

Implosion Project

INF1501: Culture and Technology I

Matt Price (with thanks to Joe Dumit & Michelle Murphy)

“Any interesting being in technoscience, like a textbook, molecule, equation, mouse, pipette, bomb, fungus, technician, agitator, or scientist can—and often should—be teased open to show the sticky economic, technical, political, organic, historical, mythic, and textual threads that make up its tissues” Donna Haraway, [Modest Witness@Second Millennium](#), p. 68)

This course has only one assignment, with many parts. To carry it out, you will need an artifact: some piece of technology that you will study in-depth in a number of assignments over the course of the semester. You are not *required* to choose a “digital” or “information” technology, but you are strongly encouraged to consider your direction in the MI program. Most C&T students will be interested in some combination of Critical Media Studies, Science & Technology Studies, and the digital humanities. Ask yourself: by studying this artifact, will I explore issues that help me clarify and attain my objectives in the MI?

The more specific your technology, the better. Not just Android, but the rattly shanzhai phone your friend picked up for you in the Huaqiangbei market in Shenzhen. Not just an abacus, but the brightly-painted child's toy you found when you were sorting through your grandmother's belongings. Not just a pen: the mass-produced Bics you found in the supply closet, or the engraved Cross pen your grandfather was given when he graduated from Cooper Union. Not “digital music”, but a particular MP3 file downloaded from the Internet. The key to this assignment is to choose artifacts that will allow you to dig into socio-cultural histories, materialities, and contexts in which you are interested.

Over the course of the semester we will work a series of transformations on this object, culminating in a mid-length research paper.. This document details all the steps along the way, graded and ungraded. If you hit the ground running and move steadily throughout the semester, this should be a lot of fun. Be prepared for a certain amount of ambiguity and guessing regarding the more exploratory aspects of this assignment, but do not let your imagination stand in for diligent work and research. Be prepared to dig in and explore, to search for information and traces of the history and contexts of your objects – you will find that there are social forces which attempt to delimit our knowledge of the real histories of objects. We will be working against the long-standing trope which divides the ‘social’ and the ‘technological’ into separate camps.

The assignment makes reference throughout to “your group” – these are groups of 4 or 5 students chosen at random at the beginning of class. While this is an individual project, groups will work together and present to each other at various times through the semester. Percentages refer to percentages of the final mark in the course.

1 Choose an Object

Due: By end of class, Sept. 26, Unmarked, 0%

Choose your object carefully. You will want something that relates to your intellectual interests. Are you interested in digital humanities? Perhaps consider an e-book, digital map, or database. Hoping to work in social media? Perhaps a small, third-party app (not Facebook!), or better, an algorithm used by one such app, or an app-building tool. Interested in the medical system? Perhaps a diagnostic algorithm, or a test, vaccine, or data management tool. Don't know yet what you're interested in? Time to figure it out! Whatever you choose, you should be as specific as possible. The richness of your analysis will be in part determined by the highly specific connections you can draw between your object and other parts of the world.

2 The object in the world, the world in It # 1[Brainstorm]

Due: Oct. 3, Pass/Fail, 10%. Marking Commitment: 10 mins/student

We will start this in class the week before this assignment is due. An electronic copy is due in Blackboard and in Dropbox Requests (<https://www.dropbox.com/request/2bVH8eeaMKT3ORo20rbG>) before class starts on Sept. 24, and you will present your findings in class to your small group. Read the whole description before you begin.

Clear your head and clear your desk. If your object is material place it in front of you – if not, try to find some trace of it that you can use to focus your attention. You will need to attend directly to your object and your thoughts, understanding, and knowledge of it. Put away your computer and your phone if they are distractions. You will need a couple of hours to do this right, and will probably require more than one session. NOTE: For at least the first hour, do not use the Internet to find information – instead, draw upon your own knowledge and understanding. After an hour, if you find it necessary, feel free to go online to look for relevant material.

Go through the list below and try to answer each question as best you can; if it's useful to draw diagrams or charts, do so (take pictures of them when you're done, and include in your final document). The questions overlap a little, so it may be hard to decide where to put your answers; decide as best you can. If it seems a question is missing, add a new one. As you answer questions, you will find that *new artifacts emerge*. Take note of them and follow their trajectories, too, as you continue down the list. Also note your own (lack of) certainty about your answers: whether you feel you know the answer in detail, have a good idea about it, a guess, or no idea. If you find it difficult to know or discover the answer to a certain question, think about where the difficulties arise. The purpose of this exercise is to explore the material and socio-cultural complexity that permeates these real, situated artifacts; later stages of the project will make extensive use of your work here.

- **Material dimensions:** What materials are involved in its production and maintenance? Where have these materials come from? How are they disposed of? What hazards are considered among these materials? What are the labor dimensions of these material productions? What are the global, economic, and political dimensions of their use? What are the histories, sciences, and political dimensions of these materials? How do these help constitute it?

- **Technological dimensions:** What kinds of technologies and machines enable it to be produced and maintained? What technologies are joined with it? Who has access to these machines and technologies? What are their histories? What sorts of information technologies are involved? What are the political, economic, bodily, labor, and historical dimensions of these technologies? How do they help constitute it?
- **Labor dimensions:** How was it produced and who is involved in its production? Are there stages in its production? Where has it traveled to and from? What are the histories of its productions? Who maintains these processes of production? Where are they maintained? How is it used and how is using it seen as labor, or not? What forms of labor and work incorporate it or make use of it? Is it used up? If not, how is it passed on, transferred, communicated? What routes do these processes take? What kinds of actors (human and nonhuman) are involved, and what kinds are excluded?
- **Context, geography, and situatedness:** Where does it appear in the world? How has it travelled? How does it appear and next to what or in what? What activities or ways of life enable one to come across it? What kinds of audiences is it addressed to? Who is excluded in these addresses? When can it appear? What is the rhythm of its appearance? How does this matter?
- **Political dimensions:** What kinds of local, national, and international bodies claim jurisdiction over it? What bodies play a part in approving it (e.g., lobbyists, patents, corporate sponsorship, etc.)? What are the histories of regulations concerning it? How do these regulations help constitute it? How is it understood in terms of political positions in the world? How can we articulate the ways it is understood with political discourses? How is it hegemonic—in what ways can we see it as marshaling our consent to dominant orders? What kinds of legislation affect it? How do political considerations make use of it? What are the political positions as seen through the lens of this artifact (they often vary by artifact and moment)? How does this matter?
- **Economic dimensions:** The process as commodity: how is it marketed, purchased, consumed? Where and by whom? How is it involved in a world marketplace? What kinds of capital, debt, credit, and labor relations are involved in producing, marketing, and circulating it? Who sells it? How are costs calculated? How are risks calculated? By whom and when? What are the histories materials come from? How are they disposed of? What hazards are considered among these materials? What are the labor dimensions of these material productions? What are the global, economic, and political dimensions of their use? What are the histories, sciences, and political dimensions of these materials? How do these help constitute it?
- **Particle Dimensions:** How can the object be divided up? What are its parts? What are its stages? Treating each part or stage as a process, repeat the above analysis.

3 The object in the world, the world in It # 2[Brainstorm]

Due: Oct. 10, Pass/Fail, 10%. Marking Commitment: 10 mins/student

Continue the work started in the previous week. Append answers to your previous document and upload your new more complete version to Blackboard & Dropbox Requests

(<https://www.dropbox.com/request/2bVH8eeaMKT3ORo20rbG>) before class starts on Oct 10. Again, you will present your findings in class to your small group. Read the whole description before you begin.

Clear your head and clear your desk. If your object is material place it in front of you – if not, try to find some trace of it that you can use to focus your attention. You will need to attend directly to your object and your thoughts, understanding, and knowledge of it. Put away your computer and your phone if they are distractions. You will need a couple of hours to do this right, and will probably require more than one session. NOTE: For at least the first hour, do not use the Internet to find information – instead, draw upon your own knowledge and understanding. After an hour, if you find it necessary, feel free to go online to look for relevant material.

Go through the list below and try to answer each question as best you can; if it's useful to draw diagrams or charts, do so (take pictures of them when you're done, and include in your final document). The questions overlap a little, so it may be hard to decide where to put your answers; decide as best you can. If it seems a question is missing, add a new one. As you answer questions, you will find that *new artifacts emerge*. Take note of them and follow their trajectories, too, as you continue down the list. Also note your own (lack of) certainty about your answers: whether you feel you know the answer in detail, have a good idea about it, a guess, or no idea. If you find it difficult to know or discover the answer to a certain question, think about where the difficulties arise. The purpose of this exercise is to explore the material and socio-cultural complexity that permeates these real, situated artifacts; later stages of the project will make extensive use of your work here.

- **Textual dimensions:** What texts are involved in it? What texts refer to it? What kinds of texts? Who produces them and who reads them? Where and in what organizations and institutions are the texts produced and read? What are the histories of these texts and how are they funded? What kinds of textual associations can be made? How does this matter?
- **Bodily/organic dimensions:** How are bodies related to it? What forms of attention, affect, emotion, and cognition are involved? Are there particular ways in which we think of ourselves that also involve or sustain this process? What kinds of bodies, including nonhumans, and bodily relations are involved in producing it? What kinds make use of it? How are these bodies and relations gendered? Are there racial, gendered, differently abled, or other group identifications that help construct these bodies? What ways of life are involved? What are the histories of all these relations? How do these help constitute it?
- **Historical dimensions:** What concepts refer to it? What are the histories of these concepts? Was it invented, when and by whom? Are there different and competing versions of its histories? Who tells these histories? How has it traveled historically? Repeat the above dimensions for each aspect of its history. How do these help constitute it?
- **Professional/Epistemological dimensions:** How is knowledge of the object and its production demarcated and professionalized? What kinds of knowledge count in talking about it? What kind of professionals are involved in making expert decisions regarding its development, production, and dissemination? How are each of these stages funded? In projecting its future use? What kinds of controversies of this knowledge are happening? Who is involved? In what kinds of institutions do they work? How is it articulated by medical, legal, governmental, religious, psychological, engineering, military, economic, academic, new age, and educational

professionals? What are the political-economic histories of this?

- **Educational dimensions:** How does it appear in our socialization? When do we learn about it in school? During the rest of life? What kinds of people/bodies get to learn about it? How much do we learn about it? What aspects of it are avoided? What are the histories of teaching about it? How does this matter?
- **Mythological dimensions:** What roles does it play in fantasies? What kinds of national narratives make use of it? How does it appear in entertainment? What other grand narratives, stories, and strong associations involve it (e.g., progress, risk, joy, fear, science, militarism, success, decline, horror, self-improvement, financial security, nuclear family, motherhood, fatherhood, independence, adolescence, democracy, origin stories, stories of difference, privilege, death, pornography, sports)? How do these matter?
- **Symbolic dimensions:** What are the many different ways in which it can be taken as a symbol? How does this process serve in symbolic systems? What sorts of ideas, metaphors, movements, ideologies, and the like are associated with it? For whom are these relevant, to whom do they matter, and what contests over meaning are they involved in? What are the histories of these meanings and contests over meaning? How do they matter?

4 Gap Map

Due Oct. 17 at 10:00AM, Pass/Fail, 5%. Marking commitment: 5 mins/student

Think about your answers to the questions explored in the first two assignments. Imagine these dimensions projected, through some unknown algorithm, into the two-dimensional space of a map or chart, with regions color-coded (heat-mapped!) according to your level of interest and expertise. Try diagramming your answers in some sort of specific way, for example based on your amount of interest, your level of knowledge, or other criteria.

First think about what dimensions you know best – how do you come to know them so well? What interest, passion, experience has led you to acquire and attain that knowledge? Then think about the *gaps* in your knowledge. Why are you ignorant about these areas? What will you have to do to learn more? Prepare a document in whatever format you choose (annotated map, lengthy chart, text) and bring it, without fail, to class.

5 Research Précis (3x)

Due Oct. 31, Graded, 25%. Marking commitment: 20 mins/student.

Your gap map will provide you with a number of research areas (dimensions) in which your knowledge is inadequate. Pick the 3 most important or interesting of those areas and learn as much as you can about them. Then, for each area, write a short précis of what you have learned so far – no more than 1.5 pages single-spaced, plus bibliography. This should be a clear, well-phrased summary of your work to far, but need not have a strong thesis. In addition to summarizing what you've learned, explore the significance of this dimension for your final paper. Remember, you need to do this for 3 “gap” areas.

Bring your completed documents (all 3) to class on Oct. 31; we will hold a peer-review exercise in the third hour, and you will have until 5pm the following day to submit your finished work to me by Blackboard and Dropbox Requests (<https://www.dropbox.com/request/9NhNSZEOiBDhd1axNzVx>).

No extensions.

6 Research Treatment

Due Dec. 5 at 10:00AM, Graded, 35%. Marking commitment: 30 mins/student.

This is a bog-standard research paper of the kind you've done a dozen times before, *except* that you have prepared for it with the gap map, the 3 précis, and the paper about your artifact. Now you need to ask yourself: what is the one great thing I want to say about this artifact? And what tools and styles of writing can I use to communicate that story – as myself, not as someone else! Clear your desk. Turn off the Internet. Bite your nails if you have to; it's OK if they tear a little, but not so bad that you need to distract yourself by running to get a band-aid.

12-15 pages (3500+ words), marked as usual on argument, creativity, coherence, and style. 3%/day late penalty. Submit via Blackboard and Dropbox Requests

(<https://www.dropbox.com/request/xTznvDAW7S3mCMZIKQ9f>).