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Critical Response Seven

ARCH1900: Archeology of College Hill

 Archeology cannot hide from the digital age, and why should it? Digital presentation has redefined the modern world and has brought with it enormous advancements in multiple fields from computational fluids dynamic software, which has changed the face of aviation, to the Kindle, which is making print books obsolete. Digital formatting has the advantage of being able store massive quantities of data at ones fingertips and, with proper development, can provide an incredible tool for searching through and finding correlations between data. These abilities could be revolutionary to archeology. But before computers can become useful in these ways, the data must be stored properly. The digital age can only benefit archeology if sustainable, universal data storage techniques are developed.

Archeological recording methods must adapt to the digital age as they have adapted in the past. Archeology was born out of the human need to understand the past. As the field advanced it must have been natural to try to communicate finding to those who were interested in early archeologists work; “[w]hy record if data is not be shared” (Addison 2008: 37). Lucas talks through the evolution of recording methods in archeology. He observes that early reports focused on material findings and over time contextual and site information became more prominent (Lucas 2001: 68). Only in more modern archeological reports are findings and site features brought together (Lucas 2001: 75). Lucas continues to go into great detail about the development of archeological reporting and how our modern reporting seems to be a result of the way the field has developed (Lucas 2001: 64). As archeology is brought into the digital age, we must again re-evaluate how archeologist record and report data so that it can be useful for digital archiving.

Archeologist must approach digital technologies with caution because there is not yet a system in place to properly store archeological data. There seems to be an endless supply of data types associated with archeology and they must all be stored properly so that computer software can be developed to data searchable and usable. Inefficient storage methods can lead to data being unused and eventually abandoned (Addison 2008: 34). In order for archeologists to benefit, recording methods need to evolve to accommodate all types data that archeologists hay encounter. Due to the destructive nature of excavation it is important to collect as much data as possible but without standardized modes of recording, it is inevitable that data will become lost in the transfer to the digital and therefore become useless. In this way the digital world can easily fail archeology, but carful work on the behalf of those who upload their data online can prevent this lose.

While a standardized recording system would be great from a programs viewpoint, it would be difficult to implement in the field. A standardized recording system will invariably create gaps between what is recorded and what is observed. Addison tries to solve this issue by advocating the use of more general guidelines, in the place of standards, that could be used to compile digital data that could be more versatile in accommodating the interdisciplinary and rapidly evolving nature of archeological digital data (Addison 2008: 35). In order for this to work, the guidelines would have to be very strict and all inclusive to allow the program to use all data sets effectively. General notes sections, like we have at the John Brown House, may be the key to how this surplus data is stored in the field but causes major complications in digital practice since this kind of data can only be searched using keyword methods, which are for the most part ineffective (Kansa & Kansa 2011: 68). For digital ease, a system that can minimize the need for generally classified data, such as notes sections, would be essential.

It is also important to note that digital technologies can benefit archaeological research only after sustainable storage infrastructure is developed and a critical mass of digital data has been integrated into the system. Limp points out that previously successful web software had previous infrastructure to build upon (Limp 2011: 268). Archeological programs are slightly behind with comparison so other program types so at this point future archeologists will have the advantage of manipulating the systems being created in the present. In order for the software infrastructure of today to be useful in the future, it must be developed to be sustainable and can outlive its creators. Currently, the majority of cyber infrastructure projects are unsustainable (Limp 2011: 276). We must learn from the errors made by failed systems and create systems that will be applicable to the future. Kansa and Kansa go into detail about one particular method for data storage, Open Context, an online source for archeological data, which has been effective in advancing its use through observing what methods of online research are most effective. Their article goes through the iterative process the websites creators used and highlights the effective and ineffective methods of digital storage and organization in archeology. This process is building up the cyber infrastructure of archeology.

At the John Brown House, we should consider uploading all of our data onto some sort of digital archive. While we do currently post out field blogs and unit summaries on the course wiki, this is hardly an effective method that we can use to share our data with the world and is lacking a lot of the data we collect. An online system, such as ASK, were we could store out field blogs, unit summaries, images, videos, artifact descriptions, interactive GIS, and field forms would allow us to share our findings with ease. Creating a system solely for the purposes of the John Brown House excavations would be much simpler than integrating it with other excavations because we would not have to worry about molding with other systems of collecting data. It would also be advantageous to link any archive to the Rhode Island Historical Society website and not just the course wiki, which is an extremely unsustainable site.

Works Cited:

Addison, Alonzo C. 2008 The Vanishing Virtual: Safeguarding heritage's endangered digital record. In Y. Kalay, T. Kvan, and J. Affleck, New Heritage: New Media and Cultural Heritage, 27-39.

Kansa, Eric C. and S. Kansa. 2011. "Toward a Do-It-Yourself Cyberinfrastructure: Open Data, Incentives, and Reducing Costs and Complexities of Data Sharing." In E. Kansa, S. Kansa and E. Watrall, eds. *Archaeology 2.0: New Approaches to Communication and Collaboration*. Los Angeles. 57-91.

Limp, W. Frederick. 2011. "Web 2.0 and Beyond, or On the Web Nobody Knows You're an Archaeologist." In E. Kansa, S. Kansa and E. Watrall, eds. *Archaelogy 2.0: New Approaches to Communication and Collaboration*. Los Angeles. 265-280.

Lucas, Gavin. 2001 Chapter 3, "Splitting Objects", In Critical Approaches to Fieldwork. Routledge: London, pgs. 64-106.