DHQ: Digital Humanities Quarterly
2019
Volume 13 Number 2

Interlude: Gaining Access, Gaming Access: Balancing Internal and External Support For Interactive Digital Projects

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Abstract

This short essay describes the difficulties and impromptu workarounds that emerged when using the video game “Minecraft” as the central teaching tool in several professional writing seminars. More specifically, the author discusses a key moment in the semester where students needed to move between university and non-university technology infrastructures in order to create multiplayer gamespaces that were accessible to their peers. In narrating this experience, the author will demonstrate how a discourse of “access” can be used to examine the oft-invisible policies, procedures, and restrictions that shape the way we compose, circulate and make visible digitally-native work. Furthermore, the author will discuss how a critical emphasis on “access” can help teachers and students better mediate the relationship between internal or university-supplied technological infrastructures and external platforms when creating interactive digital projects.

The underlying motivation of this essay is not to lambaste universities for lack of institutional support nor is it to champion commercial organizations as saviors for helping teachers successfully use digital platforms in the classroom. Instead, the goal of this brief essay is to spur discussions surrounding the following questions: how might we use issues regarding access to better examine and navigate the hard-to-define boundaries that separate university-sanction technology use from non-university sanctioned technology use? How might calling students' attention to access refine the larger learning objectives for Digital Humanities or DH-related courses?

In an institutional climate often guided by nebulous policies, procedures, and restrictions shaping how students use digital technologies in university spaces, it can be difficult for instructors to implement a streamlined process for creating interactive digital projects. In many cases, teachers and students must rely on a bricolage assemblage of third-party platforms, each with varying degrees of compatibility and long-term support, when designing digital texts [Eyman 2015]. This, in turn, can create scenarios where digital compositions are left abandoned or rendered unusable on modern machines due to the fact that they are not housed within stable, sustainable university infrastructures. However, this is not to say that university-supplied resources for digital work are universally lackluster or that third-party software is the only solution to technology-based teaching issues. Rather, this situation demands that we rethink how to navigate the complex interrelationship between university and non-university platforms, especially when asking students to create digital projects using a variety of proprietary or commercialized software in institutional environments. This examination proposes that a revised understanding of access can be a useful framework for revealing, critiquing, and even modifying the oft-invisible boundaries separating university and non-university technology policies or infrastructures, boundaries that might unintentionally stymie the inventive potential of collaborative, interactive digital projects. 1

The importance of access-based concerns became especially clear to me after a near-derailing of a collaborative game session in one of my upper-division writing classes. While teaching at the University of Pittsburgh during the 2015-2016 academic year, I designed several Written Professional Communication seminars around the open-world video game *Minecraft*. Students were tasked with composing a variety of documents that mimicked real-world genres — such as technical descriptions of gameplay mechanics and resource guides for new players — based on their first-hand experiences with the game. My rationale for incorporating a video game into a professional writing course was to 2

highlight the idea that professional or technical writers must often negotiate open-ended interactions between other individuals (such as clients or customers) and non-human agents (such as computer programs or physical equipment). In a parallel fashion, the process of designing and documenting an interactive gamespace can mirror many of the same situations or obstacles which professional and technical writers face on a regular basis, seeing as game designers must rationalize the structural features of a video game while also envisioning how other players might interact with said features [Greene 2014]. The hope was that having students compose documents that detailed specific gameplay mechanics and intended player experiences would illustrate the rhetorical dimensions underlying real-world workplace writing scenarios

A few weeks into the semester, I organized a “lab day” where students would come to class with a copy of *Minecraft* installed on their computers so I could walk them through some basic mechanics of the charming block-based world. One student had previous experiences hosting *Minecraft* games with her friends and asked if she could create a multiplayer server for our class, which would allow all of us to inhabit the same virtual gamespace simultaneously as opposed to having students explore their own single-player worlds alongside each other. I quickly gave the project a vote of confidence and the student began setting up a server on her laptop. Unfortunately, these plans stalled the morning of our class when campus wifi refused to let the server-host configure “port forwarding” for our multiplayer game. Port forwarding is a process wherein communication requests can be re-directed through a router or firewall in order to remotely access files hosted on another computer, thereby allowing users to create a private network-within-a-network. Unbeknownst to us, university IT prohibited communication requests to be re-directed in such a way that permitted remote Internet access to another device on campus (which, in this case, was a student's laptop hosting a video game server). Restrictions on port forwarding make sense from a security standpoint because they can limit the threat of non-authorized remote connections (i.e., instances where devices could be remotely controlled by malicious software). However, the same policies that regulated port forwarding within university infrastructure also prevented students from using their own computers to create collaborative digital spaces for their classmates. To bypass these restrictions, the student who organized our class server offered to relocate to a cafe down the street so she could use their wifi to host our *Minecraft* session. For the remainder of the period, I played virtual tour guide for our class while keeping in touch with the server-host via an instant-messaging feature within our university's email client. 3

What I find most interesting about these policies and impromptu workarounds is that they demonstrate how issues of access can reveal the invisible boundaries which separate university-sanctioned tech practices from non-university-sanctioned activities; the struggles of one student trying to make a multiplayer video game accessible for her peers revealed the invisible policies that demarcate what is (or is not) a permitted usage of digital platforms within university infrastructure and the invisible line where a university's jurisdiction, so to speak, over technology usage begins or ends. It was not until a student ventured beyond the confines of university infrastructure that she was able to take up and apply a new configuration of digital platforms in order to circulate an interactive digital project that could be used by others. Put differently, the ability for a student to facilitate a collaborative peer-to-peer classroom experience was entirely contingent upon whether she resided within or beyond university spaces on both a virtual and literal level. To clarify, I am not implying that our institution had devious machinations to censor student actions. Rather, these teaching misfires highlight the difficulty and necessity of coaxing internal and external (i.e. university and non-university) systems to play nice when composing or distributing interactive digital projects. 4

I used these difficulties as an opportunity to discuss institutional policies with my class and prepare them for our end-of-semester project, which tasked student groups with documenting and designing a multiplayer *Minecraft* gamespace that taught users about the values or practices of a given professional community. The rest of our semester was an experiment in playing the game of access insofar as student groups needed to devise their own methods for creating, saving, and circulating their projects among their peers. Several groups purchased accounts for *Minecraft* Realms, which is a subscription service that hosts multiplayer *Minecraft* servers for a monthly fee. Because *Minecraft* Realms handles all technical aspects of server-hosting duties, students did not encounter the same technical issues that plagued our lab day. One student group wanted to implement custom mods in their project so they set up an independent server server with the understanding that the server-host needed to be off-campus in order for group members to work on their gamespace. In each of these scenarios, students needed to manipulate the line separating 5

university and non-university technological infrastructures by creating their own impromptu solutions for cataloging their composing practices and making accessible all the work they had invested in these projects throughout the semester. As our class progressed, these workarounds became central features of student learning experiences and several groups detailed the ways in which they negotiated technical limitations during their end-of-semester presentations. In documenting how they gamed access in order to gain access, students were able to explore larger institutional procedures (one student talked about repeatedly installing *Minecraft* on temporary laptops loaned out from the campus library while her primary computer was being fixed) in addition to pragmatic concerns regarding digital composing practices (a student who lost nearly all of his progress because of software issues bluntly stated the he learned to "never update to the newest version" in the middle of a project). Hence, issues of access operated as the proverbial canary in the coalmine for identifying the invisible boundaries and policies that structure students' everyday interactions with digital technologies.

Over the course of this brief case study, initial questions of access eventually dovetailed into larger questions of digital archiving and preservation; workarounds for making students' *Minecraft* projects accessible for prospective players emerged alongside strategies for preserving these gamespaces in such a way that group members could continue designing their virtual worlds in a consistent, sustainable manner. Despite the unique circumstances surrounding my video game-centric teaching experiment, the intersection between access, archiving, and preservation has been an emerging concern across digital humanities scholarship. Universities have begun responding to these issues by creating initiatives to support the long-term curation of digital work. For example, the Digital Scholarship Lab at the University of Richmond goes beyond simply backing up files for interactive texts in a static database. Instead, full-time DSL faculty coordinate the development of interactive projects with their respective authors while using a variety of open-source platforms — such as MySQL, Omeka, and JavaScript — to ensure long-term sustainability and broad accessibility of digitally-native texts. Projects curated and hosted by the DSL include "Visualizing Emancipation" (an interactive map that documents the uneven spread of emancipation during and after the Civil War) as well as "Renewing Inequality" (which visualizes how urban renewal projects during the 1950s and 60s led to the mass displacement of low-income and minority communities throughout American cities), both of which encourage users to see these interactive texts as outlets for further research or teaching. 6

While the DSL is an excellent example of contemporary efforts to protect interactive texts from the threat of digital obsolescence, we should not gauge the success of this initiative based solely on the amount of resources and labor dedicated to producing digital projects. Instead, we should measure the impact of institutional undertakings such as the DSL based on the support offered to authors and audiences of digitally-native work. That is to say, successful institutional support for digital work can be evaluated based on the capacity for audiences across a variety of spaces and settings to engage with digital projects regardless of institutional affiliation or circumstances. Failing to circulate digital work beyond a small handful of faculty members at a specific university would severely undermine the on-going critical contributions of digital projects and their authors, seeing as the scholarly or pedagogical value of many interactive texts resides in their capacity to be actively used by other individuals. Consequently, the DSL's emphasis on ensuring access to interactive texts for audiences beyond those in traditional university environments offers one model that can help scholars and teachers envision what constitutes sustainable university support when discussing resources for digital work. 7

Initiatives such as the DSL resonate with the same themes underlying my students' *Minecraft* projects in the sense that questions surrounding access can operate as a framework for identifying, negotiating, and even modifying the invisible boundaries that regulate the production or circulation of digital work within and beyond university infrastructures. The success of my students' *Minecraft* projects hinged on their ability to navigate the invisible line separating university- from non-university technology policies and platforms in order to make their collaborative projects accessible to their peers. Similarly, the success of the DSL stems from its ability to streamline the curation, preservation, and distribution of digital texts across university and non-university spaces, thereby making interactive projects accessible to a wide range of audiences. Hence, the small-scale workarounds created by students and contemporary large-scale institutional undertakings both demonstrate how a renewed focus on access can help us re-approach the obstacles that scholars, teachers, and students face when composing digitally-native work. 8

Works Cited

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