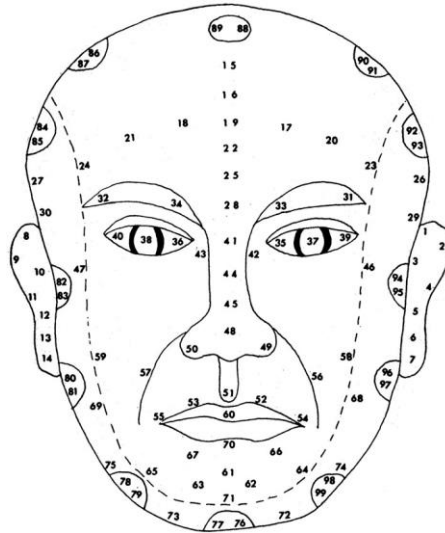


# WORDS & IMAGES

EngLit 0354-1020 S1 2018 | Tues/Thurs 3-615pm | Cathedral of Learning room 407  
Moriah L. Kirdy | [moriah.kirdy@pitt.edu](mailto:moriah.kirdy@pitt.edu) | Office Hours: Tues/Thurs 2-3pm CL 517R



Timothy T Mar: *Face Reading:*  
*The Chinese Arts of Physiognomy* (1974)  
Reproduced in Diagram 18.1 [\[link\]](#)

**“The task of making knowledge visible does not depend on an assumption that images represent things in the world. Graphics make and construct knowledge in a direct and primary way. *Most information visualizations are acts of interpretation masquerading as presentation.* In other words, they are images that act as if they are just showing us *what is*, but in actuality, they are *argument made in graphical form.*” ~ Johanna Drucker, *Graphesis: Visual Forms of Knowledge Production***

## COURSE DESCRIPTION

This section of Words and Images is inspired in part by Johanna Drucker’s *Graphesis: Visual Forms of Knowledge Production*, the source for the epigraph above and a key text for this course. We’ll engage with creative and critical modes and methods of information visualization and interpretation. If words and images are systems of communication, what might we learn by interacting with them in systematic, mechanistic, or procedural ways of making and design? For those of you used to seeing visualizations in mostly dry and pragmatic contexts and genres, we’ll dig into this topic through some perhaps unexpected sources, purposes, and methods. I hope that the class environment will feel like a safe space for you to experiment, challenge yourself, and try out new things.

This is an interdisciplinary writing intensive (w) course. You come from a variety of home disciplines and interests, and you should take advantage of the perspectives you bring to this topic from your varied areas of interest. You may even discover this course as useful for future work in your field or future jobs. You’ll write a little for just about every class, we’ll engage with texts (broadly conceived) that will serve

as the inspiration for your own composition projects, you'll workshop and share those projects with your peers in class work, and by the end of the term you'll compose a larger-scale project that represents the culmination of your thinking in the course.

## REQUIRED TEXTS & SUPPLIES

All readings for this course will be supplied via our course Box folder or hyperlink. There are no required texts you will have to purchase. You will, however, have to purchase some supplies, which you should get into the habit of bringing to every class session:

- A set of at least 16 colored pencils (pencils not crayons, please!).
- A set of at least 16 colored markers.
- At least one black *fine-tipped* permanent pen (like a Sharpie pen).
- A graphical notepad or notebook either of grid lines or dotted squares (pale squares or dots are preferred, so that what is most visible is your work, not the grid).
- A small ruler and/or straight edge.

## YOUR RESPONSIBILITIES FOR THIS COURSE

### Active Engagement & Preparedness (Participation)

This is a discussion-oriented seminar and engagement in class conversation and activities is mandatory. Individuals who are actively engaged arrive on time, take notes, ask questions, and interact with others and the ideas of others with curiosity and respect (including your peers as well as the texts we engage with). Engagement is evidenced in the body (sitting attentively, taking notes, etc.) as much as through verbal contributions. **If you do not appear engaged I will assume you are unprepared for class. If you are not prepared, you cannot participate fully.** Being prepared means you are present, you arrive on time to class, and that you have completed the work necessary for us to do that day's work.

### Class Commons

You will post either examples from your own interests and investments or drafts and experiments of your own to a shared Box Note. Posts are due by 12 noon so that I and your classmates can read and engage with what you've posted in advance of class time.

### Weekly Composition Projects

Projects for this course will include visualizations drawn from data you gather from your own routines (e.g. sleep patterns, media consumption, steps, etc.), visual poems/book alteration, computer-assisted methods of reading, and abstract representations of complex sensory experiences.

Each Saturday you'll turn in a project that continues to develop some aspect of the week's work. Most often we'll workshop "drafts" (or beginnings, false starts, early brainstorming, etc.) in class so that a decent amount of each week's project has already been conceptualized if not fully drafted. ***You will introduce each weekly project with a rationale*** that describes the logic behind your approach and how the week's work has informed your approach to your project. Rationales may influence how I evaluate your projects (see below).

### Data Collection Accountability Notes

For two weeks during the term you'll be collecting information on your daily life. This percentage of the grade is meant to hold you accountable to keeping up with your data collection practice and give you a place to store your data.

## Final Project & Final Presentation

For the final project you will develop a substantive 8-10 page project directed at an audience outside of this course as a revision, remediation, or expansion upon earlier projects and experiments. On the last day of the term you'll share your project with the rest of the class through a short presentation.

## MY RESPONSIBILITIES FOR THIS COURSE

### Fostering a Fun and Safe Collaborative Environment

As a discussion-based seminar, my role in this course is to design activities that have you engaged in applied learning through collaborative problem-solving (working together to figure something out), critical analysis (analysis by inquiry and interpretation) and critical making (aiming to understand a thing by making that thing).

### Facilitating Workshops

I try to design workshops where you will share your work in ways that will get you engaged in the critical questions of the composition process and as an intervention into the process when you're most likely to have questions or concerns about how to develop or revise a project in the early messy drafting stages. Student work shared in workshop end up being some of the most central texts of this course. The purpose of workshops is not to critique each other; rather, the idea is that you'll learn something about your own composing practices by looking at works-in-progress and working through challenges you might face in collaboration with others.

### Making Myself Available to You Outside of Class

I am available to meet with you for one-on-one or small group conversations. ***Unless otherwise noted, I will hang out in my office (cubicle 517R upstairs in the CL) for an hour or so before class starts.*** I am also generally available after class for brief questions. We can meet by appointment, provided we set up that appointment at least a couple days in advance. ***Office hours can be an incredible resource for you! Feel free to stop by just to chat in general.***

I am also available over email ([moriah.kirdy@pitt.edu](mailto:moriah.kirdy@pitt.edu)) for quick concerns (e.g. assignment prompt clarifications, troubleshooting a very specific element of a project, or confirming your approach is appropriate). I try to keep regular "business hours" and do not typically respond to emails past 6pm unless the matter is urgent. Due to my own writing/research schedule, I am most likely to respond to emails in the afternoon. Please reread course materials to find out if your question is answerable without asking me.

### Providing Feedback and Evaluating Your Work

#### Breakdown of Your Grade

Active Engagement and Preparedness (Participation)	15%
Course Commons	10%
Weekly Composition Projects (5 x 10% each)	50%
Data Collection Accountability Posts (May 27- June 9)	5%
Final Project & Rationale & Presentation	20%
TOTAL	100%

## Some Important things to Know about How I Evaluate Your Work

- I will provide written feedback on your weekly assignments (always) and your final project (by request). In general, feedback amounts to a few marginal comments and at least one substantive paragraph of response, questions, and considerations for further development, revision, and/or future work.
- I encourage and reward risk-taking, experimentation, and a willingness to take on approaches that are challenging to you and my grading reflects this. When I evaluate your projects I will always respond to the argument you make in your rationale and while I may have other concerns as well, you'll find that our concerns are often in sync. I will also take your rationale into account when assigning a grade to your projects. *Having an awareness of what you are trying to do is often more important than whether or not your attempt was successful in the long run, especially when it comes to particular tools, methods, or genres that are unfamiliar to you.*
- I am always willing to meet with you to discuss a project, especially if you think you might make it central to your final project for this course or if you can see an application for the project outside of this course. While your rationales are the start to our conversation, my feedback is not the end.

### How Active Engagement & Preparedness/Participation are evaluated

I evaluate participation with a letter grade according to the quality of your engagement and preparedness. Students present and prepared for every class session who are actively engaged and respectful of others' ideas will receive full credit (an A) for participation. Occasional lapses will not ruin this portion of the grade, but will lower it slightly (to a B/B+). If you consistently show up to class unprepared and/or unwilling to engage in class activities your participation grade will be lowered (to a C). If you actively disrupt the class environment (e.g. you're openly disrespectful, fall asleep in class, arrive dramatically late without notice or apology, etc.) or are absent for more than one class without good reason your participation grade will be *dramatically* lowered (to a D or F).

### How Course Projects are Evaluated

Your course projects will be evaluated by the assignment of letter grades and the following numerical equivalents (+ or - grades reflect movement toward or away from another level of attainment):

- A Superior Attainment.** This work impresses in terms of its nuance and complexity. The writer took risks that paid off.
- B Meritorious Attainment.** Compositions evaluated at the "B" level are moving toward nuance and complexity, but may still be working something out, or took risks that might not be working well yet.
- C Adequate Attainment.** Compositions evaluated at the "C" level reach expectations to some degree but are lacking robustness of response or a lack of adventurousness (the writer tried to take an "easy" way out).
- D Minimal Attainment.** Compositions evaluated at the "D" level have met some expectations but have delivered something without the appropriate depth and breadth required of the task at hand, have "phoned it in" etc.
- F Failure.** Compositions evaluated at the "F" level were incomplete to the point of unreadability in relation to the assignment or were turned in dramatically late.

Grades will be assigned per following scale: A = 93-100, A- = 90-92, B+ = 88-89, B = 83-87, B- = 80-82, C+ = 78-79, C = 73-77, C- = 70-72, D = 60-69, F = below 60.

*Note: I often find that Pitt students who receive a final grade at the C level or lower are capable of producing work at a higher level, but either don't put in the work or something else gets in the way. If that something is some challenge you're currently facing in your life, please speak with me (see "Accommodations" below)! If that something is just a general disinterest in the course, consider dropping or withdrawing.*

## Course Policies

### Attendance

If you have prepared for class the best you can but are unable to attend for a reason outside of your control (e.g. you are very sick or some other emergency) you must communicate with me as soon as possible to let me know prior to the class you will miss or as soon as you can. While you cannot "make up" the in-class work you missed, you can always inform me in writing or during my office hours how you continued the work of the class session even though you were not able to be there in person, which will help my impression of your active engagement. *If you are absent more than once for reasons you did not communicate to me in advance or as soon as you were able you may be at risk of failing this course.*

### Due Dates, Extensions, and Late Work

All projects (both homework and larger compositions) must be turned in on the date they are due. I understand, however, that on occasion circumstances outside of your control prevent you from turning something in on time or from doing your best work. ***If this is the case, you may request a two-day extension for one weekly composition project.*** Your request must be reasonable (e.g. you ran into a roadblock you weren't anticipating, you had a family emergency, or you got so sick you can't focus). Work turned in past the initial or extended due date will not receive written feedback and will be lowered one full letter grade for each day it is late. *Students missing assignments entirely are unlikely to do well in this course.*

### Revision/Reevaluation

Weekly writing projects evaluated at a C or lower for reasons other than that you waited until the last minute or you "phoned in" the assignment (for example, you misunderstood the task) can submit a request to revise and resubmit one weekly writing project for reevaluation from the first five weeks of term. Requests to resubmit must appear in writing via email within two days after feedback has been provided, outlining why you would like to revise the project and how you intend to do so. Reasonable requests will be granted and assigned a new due date.

### Respectful Use of Technology

Most days in this course we'll be dealing with digital examples and/or using digital tools. Please bring your laptops to every class. Please put phones away or keep them screen down on the table at the start of class and after breaks, and close or minimize programs/windows/tabs open on your computer that will distract you. If I notice that you're using your laptop for reasons unrelated to class work, your participation grade will be lowered (I tend not to call people out unless a behavior is really disruptive, but trust me, I do notice!)

## RESOURCES

### **Writing Center**

I highly recommend planning for multiple Writing Center sessions, as the tutors in the Center will serve as wonderful early audiences for your work. The Center has provided the following language for instructors to include on syllabi for the University of Pittsburgh:

Located on the third floor of the O'Hara Student Center, the Writing Center offers events, courses, and one-on-one tutorials for undergraduate students. Although consultants do not correct, edit, or proofread papers, they can teach you strategies for organizing, editing, and revising your writing. You can meet with a consultant once or regularly over the course of the semester. In some cases, your teacher may send you to the Writing Center for help on a particular problem; otherwise, you can seek assistance on your own. Their services are free. You can browse the services they offer or make an appointment by visiting [www.writingcenter.pitt.edu](http://www.writingcenter.pitt.edu).

### **Academic Integrity**

All students are expected to adhere to the standards of academic honesty. Any student engaged in cheating, plagiarism, or other acts of academic dishonesty would be subject to disciplinary action. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity.

### **Reasonable Accommodations**

I am committed to making sure the class is accessible to all learning styles and abilities. If you have a disability or learning difference that requires any kind of accommodation, please provide me with the appropriate documentation from the Office of Disability Resources and Services (DRS), and/or talk to me about your learning needs. If you have a specific concern apart from a documented disability that you believe may impact your ability to successfully complete this course, please communicate with me as soon as possible and we may be able to discuss accommodations to increase your potential for success.

### **Statement on Classroom Recording**

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

# DETAILED SCHEDULE/HOW TO PREPARE FOR CLASS

## Week 1: Visual Forms of Knowledge Production



Rodolphe Toepffer's graphic inventory of profiles, *Essay zur Physiognomie* (1845), in *Graphesis*, pg. 26.

### Tuesday, May 15<sup>th</sup>

We'll talk through some stuff, you'll write/compose something, we'll brainstorm as a class the keywords that you imagine might be central to a course called "Words & Images" dealing with visualizations. We'll experiment with some abstract visualizations of experiential phenomena.

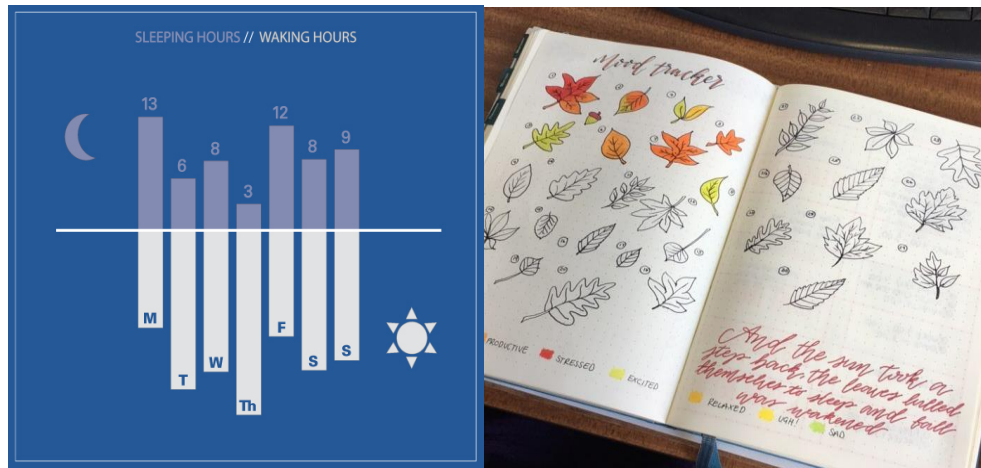
### Thursday, May 17<sup>th</sup>

*Note: Please purchase the required materials/supplies by today's class, and bring them with you!*

- **Read:** Johanna Drucker's *Graphesis*, up to page 137 (PDF in Box).
- **Post to the Commons:**
  - Find an example of a visual form of knowledge production and post it to the commons (an actual image, not a link, please!). *Don't overthink this! Part of the point is that visual forms of knowledge production are all around us! When in doubt, keep it simple. Find a graph, chart, infographic, etc. in media you consume in general or from some materials from your disciplinary studies.* Make sure to cite your source in a citation style you are comfortable with (I'm well-versed in MLA, APA, and Chicago style, so just be consistent). If you find your example out in the world, tell us where you found it. If you find it on the web, include identifying details and a hyperlink to caption the image.
  - Using quotations and examples from *Graphesis*, offer an interpretation of your example in around 300 words. Some possible questions to get you started might include: What is systematic about it? What visual language(s) or grammars are appropriate for describing this visual form of knowledge production? What is it arguing and how? In what ways might the culture of your own interests or home discipline be informing your interpretation?
- **Prepare for In-Class Work:** You will create a visualization inspired by your example in class, so bring your supplies and an idea of another set of information that would be appropriately visualized in the same form/manner as the example you posted to the Commons.

***Weekly Composition Projects due Saturday by 5pm! See "Assignments" for details.***

## Week 2: Self-Tracking & the Stories of Ourselves in Data (Beginnings)



Sleep-wake graph from daniellecarrick.com | Mood Tracker from Instagram @mindbodyjournal

### Tuesday, May 22:

- **Read:** "'Know Thyself' Self-Tracking Technologies and Practices" from *The Quantified Self*, by Deborah Lupton (PDF in Box)
- **Explore:** <http://quantifiedself.com/> (forums are especially fascinating!)
- **Explore:** Nicholas Felton Annual Reports <http://feltron.com>
- **Explore:** <http://bulletjournal.com> (get the basics of this information management system, then explore <http://bulletjournal.com/top-5-bujo-ideas-2017/> for some tracking-specific ideas)
- **Explore:** "Dear Data" <http://www.dear-data.com/theproject/>
- **Explore:** Laurie Frick's sleep drawings: <http://www.lauriefrick.com/sleepdrawings/>
- Search the web and social media platforms you use for quantified self experiments and visualizations as well as "trackers" (the bullet journaling community has a robust set of these, but these aren't the only ones). Refine your search by looking for how people have used digital and analog tools for data types you'd be interested in tracking about yourself.
- **Post to the Commons:** an example of self-tracking and a visualization of that tracking that you discovered in your reading and searching (or your own experiences) that strikes you as interesting. Write a brief 300-word statement for why you feel your example is relevant/appropriate based on the class so far, and based on information you may experiment with tracking for this class.

### Thursday, May 24:

- **Read:**
  - "Meet Some Self-Trackers" from *The Quantified Self in Precarity: Work, Technology and What Counts* by Phoebe V. Moore (PDF in Box). *Note: this whole book is available as an ebook through the library if you're interested in it.*
  - "Sara's Self-Tracking" <http://www.riggare.se/saras-self-tracking/>
  - "Tool, toy, and tutor: Subjective experiences of digital self-tracking" by Ben Lyall and Brandy Robards (PDF)
- **Prepare:** Decide on at least two points of information you'd like to track (or data points you already track). You must choose two sets of information: 1) information you can track "passively" via your phone, a device, media or browser history, etc. and 2) information you can track "actively" through a tracker you've designed that you will fill in with data as you collect it.



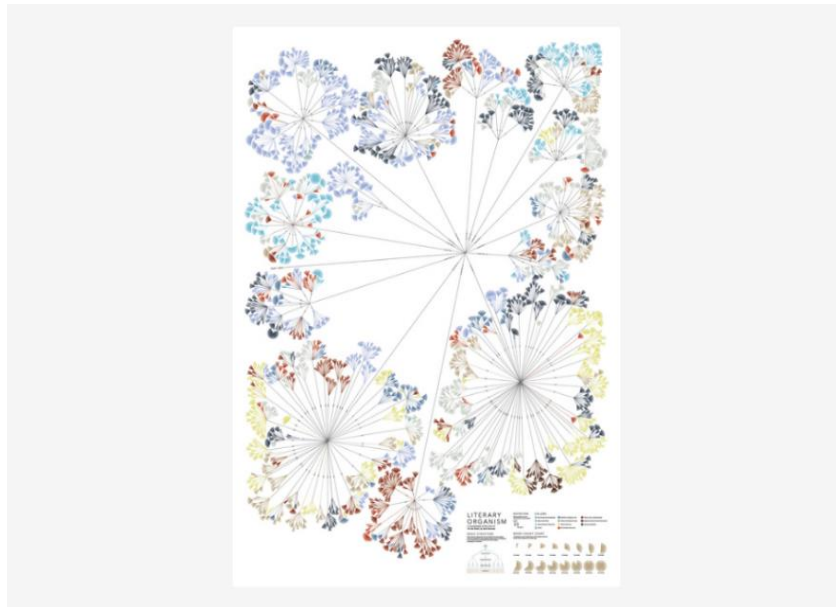
- **Post to the Commons:** At least 400 words on the types of information you've decided to track and how you plan to visualize them. Consider how your methods of collection and representation will generate knowledge for you. Where appropriate, cite examples from your reading and exploration that were inspirational for you and describe why. *What do you hope this tracking will teach you, and how will it do that?*
- **Prepare a method to hold yourself accountable in Box:** You will conduct your self-tracking experiments for two weeks, from Sunday May 27th through Saturday, June 9th. To keep you accountable, I've created a folder in Box where you can keep track of your information and post your progress. ***As an additional incentive, regular contributions to the accountability folder are worth 5% of your final grade.*** I'll just want to see that you're using it, it doesn't have to be directed at an audience other than yourself. See the "Assignments" document for how this portion of the grade will be determined.

*Note: I am speaking at a conference this upcoming weekend and am likely to shorten this class session so that I can travel for the conference. Time adjustments TBD.*

***Weekly Composition Projects due Saturday by 5pm! See "Assignments" for details.***

### Week 3: Visual Interpretations of Texts

Image of print from Stephanie Posavec's data visualizations of Jack Kerouac's *On The Road*.



[www.stefanieposavec.com/writing-without-words.com](http://www.stefanieposavec.com/writing-without-words.com)

#### Tuesday May 29th:

- **Visit & Explore:** Stephanie Posavec's website & projects (<http://www.stefanieposavec.com>)
- **Read:** The "Insect Poetics" edition of poetry and poetics online journal *Evening Will Come*: <http://www.thevolta.org/ewc-mainpage59.html>
- **Explore:** <https://Voyant-Tools.org> and this handy informational article <https://medium.com/dh-tools-for-beginners/voyant-tools-2-0-less-common-tools-for-text-analysis-a922cfdc85cb>
- **Post to the Commons:** The collection of works under the "Insect Poetics" edition of *Evening Will Come* holds the thematic thread of insects in common. Use your commons post this week to take notes as you read on what language tracks across poems, what is quantifiable, what isn't, what patterns and trends you notice (including poetic method and devices), anything you else you can observe as patterns, trends, and outliers to those patterns and trends. In light of our experiment on the first day, this might include ways in which you can track or map your own experience reading the poems. For the moment, describe these data points in prose.
- **Prepare for in-class work:** Print out three sections of the "Insect Poetics" issue of *Evening Will Come* that you found particularly compelling for whatever reason.

#### Thursday, May 31st:

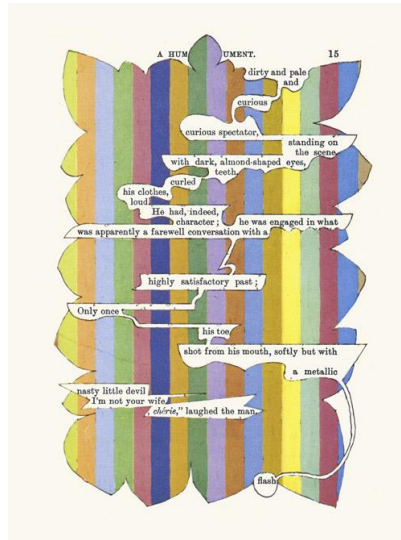
- **Seek:** A collection of texts that share something in common. This might be another edition of collected works around a topic, like the issue of *Evening Will Come* we read for Tuesday, or it might be a different kind of collection (a collection of essays, a series of scholarly articles on a topic, a Reddit thread, the most recent articles in a heavily themed popular media webzine you like, your Twitter feed, etc.).
- **Read/Explore:** Enough of your chosen collection to get a sense of elements that can be quantified
- **Post to the Commons:** some notes on what holds your collection together as a collection, and an attempt at visualizing some data point that tracks across the texts, as inspired by Tuesday's

work and readings. Feel free to use Voyant-Tools to glean quantifiable data about specific word use, or manual methods of pattern tracking and recognition. If you use manual methods, try to get through at least 5 pages.

- **Bring to class:** Your chosen collection.

***Weekly Composition Projects due Saturday by 5pm! See "Assignments" for details.***

## Week 4: Erasure Poetics



From Tom Phillip's page 15 version 1973 [\[link\]](#)

### Tuesday, June 5th:

- **Visit & Explore:** Tom Phillips's project, *A Humument* ([www.tomphillips.co.uk/humument](http://www.tomphillips.co.uk/humument)) especially explore images via the *Humument* slideshow.
- **Read:** "Notes on *A Humument*" by Tom Phillips, from *A Book of the Book* (PDF in Box)
- **Read/Explore:** Travis Macdonald's O Mission Repo (an erasure of the 9/11 Commission Report) [https://issuu.com/fact-simile/docs/o\\_mission\\_repo\\_full\\_text](https://issuu.com/fact-simile/docs/o_mission_repo_full_text)
- **Read:** About & samples from Jen Bervin's *Desert* and Mary Ruefle's *Little White Shadow*: <https://jacket2.org/article/defacedrefaced-books>
- **Read:** more about erasure poetics <http://jacketmagazine.com/38/macdonald-erasure.shtml>
- **Seek:** Either, 1) find an obscure book or document for cheap at a used book store, book swap, your own bookshelves, or any place where books get lost and end up being free to you or reasonably cheap, or 2) find a PDF of a text (any text will do, really, but you can be picky about which text if you have a particular way of reading it in mind) that is a scan of a book's original pages. Print out at least 20 pages of this text and bring them to class with you.
- **Post to the Commons** a reflection on your experience with book alteration and erasure poetics, and the beginnings of your own erasure project with your chosen text. Consider how your chosen method of erasure is appropriate as a method of reading the text you have erased. *Note: This must be a pen-and-paper method!* Include in your post an image of at least one page you've erased.

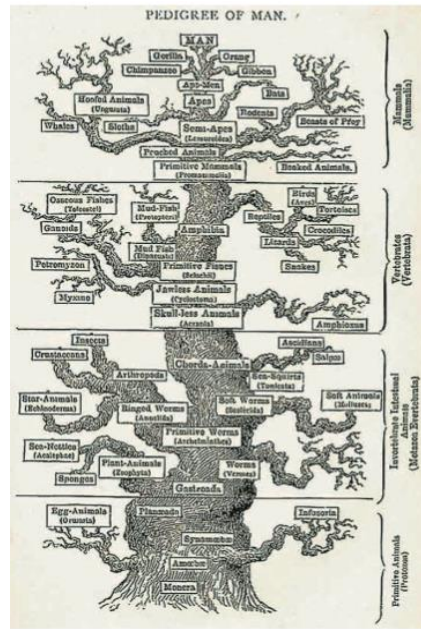
### Thursday, June 7th:

- **Continue your erasure projects.**
- **Post to the commons:** an informal 300-400 word proposal for your final project (see the "Assignments" document for the full Final Project prompt) describing, in particular, how this project will serve as the culmination of your thinking in this course.
  - Describe what you imagine doing and how you imagine doing it. List what materials you will need and might use.
  - You may want to sketch, draw, or map out things digitally if you need to or if that will help to convey your idea (or re-cite earlier projects if that is relevant).

- Make sure to note potential problems you imagine encountering and anticipate a way to pivot if you need to (it might help to think of this part as what you *hope* to accomplish and what you feel to be actually possible in the time allotted).
- End your proposal with two to three questions you have about formatting, procedures, or about concerns you have in general (we will respond to these questions directly in workshop in class).

***Weekly Composition Projects due Saturday by 5pm! See “Assignments” for details.***

## Week 5: Trees & Mapping + Final Projects



Ernst Haeckel *Evolution of Man*  
In *Graphesis* pg. 99

Tuesday, June 12th

- Turn in your final self-tracking projects prior to the start of class.
- Read/Explore: *The Book of Trees* (available as an ebook through Pitt libraries):  
<https://ebookcentral.proquest.com/lib/pitt-ebooks/reader.action?ppg=1&docID=3387599&tm=1526137295658>
- Revisit Drucker's segment on knowledge trees: pages 95-104.
- Post to the commons: A discussion in around 400 words brainstorming knowledge meaningful to you in your own life that can be represented in a tree diagram, and either a rough sketch of that tree diagram or a thorough prose articulation of what such a visualization would look like.

Thursday, June 14th

- Read/Explore: The Northside Aim Mapping Project: <http://northsideaim.org/about-aim/>
- Read/Explore: The MOMA theme/content area for maps, borders, and networks:  
[https://www.moma.org/learn/moma\\_learning/themes/maps-borders-and-networks](https://www.moma.org/learn/moma_learning/themes/maps-borders-and-networks)
- Revisit Drucker's segments on space and mapping: pages 76-84.
- Post to the Commons (this week is a folder and a shared document): A working draft of at least a three-page portion of your final project (wherever you are in the process)) saved to the folder as a .docx or .pdf so that we can all preview what you're up to. To the shared Box Note in the folder, provide a few sentences of commentary on what you've done so far, a link to your document, and three comments or questions you have regarding to challenges, roadblocks, concerns, etc. you have for moving forward that might benefit from peer discussion, troubleshooting, and/or general feedback.

## Week 6: Final Workshops & Presentations



Screen grab from Pittsburgh interactive zoning map <http://gis.pittsburghpa.gov/zoning/>

### Thursday, June 19

- **Work on your final projects.**
- **Post to the Commons (this week is a folder and a shared document):** A working draft of at least a six-page portion of your final project (wherever you are in the process)) saved to the folder as a .docx or .pdf so that we can all preview what you're up to. To the shared Box Note in the folder, provide a few sentences of commentary on what you've done so far, a link to your document, and three comments or questions you have regarding to challenges, roadblocks, concerns, etc. you have for moving forward that might benefit from peer discussion, troubleshooting, and/or general feedback. Include in your post a few ideas you have for presenting your projects on the final day of class.

### Thursday, June 21st:

- **Provide Final Presentation slides/websites/documents to the Box by 2pm** so I can queue them up (so we don't spend time switching computers at the projector).
- **Final Projects are due prior to the start of class.**