

## Making Space: Feminist DH and a Room of One's Own

Kim Brillante Knight, PhD  
The School of Arts and Technology  
The University of Texas at Dallas

Abstract:

(With all apologies to Virginia Woolf...)

But, you may say, we asked you to speak about minimal digital humanities—what, has that got to do with a room of one's own? I will try to explain. When you asked me to speak about minimal digital humanities I sat down on the banks of a river and began to wonder what the words meant. They might mean simply a few remarks about funding; a few more about space; a tribute to the human collaborators who are anything but minimal; some witticisms if possible about university administrators; a respectful allusion to the work of feminism in the academy; a reference to the NEH and one would have done. But at second sight the words seemed not so simple. The title minimal digital humanities might mean, and you may have meant it to mean, underfunded DH projects and what they are like, or it might mean a mode of humanities in which the qualifier “digital” becomes minimal; or it might mean a foundational embrace of minimalism, or it might mean that somehow all three are inextricably mixed together and you want me to consider them in that light.

But when I began to consider the subject in this last way, which seemed the most interesting, I soon saw that it had one fatal drawback. I should never be able to come to a conclusion. I should never be able to fulfill what is, I understand, the first duty of a roundtable participant to hand you after seven minutes' discourse a nugget of pure truth to wrap up between the pages of your notebooks and keep on the mantelpiece for ever. All I could do was to offer you an opinion upon one minor point—a scholar must have money and a room of her own if she is to do digital humanities...

Short Paper

On GO:DH's web space, Joel Hughes offers this idea in his thought piece, “Minimal Definitions - Notes”:

The notion of a “minimal” system is very subjective. In most cases, assuming that the complexity is essential, what remains can be hidden from the user (at the expense of understanding/learning and flexibility) or revealed at the surface (at the expense of first-time comprehension).

The tension between accessibility and visibility is one with which minimal computing will continue to wrestle. In the context of wearables, this relationship is often overdetermined by the logic of capital. Fitness trackers and other objects of wearable tech are often lauded for their unobtrusive hardware or minimalist aesthetics, which often relies on the hardware blending in with other objects of dress or disappearing entirely. In *Garments of Paradise*, Ryan notes that this impulse, to make the tech disappear, ignores the cultural connotations of “dress” and is focused on marketability. One side effect of this may be an opaqueness around the ubiquity of wearable technology and a fuzziness regarding the biopolitics of wearable technology.

In both Gil’s and Sayers’ thought pieces on the *Minimal Computing* website, they reference Arduinos as one model of minimal computing. The LilyPad Arduino, specifically engineered for wearable applications, shares many of the characteristics of the typical Arduino that might prompt one to categorize them as minimal computing. It is lightweight with only a simple processor and limited memory. It is modular and can be combined only with the sensors and actuators needed for a given project. It is open source, with hardware manufactured under humane conditions. It uses the Arduino language, a beginner-friendly programming language.

As minimal as it may be, the LilyPad complicates the binary found in the tension between visibility and accessibility. While most any Arduino project could foreground the processor among its visual strategies, they often don’t. In contrast, the LilyPad is designed with visibility in mind. Leah Buechley, the creator of the LilyPad, describes it as having a soft, colorful, beautiful aesthetic that she hopes will affect the world of engineering applications. As a result, both the LilyPad controller and the stitches used to connect it to other components are often consciously made visible as part of wearable projects. Kafai and Pepler argue that the visible stitches of a LilyPad circuit make transparent the workings of circuits, including concepts like polarity and

flow. So we have that which is ornamental also increasing transparency. This puts the LilyPad somewhat at odds with minimalism as an aesthetic strategy and the invisibility of most consumer wearable technologies.<sup>1</sup> While the LilyPad is nowhere near as ubiquitous as other forms of wearable tech, i.e. fitness trackers, it is one example of an approach that resists the drive toward invisibility. Its other characteristics are not overshadowed by its ornamental affordances.

In fact, all of these characteristics are what make the LilyPad quite useful as the centerpiece to Fashioning Circuits, a public humanities program that explores the ways in which fashion and emerging media intersect and that works with community partners to introduce beginners to making and coding through wearable media. I think it would be most useful to think about the ways in which Fashioning Circuits both is and is not minimal.

**It is minimal because it has never had grant funding.**

When I started out, I had no choice but to be minimal. I used my own sewing machine, soldering iron, and other equipment to help students materially engage with wearable technology as part of our study. I had no idea if any of it would work. I was working with students on feminist approaches to wearable tech while also teaching them to sew and solder. I didn't want anyone to tell me to stop.

Once I realized that it worked and the project started to expand, I really did get by on about 500 a year. In the first year, I requested funds to purchase 10 LilyPad kits that I could use for workshops. The total was around \$400. The next year, as I did more independent studies and

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<sup>1</sup> This keeps nagging at me but I have so far been unsuccessful in developing it further: I keep returning to the concept to stripping away that which is considered "excess," and wondering what is eclipsed in this process? Is there something masculinist in this? A refutation of ornament? Makeup and jewelry are often critiqued in this regard and are closely associated with femininity. There is definitely something classed in the idea - what is the line between that which is opulent and that which is garish or tacky? And how is minimalism a reaction to that distinction? Is this a racialized concept? It sits uncomfortably and I cannot articulate why.

workshops, I requested \$430 to purchase two sewing machines and some other sewing supplies to help alleviate the wear and tear on my own equipment. And those were our total expenditures until last year when I was given some research funds and I was able to replace the initial LilyPad kits and expand our supply store. If the community organizations with which we are working wants to have a take-home project, I generally develop a few options for them and we incorporate the one that fits their supply budget. This limits who can have a take home project.

Though Fashioning Circuits has multiple components - my research, university coursework, and community partnerships, it is generally the latter piece that people identify as being “fundable.” People have encouraged me to try to turn Fashioning Circuits into a business outside the academy. People have encouraged me to pursue the many grant opportunities that exist for increasing diversity in STEM fields. Both options carry with them limitations that I have not been willing to accept for the project. In both cases, the project would become responsible to some other outcome, either a profit or the goals of the funding agency. By keeping our financial requirements low, we retain control and we retain flexibility. It limits us in scale, but I’m also happy to support other people in starting up their own or similar programs in their locale.

An additional drawback of this is that Fashioning Circuits does not “count.” My colleagues respect it. My administrators support it in many ways. But because there is no grant money attached to it, it does not replace the more traditional types of scholarship that are required for advancement.

**It is minimal because there is no administrative infrastructure.**

I do almost everything. I have a group of enthusiastic and dedicated volunteers for community events, whom I will return to in a moment. But the infrastructure, the planning and administration all comes down to me. I do the social media. I develop budgets and curricula for

events. I put the slide decks together. I train those aforementioned volunteers. I invite others into those processes, but for the most part, I end up doing it.

This is, of course, related to the issue of no grant funding. I do all of this because I have no funds to pay someone to help me with it. When I teach Fashioning Circuits university courses, I have historically been assigned a shared TA to help support students in the lab. But this is the only time I've been able to pay someone to help. And even then, that TA is not full-time for Fashioning Circuits and their primary focus is student support, so I still end up doing most of the administrative work myself.

The lack of administrative infrastructure also means that we lack the means to do some things that I think could be important - following up with workshop participants. Maintaining files of who has participated in order to develop more advanced programming for those who might like to return. Developing resources for supporting workshop participants after the event is over. Again, this results in limitations in scale.

**It is not minimal because it requires a significant time investment.**

It is time I do not mind spending. But it is not only my time. The group of volunteers that I mentioned previously also give their time. Former students talk about it and bring ideas for events to the group. Community workshops are staffed by former students, enthusiastic community members, community partners from past events, and supportive colleagues.

**It is not minimal because it generates tremendous goodwill.**

All of those volunteers. I'm constantly blown away by the people who hear about what we are doing and just want to lend a hand. Our logo was donated by a supporter. People donate their time in these workshops. They encourage other people to donate their time.

**It is not minimal because we have space.**

In Jentery Sayers' "Minimal Definitions, Minimal Computing," he raises the issue of space. Minimal computing theoretically needs less space. But, as Sayers notes, this increases the burden to prove why space is needed. And in addition to money, administrative support, time, and goodwill, space is a tremendous asset. I have done Fashioning Circuits with no space, having students in my home to work, or moving supplies from my office to available meeting rooms for each gathering of students or volunteers. I have done Fashioning Circuits as a guest in someone else's space. I have done Fashioning Circuits as an official co-habitant of a lab. And beginning next year, I will do Fashioning Circuits with a dedicated space. I don't yet know what the effects of this will be. The room we are assigned is too small to hold classes or community workshops. But it could host small groups of faculty and students co-working. And it is a space the layout of which I can design to best suit the needs of my own and student projects - for cutting fabric and sewing large items and working on a wired garment for a few minutes a day without having to pack up everything and then unpack it the next time. In other words, it is a space of possibility. Does this mean that we are no longer minimal? I guess the question to ask is why does that matter?

In this case it matters because being minimal has enabled certain things. The minimalism of the LilyPad allows me to incorporate it fairly easily into humanities coursework. The minimalism of the project's financial and administrative needs made it less likely that anyone would tell me no. The project's not-so-minimal goodwill has allowed me to draw on the resources of time and space in ways that might be difficult with other projects. In thinking about the difference between minimalism-as-choice and minimalism-as-necessity, I'm not so sure you can place Fashioning Circuits firmly in either category. True to the promise made in my abstract, I offer you no conclusion. All I can offer you is an opinion upon one minor point— there are many

different kinds of resources that might support a successful digital humanities project. We've made do without grant funding and administrative infrastructure, but that is only because we have been rich with time, goodwill, and now space.

## References

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