**Prototyping the Classroom in Media Studies**

**The Preamble**

In the prototyping classroom, media are examined as physical objects–torn apart or rebuilt–pressuring the media studies student’s canonical understanding of media studies and opening new venues for insight. The act of engaging with the material media text–or, the material media object–allows students to engage more fully with questions involving the infrastructures that go into the production of media objects, the paradigms for media innovation, and the assumptions that they might bring to bear on the material make up of the media object itself.

There are a number of ongoing discussions in media studies and parallel fields, particularly the Digital Humanities, that foreground the role of materiality in a media-dominated age. The intervention this contribution pushes for is not new. Tara McPherson who, in her introduction to the *Popular Culture* special issue on Media Studies and DH, asks, “that the media studies classroom deploy methodologies that are more concerned with materiality”[[1]](#footnote-1) has already covered some of the ground I’m sowing here. Moreover, forays into the topic of possible collisions between the disciplinary practices of Media Studies and Digital Humanities have been well-mined in a special issue of *Cinema Journal*,[[2]](#footnote-2) Hocks and Sayers et al in *Hacking the Classroom*,[[3]](#footnote-3) Parks and Starosielski in *Signal Traffic: Critical Studies of Media Infrastructures (Geopolitics of Information)*,[[4]](#footnote-4) and in recent discussions of media studies by Matthew Kirschenbaum,[[5]](#footnote-5) Lori Emerson,[[6]](#footnote-6) Nicole Starosielski,[[7]](#footnote-7) Mark Sample,[[8]](#footnote-8) and Jonathan Sterne,[[9]](#footnote-9) to name but a few.

As someone who belongs more to the partnerships of Digital Humanities than to the theoretical discourses of media studies, I want to encourage media studies in the classroom to “take the material nature of technology as seriously as […] its social construction.”[[10]](#footnote-10). In so doing, I build off recent ideas put forth in Stephen J. Jackson’s “Rethinking Repair,”[[11]](#footnote-11) which seems to be signaling a decisive shift in the application of Digital Humanities practice in general, but is also aptly timed for a discussion about how we approach physical media objects in the classroom.

Thinking about the classroom as a prototyping space then, hopefully, shifts the emphasis of media studies to a material approach that opens space for discussions about how other cultures approach the materiality of media–as an instrument of injury, toxicity, and disruption, for instance. An encounter with the tools and infrastructures governing the fabrication, repair, and destruction of media objects raises questions about access that trudge toward systems of labour, non-democratic restrictions, and environmentalism. By directing conversations away from the content’s effect on users of media toward the structures that govern the material production, repair, and destruction of them, at the very least, the prototyping classroom problematizes traditional lines of media studies inquiry.

**The Exercise**

In order to illustrate the paradigms outlined above, the remainder of this piece is a walk-through of a classroom situation–a lesson plan–offering a way to implement and encourage discussions about materiality and fabrication already underway in the Digital Humanities in the media studies classroom. The assignment, for the sake of brevity, begins with a disassembled computer tower–the rectangular branded box that often sits on the floor or a desk and that holds within its metal or plastic casing a hard drive, some disk drives, a micro processing chip with a fan, a motherboard, and the connective ports for external hardware such as screens, a mouse, and modems.

While suggesting that the assignment as it is laid out here begin with a disassembled computer tower, I want to emphasize that it could begin with the process of tearing down, unscrewing, disconnecting and deconstructing a computer tower–or any physical media. The example merely emphasizes one approach; I hope it is understood that mashing up and ripping apart the example is precisely the point that the paradigm for prototyping classroom puts forward. That said, from here onwards, the focus will be on a classroom exercise that involves the rebuilding of a tower computer console–or “box.” There is no provision for screens, keyboards, or a mouse–but one could add these items, giving different components to classroom different groups leading to a discussion about how the different material media objects network together (or don’t). The focus on tower consoles–again, “boxes”–comes out of the assumption that such boxes are usually fairly available–and disposable–in academic replacement cycles given their abundance in computer labs, employee desks, and general tendency toward obsolescence. Usually, all one has to do to get one is ask the IT department, who will often be more than happy to offload one to a destructive classroom application.

For the instructor, the hardest part of setting the assignment is the initial disassembly–hence the suggestion above that one passes it off on the students. The disassembly can be done with basic household tools–a screwdriver mainly, some physical exertion, and hand wringing. The box disassembles intuitively, usually after the screws are removed from the external casing, things fall apart easily with a little nudge and, if one is stuck, sites such as [ifixit](https://www.ifixit.com/) offer practical guidelines for disassembly. Once disassembled, the pieces of the box put into containers, or better still, haphazardly placed in containers, the exercise is pretty much ready to go. The instructor will need to get to the classroom with all the disassembled pieces a little early and it wouldn’t hurt to bring some safety glasses and a Band-Aid or two.

Students arrive in the classroom to be confronted by the disassembled box in the center of the room. The setup, beyond this central focus is open. Instructors can scatter pieces, order pieces, place pieces. Suffice to say, all the pieces, parts, and plugs, required to reassemble the box must be present in the center of the room–note there’s no specification that the box be on a table; it could be on the floor. Initially, there should be no tools present–only the disassembled pieces of a computer tower.

The exercise begins by encouraging students to identify what it is that is in the center of the room. If the students identify the pieces as a computer tower, then encourage the students to explore the assumptions or embedded knowledge that allowed them to identify and “reassemble” the pieces in order to make their claims about the origin of the media object before them.

Following these early interventions, the instructor delivers the central prompt: “repair, reassemble, or reanimate the media object in the center of the room.” While the “media object” label is not essential, it does provide the students with some sense as to the relevance of the exercise to the media studies discipline. The nod to “reanimate” encourages interesting mash-ups or recreations in which the object is repurposed in ways unintended by the media object’s original state.

By withholding tools at this stage, the exercise encourages students to engage with the pieces as they sit. Students quickly discover the limits of their agency–what can they do without tools? What tools do they even need? What is the proper name for that star-shaped screwdriver head? Here, the students confront the limitations around their knowledge of production infrastructures. As best the instructor can, s/he should avoid trying to interfere with any transgressions. Mash-ups, incorrect reassembly, ignorance should be encouraged as it fosters discussions around agency–who in the classroom is even equipped to act; creativity–what ordering/pattern can make these pieces “mean something”?; and assumptions–what do I know about these pieces and how do I make them into the normal computer again?

As students reach their limit in terms of agency, creativity, and assumption, the instructor should introduce the tools needed for reassembly. In so doing, conversations could be had around the political agency created by access to these tools. in other words, how does the tool determine the process? How does access to the tools–and the education about how to use them that accompanies such gifts–determine their use value? How do the students share information, collaborating toward a solution? At this juncture, it is especially important to note how gender stereotypes are activated by assertive or regressive maneuvers when it comes to repair. Do the female students back off or assert themselves upon the introduction of tools? How are groups forming–are their specialized skills that dictate how the groups form? Who takes ownership of the tools and/or the rebuilding process, and what are the criteria for this political agency? Do gender roles result in spaces where different conversations that do not involve the reassembly of the computer tower but concentrate on aesthetics, content, software, and integration with other materialities?

**The Outcomes**

As the media object is reassembled, in whatever form, there should be notable moments where traditional media theories become visible through the process of fabrication. To move quickly to a conclusion, materiality, and the media studies student’s encounter with it, encourages a new kind of interaction with the paradigms that dominate the theoretical interpretation of media. Confronting the broken tower, the student must deal with the assumptions and unknowns that govern the production of media objects. As the process–often collaborative in nature–governing the media objects reassembly emerges, insights into the underlying the material production of media objects are revealed. The end result is often not the blue light that suggests the hard drive has begun to spin again, but the realization that no one has thought to integrate the rebuilt media object into the underlying material infrastructures of media content; how does one re-boot the machine?

Where the traditional media studies classroom focuses on the content, history and effects of media, the prototyping classroom keys in on the materiality of media in order to approach contextual, historical, and rhetorical situations in a way that embeds those conversations in the material rather than ethereal. Hopefully, the material classroom engenders ideas about how physical objects mediate contact between humans as objects rather than as purveyors of messages.

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2. McPherson, Tara et al. "In Focus: Digital Scholarship and Pedagogy." *Cinema Journal* 48:2 (Winter 2009) 119-160. [↑](#footnote-ref-2)
3. Hocks, Mary and Jentery Sayers. *Computers and Composition Online*. Spring 2014. (http://www2.bgsu.edu/departments/english/cconline/hacking/) [↑](#footnote-ref-3)
4. Parks, Lisa and Nicole Starosielski, eds. *Signal Traffic: Critical Studies of Media Infrastructures (Geopolitics of Information)*. U of Illinois P, 2015. [↑](#footnote-ref-4)
5. Kirschenbaum, Matthew G. *Mechanisms: Mechanisms New Media and the Forensic Imagination*. MIT P, 2007. [↑](#footnote-ref-5)
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7. Starosielski, Nicole. *The Undersea Network*. Duke UP, 2015. [↑](#footnote-ref-7)
8. Sample, Mark. *Sample Reality*. (http://www.samplereality.com/) [↑](#footnote-ref-8)
9. Sterne, Jonathan. *MP3: The Meaning of a Format*. Duke UP, 2012. [↑](#footnote-ref-9)
10. Lievrouw, Leah A. "The Materiality of Mediated Knowledge and Expression." Parks, Lisa and Nicole Starosielski, eds. *Signal Traffic: Critical Studies of Media Infrastructures (Geopolitics of Information)*. U of Illinois P, 2015. 21-52. (23) [↑](#footnote-ref-10)
11. Jackson, Stephen J. "Rethinking Repair." Parks, Lisa and Nicole Starosielski, eds. *Signal Traffic: Critical Studies of Media Infrastructures (Geopolitics of Information)*. U of Illinois P, 2015. 221-240. [↑](#footnote-ref-11)