

Exploring the Digital Humanities: An Interview with Mark Algee-Hewitt, Ph.D.

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Mark Algee-Hewitt is an Assistant Professor in the department of English and the Co-Director of the Stanford Literary Lab. His work focuses on the eighteenth and early nineteenth centuries in England and Germany and seeks to combine literary criticism with digital and quantitative analyses of literary texts. In particular, he is interested in the history of aesthetic theory and the development and transmission of aesthetic and philosophic concepts during the Enlightenment and Romantic periods. He is also interested in the relationship between aesthetic theory and the poetry of the long eighteenth century. At the

Literary Lab, Dr. Algee-Hewitt leads projects on suspense literature, the relationship between titles and texts in the long eighteenth century, and gender performance in the dialogue of novels written during the Romantic period. He is also a collaborator on the Canon/Archive project, Micromegas, the Transhistorical Poetry project, Modeling Dramatic Networks, and a project on the Supreme Court and Environmental Law. Outside of Stanford, Dr. Algee-Hewitt is a partner in the ongoing NovelTM partnership grant and is an associate principal investigator of the Stanford branch of the Global Currents Digging into Data project. Building on this work, he has ongoing collaborations with Andrew Piper at the .txt lab at McGill University in Montreal, and with the North American Concept Lab, based at New York University. He is also a member of the executive board of 18thConnect and is on the visualization advisory committee of the Digital Mitford project.

TI: The Digital Humanities is a pretty up-and-coming field. Not many people are familiar with what the Digital Humanities are and what kind of work you're doing. Can you tell me a little bit more about what it is and what projects you and your colleagues are pursuing right now?

MAH: It's a loaded question since most Digital Humanities conferences I've been to have had the theme, "What are the Digital Humanities?" Part of the issue is that it's a really wide-ranging term that encompasses different kinds of research: from the use of mapping technology to understand various historical formations to looking critically with a humanities lens at the way in which technology is shaping our lives. Anything that applies or brings together digital technology and the humanities, usually falls under the label of Digital Humanities. My own particular side of things tends to be less looking at digitality through a humanities lens and more the reverse: looking at humanities-based questions, primarily literary or textual questions, using methodologies that are digital in origin. I use techniques that would be more native to computer science or statistics or computational linguistics to answer questions of literary, critical, or historical significance. So, for example, in the Literary Lab, we have a number of projects, such as the Suspense Project, in which we are using computational models and social psychology methodology in order to understand why certain texts create the effect of suspense in certain people. We have a project on what's called Canon Archive, and we're interested in looking at why certain texts become canonical, or are considered to be canonical, and others are left in the archive and don't get read anymore—if there's any kind of morphological or formal differences between those two over time. And it ranges all the way to any application of textual studies; so, for example, we've got a collaboration with a legal scholar from New York, Michael Berger, who's actually the director of the Savant Center for Climate Change Law at Columbia, and he has a corpus of Supreme Court decisions, and he's interested in whether or not there are narrative patterns to decisions that are climate proactive or not climate proactive, for example.

TI: Can you tell me a little bit more about how you approach these projects? This research is nontraditional in the sense that you're dealing with things like computer science and statistics, but you're applying them to English. How do you go about designing a project and then answering really interesting interdisciplinary questions like the ones you mentioned previously?

MAH: That depends on the project itself, and it also depends on the field that you're coming at it from. I think that if you asked my colleagues from the Spatial History Project, for example, you'd get a different answer than my colleagues at Humanities + Design. For us at the Literary Lab, and for

me in particular, it's really important that we think of the methodologies that we use as applied science: we frequently try and innovate methodologically as part of the process of research. But the ultimate goal of the research lies in the field that we're examining. So first we have the question that is usually a literary question: "Why does the canon exist? Why do some people feel suspense even when they know what's going to happen in a work? Why do certain texts become viral and really, really popular, despite not having a marketing push behind them?" So we start, usually, by framing the question in terms of something that would be much more familiar to humanities, but still has a way to operationalize the question, such that it can be answered through quantitative means.

TI: Along that line, how do you think the Digital Humanities is bridging the "techie-fuzzy divide"?

MAH: (laughing) Or *is* it bridging the techie-fuzzy divide?

TI: Or is it? Yeah, I think it's a particularly relevant question at Stanford, because a lot of people think of Stanford as a very "techie" university, where you come and get pulled into this CS vortex. So I'm curious to know how you think the Digital Humanities is changing that.

MAH: I mean I think it is changing it to a certain degree. One of the nice things about working in this field is that, for example, when I teach undergraduate classes and graduate classes on Digital Humanities methods, I frequently have a fairly even split between humanities students and computer science, statistics, other kinds of applied science students. And that is a forum in which to witness this kind of interaction in a way that you don't get to otherwise. I mean, I've collaborated with some computational linguists, I've collaborated with some computer scientists on network theory things, and so I kind of know it from the inside, but watching these two groups of students try and talk to each other is a really interesting experience that literalizes that kind of bridge that you're talking about. Part of it is the realization in the part of both groups that each one has something valuable to offer. In a class like that, the computer science students will come to the table with a really well-established set of methodologies: they'll understand how computers can help us break down texts, how they can count things, ways in which they can model various kinds of outcomes. But the humanities students bring to the table a great degree of skill in thinking critically about problems and interpreting results, particularly when both the data going in and the data coming out is really messy and/or noisy. The digital humanities is one of those relatively rare places where that set of skills is being brought together by both students and, I think, scholars working in the area, to understand how we can leverage this kind of computational technology towards problems that don't easily lend themselves to computation, and the ways in which

humanities methodologies can help us make sense of these much more complex higher order problems than typically are solved by computational methods.

TI: What drew you to the digital humanities? I know a little bit about your background, I think you have degrees in English and computer science?

MAH: I do.

TI: So, I'm curious to know how you were drawn into this field.

MAH: (laughing) When I finished my undergraduate studies I left computer science behind and did my graduate work in critical theory and English literature. About midway through my Ph.D., I was doing a dissertation on a concept from the eighteenth century, and I wanted to look longitudinally at this concept and understand the various ways it had been embedded across time. I realized, while I was trying to do it, that this would be a whole lot easier if I could, for example, look at just where the word is used and the contexts of the words in which it was embedded across its discontinuous history in the long eighteenth century. At the same time, there were a number of databases that had emerged which collected large corpora of texts from the period such as the Eighteenth Century Collections Online database, Literature Online, and the Early Books Online database. I realized that all of these resources were now available, and I had at my fingertips a set of methods that would let me fairly easily program some simple scripts that could go through these databases and pull out really interesting information for the question I was trying to answer. I tried it, it worked, and the rest is history, because once I realized that we could leverage this kind of knowledge to do really interesting work in the humanities, problems just seemed to present themselves in that way to me.

TI: Some people feel that by focusing so much on the intersection of the humanities and the sciences, you lose a lot of important depth that you would get if you studied only English or if you studied only computer science. What is your answer to that question: how do you think people can learn to become really deep and critical thinkers in both areas, but at the same time leverage the potential of that intersection?

MAH: I actually teach a class that's now become a core class for STS [The Program in Science, Technology, and Society at Stanford] called Data and Knowledge in the Humanities. One of the things we look at is the emergence of what's called disciplinary knowledge in the Enlightenment. Knowledge production became less about a broad knowledge over a number of subjects. Instead, expertise became associated with a very narrow and very deep set of knowings. The notion

that in order to be an expert in the field you need very specific, very narrow and discontinuous knowledge, is actually radically historically contingent. It has only been around for a couple hundred years. Our university system is founded on that model of disciplinary knowledge; that is what we have to work with. But it helps for me to keep in mind that this isn't necessarily the way it always was, nor is it the way it necessarily has to be. I think good interdisciplinary work—and it's hard, because a lot of interdisciplinary work, even in my own field, is not great—but good interdisciplinary work requires a sensitivity and attention to both disciplines and the points at which they interact. We can imagine the emergence of a kind of hybrid field rather than these two fields being brought together with a gap between them. In this hybrid field, people can be deeply knowledgeable about the applied parts of computer science that make sense for humanities and the ways in which humanities questions can be operationalized through an understanding of computer science.

I started around 2005–2006 when I was midway through my Ph.D., and even then—I mean, if you listen to historians in the field of digital humanities, people have been doing this for a lot longer than that. There were studies in the 1960s, the 1970s, humanities computing was a thing in the '90s—but even when I started in 2006, this was not a highly populated field, there weren't a lot of people doing it, and departments on both sides of the divide—both computer science and literary studies, for example—were resistant in many ways. It's amazing how, in a few short years since then, things have really changed.

TI: Looking at your bio, I notice that you are the co-director of something called the Book History Bibliograph, is that right?

MAH: I am.

TI: Can you tell us more about what that resource is, how it was created, and what you hope to achieve with it?

MAH: It's actually still in process. We have a beta, but we haven't made it live yet. Before I came to Stanford, I was a postdoctoral scholar at McGill University and I worked with a group that was doing something called book history. Book history is a sub-specialty in literary studies, but also overlaps with communication studies, art history, and music. Effectively, book history is interested in the material history of the text as a way to understand its meaning. That is, simply looking at the text without an awareness to the original conditions of its production, as well as the history of mediation that surrounds it—if you don't take that into account then you don't really understand what the text is about. One of the interesting things about that field, much like digital humanities, is the multidisciplinary nature of the discipline. But the problem with that is that

since our training is so disciplinary, scholars interested in looking up book-historical resources will typically stick to those resources from their own field. So, an English scholar wanting to do book history will only find English resources, or an art history scholar will only find art history resources—to say nothing of the fact it’s a multilingual field, so German, French, and English scholars will only find German, French, and English sources, respectively. The book history bibliograph is a way to use digital methods in order to create a resource that will allow scholars to bridge those disciplinary divides by creating “a finding aid that helps you find things you didn’t know you were looking for.” It’s like a visual representation of Amazon’s or Netflix’s recommendation engine, in which texts are associated based on the similarity of their lexical and topical structures, and placed adjacent to each other within a visualization of the field as a whole. So when you search for particular resources, you’re taken to a spot on this abstract map, which identifies what you’re looking for, but will also show you the closest, by which we mean most similar along various dimensions, texts, regardless of their disciplinary origins. For example, say you are looking for a book on printing presses in England in 1826 that specializes in nonfiction and history. There might be an art history book that’s on the exact same subject. The idea is that this resource will show you that “here’s where you are and this is what you’re looking for, but right next to it is this thing that you haven’t heard of that you might want to look at.”

TI: That’s really fascinating. So I guess, along with this, where do you think digital humanities research is heading into the future—you’ve talked a lot about the different implications, whether it be broadening your research focus, finding new patterns in Supreme Court case studies—in your mind, what is the trajectory of the field right now?

MAH: This is a really hard question. Digital Humanities is getting close to a crossroads. It’s methods are becoming more and more embedded within the humanities departments of which it originally was a member. More and more departments are investing more and more of their energy in various formulations of the Digital Humanities—the fact that I’m an assistant professor of the Digital Humanities at Stanford speaks to the fact that the English department has realized that this is a field that needs representation. On the other hand, things are getting more and more collaborative across different departments, and a lot of scholars have made the argument that Digital Humanities is a field in and of itself that might at some point in the future sever itself from the various constituent departments and reorganize itself around a specialized set of knowledges and practices. Intellectually, I think, Digital Humanities is going to stay on the path that it’s on: our methods get ever more sensitive, new people are coming into the field bringing really interesting ideas of new ways to think about texts quantitatively or computationally, especially in all these other

fields—geohumanities, spatial humanities, design and humanities. But what that will look like in the future, whether we sort of form something new or whether we keep working within our own individual departments, disciplines, clusters—that’s a big question.

TI: Do you see the Digital Humanities becoming something that extends beyond its primarily academic setting right now?

MAH: I think so, definitely. We have the Digital Humanities minor, for example, starting this year at Stanford, and one impetus is recognition that within the greater job market, not just the academic job market, this is something that companies are actually really interested in. Companies are interested in students who have a really strong background in various kinds of computational techniques, or students who can program, but who can bring with them a sensitivity to complex problems or deep engagement with critical thought, because that just makes them all around better innovators within a tech company setting, for example. So I think very much that this is something that echoes the larger cultural shift overall.

TI: Do you have any closing comments?

MAH: Digital humanities is a really interesting field because of the way in which it combines these different sets of knowledge in a way that hasn’t been really done before. So doing this work is really exciting because whatever we do, we tend to discover something that we didn’t know before. You can tell, I think, whether or not a field is really fruitful by how easy it is or how readily new kinds of discoveries keep emerging. This field is rife with that. We’re also pretty lucky here at Stanford because of its really strong computational program, and its really strong humanities program. Because of that combination, this has been one of the places where Digital Humanities has emerged. Historically, it’s one of the ones that’s done this the longest, and I think done it the best. So I think it’s a really exciting field to be in, and I think Stanford is a really exciting place to be in that field.