice individually will be put side by side with what your classmates noticed, and together we’re all more likely to figure some things out that much more readily. Again, the [Projects](file:////%257B%257Bsite.course.base_path%257D%257Dprojects#presentations-and-peer-review) page has some suggestions for how to prepare for the presentations – and how to [share your project-in-progress with the larger world](file:////Users/MILLERB/OneDrive-UniversityofPittsburgh%20(Archive)/_BoxMigration/teaching/DSAM%203000/%257B%257Bsite.course.base_path%257D%257Dprojects#palimpsest-of-public-iteration).

Third, and potentially related to that last point, I’m going to make sure everyone here knows how to use GitHub, one of the places a lot of digital humanities projects are shared (along with a great many more projects beyond DH). It’s a place where you can post files, and write about them, even if you don’t want to make a website. (Though if you do want to make a website, GitHub lets you do that, too.) But best of all, as we’ll discuss after the break today, GitHub prominently displays and celebrates the work-in-progress-ness of all its projects, because it’s built on the assumption that every file has a dynamic history, and it makes that history visible.

Digital projects are variable and changing, even as they remain themselves. Kind of like people, if you think about it.

I look forward to marking the changes with you!

Ben