AHR Exchange
Narrative Interface for New Media History: *Slave Revolt in Jamaica, 1760–1761*

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April 20, 2015, was a good day for *Slave Revolt in Jamaica*—at least in terms of online traffic.[1] After a long period during which the website attracted about 50 to 75 visitors a day, Google Analytics suddenly recorded more than 33,000 visitors in less than twenty-four hours. The site's reach extended to 139 countries and 5,600 cities around the world. Eager to find an explanation for this huge spike in attention, I took to Google for a bit of sleuthing. I discovered that a link had been posted to the entertainment, social networking, and news website Reddit by a registered community member calling himself cavedave. From there it had been linked by a fan site for Joe Rogan, the American comic best known as the host of the reality TV show *Fear Factor* and as a commentator for the Ultimate Fighting Championship. The link to *Slave Revolt in Jamaica* was adjacent to the boldfaced notice of a devastating elbow strike administered during a recent UFC bout. This seeming endorsement by a celebrity with a broad interest in violent competition had greatly boosted the number of visitors to the site, but the pool of new viewers was shallow; nearly 90 percent of those visitors did not click past the first page.

This episode in the life of an educational website highlights the potential and limitations of history on the World Wide Web. As Natalie Zacek's generous review of the site indicates, the convergence of representational media, facilitated by the nearly ubiquitous profusion of computers, presents challenges to and opportunities for customary ways of conducting research, presenting findings, storytelling, and reading. New media enable text, oration, graphics, objects, and embodied performance to supplement, or even to constitute entirely, new forms of scholarly and artistic production. Historical scholarship can now include open-ended and multiform engagements—interactive and continually updating databases, cartographic applications that enrich places with historical information, online dialogues with peers and the public, in addition to films and television programs, audio shows, and public performances.[2]

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[1] *Slave Revolt in Jamaica, 1760–1761: A Cartographic Narrative*, http://revolt.axismaps.com. The code for the project can be found on github: https://github.com/axismaps/revolt.

[2] Anne Burdick, Johanna Drucker, Peter Lunenfeld, Todd Presner, and Jeffrey Schnapp, *Digital_Humanities* (Cambridge, Mass., 2012). See especially Ann Rigney, "When the Monograph Is No Longer the Medium: Historical Narrative in the Online Age," *History and Theory* 49, no. 4 (December 2010):

Such novel works of history can find unexpected audiences, but there is no necessary correspondence between the interests of the creators and those of the users. While accessibility is a great egalitarian virtue, it is not always a satisfying end in itself. Nor does the open-ended provisional quality of web-based projects always offer the most authoritative historical explanations. Yet the expanding role of the web in the gathering and interpreting of sources and the making and learning of arguments about the past compels pressing questions about the production, circulation, and reception of historical narrative beyond the print medium. Zacek asks the crucial question: What can we learn from these new media histories that we don't already know, or couldn't just as easily learn from print? What, in fact, did all those people who viewed the website on April 20, 2015, learn about slave insurrection? What can historians expect anyone to learn from an analytical story in the form of an animated visualization?

A GROWING THRONG OF NEW MEDIA WORK gathers under novel signs marked "digital history" or "digital humanities." But if Zacek has derived a definition of "digital humanities" from *Slave Revolt in Jamaica*, then I must admit that she is a step ahead of me. I generally avoid the term for its vagueness, but also because its novelty draws attention away from the traditional practices of scholarly craft that give content to the media in use. Unless we want to acknowledge every paper written with a word processor as a digital history, we would do well to continue emphasizing the customary questions of evidence and interpretation. In other words, we shouldn't treat the medium as the most important message.

Digital media are tools that offer innovative methods of research and presentation, but new media history must first and foremost perform the interpretive work of historians.[3] Obviously, one need not be a digital historian or digital humanist to make significant use of digital applications. One needs only historical questions and a willingness to pursue them by any available means. Over the last few years, I have been working in Harvard University's History Design Studio (historydesignstudio.com) to join a commitment to the professional practice of history with an experimental approach to form and presentation. Our goal is to embed historians' core values and methods in the innovative products of artisanship and craft. Extensive use of primary sources, attention to processes of change over time, keen historiographical awareness, and an overarching respect for evidence form the basis of projects in mul-

100–117; Daniel J. Cohen and Roy Rosenzweig, *Digital History: A Guide to Gathering, Preserving, and Presenting the Past on the Web* (Philadelphia, 2005); Toni Weller, ed., *History in the Digital Age* (New York, 2012). History Design Studio (http://historydesignstudio.com) draws inspiration from projects such as the Digital Scholarship Lab at the University of Richmond (http://dsl.richmond.edu), the Roy Rosenzweig Center for History and New Media at George Mason University (http://chnm.gmu.edu), the Spatial History Project at Stanford University (http://web.stanford.edu/group/spatialhistory/cgi-bin/site/index.php), the Spatial Information Design Lab at Columbia University (http://www.spatialinformationdesignlab.org), and eHistory at the University of Georgia's Center for Virtual History (http://www.ehistory.org).

[3] The suite of methods that constitute digital history is indeed coming to be seen as a field. Yet, as far as I know, when quantitative history was in vogue in the 1970s, history departments did not advertise positions for cliometricians. They hired historians of slavery or other historical subjects, just as cultural historians of the 1980s and 1990s were not hired as professors of close reading or fieldwork but as historians of symbolic worlds and their transformations.

timedia storytelling and analysis. Thinking creatively about the design and presentation of our research, we attempt to stretch the canvas of historical scholarship.

Different media might facilitate their own appropriate insights, or illuminate things that are otherwise more difficult to see. This is the case with each of the media projects I have undertaken. Working on the television documentary *Herskovits at the Heart of Blackness*, I used the audiovisual medium to reflect on the way a form of presentation mediates historical knowledge.[4] Given the centrality of visual and aural materials—including film, photographs, and audio recordings—to Herskovits's ethnographic findings, the audiovisual format seemed like an ideal way to explore and illustrate this dimension of his work. Another digital project similarly takes its cues from the nature of its sources and the historical questions they recommend. *Two Plantations: Enslaved Families in Jamaica and Virginia*, which diagrams a database of enslaved life histories compiled by historian Richard S. Dunn, explores the intergenerational toll of slavery.[5] The website also highlights the potential and the limitations of using the family tree as a graphic form for representing families who were owned as property, who were routinely violated and interfered with, whose lines of descent are broken and tenuous, and whose resulting structures of kinship could never be based solely on blood relations.[6]

Where *Herskovits* employed video to show connections in juxtaposition, and *Two Plantations* conjoins web technology with graphic pedigrees, *Slave Revolt in Jamaica* uses cartography to explore contested movements in space. The rationale is primarily historiographical. I have been conducting research for a book manuscript about insurrections staged by "Coromantees" from the Gold Coast of West Africa in the late seventeenth through the second half of the eighteenth century, most significantly in Cartagena de Indias, Surinam, St. John, New York, Antigua, and Jamaica. The Jamaican revolt of 1760–1761, commonly called "Tacky's Revolt," was among the largest and most consequential. To date there has been no comprehensive study of this event, and the basic interpretation of the rebellion follows that of the eighteenth-century planter-historian Edward Long, who attributed the uprising to the peculiarities of African experience and identity in the New World.[7] Consequently, historians still

[4] *Herskovits at the Heart of Blackness* (Vital Pictures, 2009), California Newsreel, http://newsreel.org/video/HERSKOVITS-HEART-BLACKNESS.

[5] *Two Plantations: Enslaved Families in Jamaica and Virginia* (History Design Studio, 2014), http://www.twoplantations.com/. See also Richard S. Dunn, *A Tale of Two Plantations: Slave Life and Labor in Jamaica and Virginia* (Cambridge, Mass., 2014).

[6] Johanna Drucker, *Graphesis: Visual Forms of Knowledge Production* (Cambridge, Mass., 2014), 103.

[7] For eighteenth-century histories of the war and its aftermath, see Edward Long, *The History of Jamaica; or, General Survey of the Antient and Modern State of That Island, with Reflections on Its Situation, Settlements, Inhabitants, Climate, Product, Commerce, Laws, and Government*, 3 vols. (London, 1774), 2: 447–472; and Bryan Edwards, *The History of the West-Indies*, 3 vols. (London, 1793), 2: 75–79. Recent accounts include Maria Allessandra Bollettino, "Slavery, War, and Britain's Atlantic Empire: Black Soldiers, Sailors, and Rebels in the Seven Years' War" (Ph.D. diss., University of Texas, Austin, 2009), chap. 5; Vincent Brown, *The Reaper's Garden: Death and Power in the World of Atlantic Slavery* (Cambridge, Mass., 2008), chap. 4; Verene A. Shepherd, *I Want to Disturb My Neighbour: Lectures on Slavery, Emancipation and Postcolonial Jamaica* (Kingston, 2007), chap. 6; Trevor Burnard, *Mastery, Tyranny, and Desire: Thomas Thistlewood and His Slaves in the Anglo-Jamaican World* (Chapel Hill, N.C., 2004), 170–174; Richard Hart, *Slaves Who Abolished Slavery: Blacks in Rebellion* (1985; repr., Kingston, 2002), chap. 6; Michael Craton, *Testing the Chains: Resistance to Slavery in the British West Indies* (Ithaca, N.Y., 1982), chap. 11; C. Roy Reynolds, "Tacky and the Great Slave Rebellion of 1760," *Jamaica Journal* 6, no. 2 (June 1972): 5–8; Monica Schuler, "Ethnic Slave Rebellions in the Caribbean and the Guianas," *Journal*

don't have a clear idea of the aims and coordination of the rebels' efforts, or how great a threat they represented to the British Empire in America. So I started the project with elementary historical questions, asking what happened, when, and where, hoping that the answers would tell me something about why the insurrection played out as it did, and with what implications. The *Slave Revolt* map began merely as my timeline of events—as a heuristic tool for my own research that took advantage of new media tools.

The dramatic expansion of computing power has enabled historians to query, interpret, and display previously obscured patterns in historical data. Building on the kinds of visualizations pioneered by information designers from William Playfair and Charles Joseph Minard to Edward Tufte, historians can also now produce graphics that illustrate some of the evolving contours of historical life.[8] Cartographic visualization, in particular, allows us to trace patterns of movement, interaction, and transformation in space. When animated by time-based media or laid out within temporal diagrams, such graphics condense interpretation, setting images in motion to show the unfolding of historical processes. This kind of thematic cartography in motion can serve a rhetorical purpose, defining, clarifying, and advocating interpretations of the past that might otherwise go unarticulated.[9]

Zacek acknowledges that the animated map, the *Slave Revolt* website's central feature, makes two significant scholarly contributions. First, she agrees that its spatial analysis allows us to gain better purchase on limited sources. As Zacek appreciates, the textual records "are written by and from the perspective of whites." However, by extracting locational information from these records and plotting the combatants' movements in space, the map allows us to view the archival evidence both against the grain, to portray things the sources were never meant to illustrate, and along the grain, to show how they constrain and shape our knowledge.[10] Second, Zacek welcomes the way the map conveys a sense of how people experienced the revolt as an unfolding sequence of events. The left-hand column, which shows excerpts from the textual record, indicates the basis for many of the developments located by the map, even as it shows how colonists described them.

Together, the diagram's spatial and temporal dimensions make an analytical claim. The map suggests that tracing the adversaries' locations over time makes it possible to discern some of the strategic aims and tactical dynamics of the slave insurrection and the imperial counterinsurgency. The map shows three major phases of sustained fighting, in addition to other conspiracies, skirmishes, and deployments. Within these movements, one can see clear evidence of strategic coordination across an uneven landscape. In the densely forested northern parishes, the rebels followed

of Social History 3, no. 4 (1970): 374–385. Craton's account includes a map of conflict in St. Mary's Parish, but no map for the much larger conflagration in Westmoreland Parish.

[8] William Playfair, *The Commercial and Political Atlas and Statistical Breviary*, ed. Howard Wainer and Ian Spence (Cambridge, 2005); Edward R. Tufte, *The Visual Display of Quantitative Information*, 2nd ed. (Cheshire, Conn., 2001); John Bender and Michael Marrinan, *The Culture of the Diagram* (Stanford, Calif., 2010); Johanna Drucker and Emily McVarish, *Graphic Design History: A Critical Guide*, 2nd ed. (New York, 2012).

[9] Richard White, "What Is Spatial History?," Spatial History Lab Working Paper, February 1, 2010, https://web.stanford.edu/group/spatialhistory/cgi-bin/site/pub.php?id=29.

[10] Ann Laura Stoler, *Along the Archival Grain: Epistemic Anxieties and Colonial Common Sense* (Princeton, N.J., 2010).

major roads until they were forced to disperse and take defensive positions in deep ravines. In Westmoreland Parish, by contrast, the insurgents occupied a small range of mountains, both removed from the plains controlled by planters and detached from the great peaks and cockpits that hosted the Maroons, who were obliged by treaty to help suppress slave revolts. This suggests that the rebels strove to establish their own new Maroon village, what I called an alternative "enduring society."[11] In sum, I learned that the insurrection was the product of genuine strategic intelligence and presented a real threat to the maintenance of the colony, especially given that the British had nearly lost the island during the Maroon Wars of the 1730s.[12] Perceiving the viability of the rebels' "rival geographies," the empire responded accordingly.[13] Indeed, a detailed map printed in 1763 marked the location of the "Rebel's Barricade," conceding the place name as a testament to the insurgents' ambition.

The evidence presented by the map also helped me to view colonial Jamaica as a place in the making, a continuing accumulation of historical developments. "Places do not have locations but histories," argues the anthropologist Timothy Ingold. "Bound together by the itineraries of their inhabitants, places exist not in space but as nodes in a matrix of movement."[14] In this case, the movements of combatants sketched the political outlines of the place itself. As opposed to comprehending the island as a single undifferentiated colonial territory, I could see how slave revolt had shaped the landscape of planter control. I could also perceive how the geography of British power shaped the course of the revolt. Physical geography, territorial control, and social struggle unfolded in dynamic relation, finely illustrating recent scholarly perspectives on the history of imperial space. As Lauren Benton has observed, imperial spaces were "politically fragmented" and had "irregular, porous, and sometimes undefined borders." Despite vast territorial claims, empires exercised control "mainly over narrow bands, or corridors, and over enclaves and irregular zones around them." *Slave Revolt in Jamaica* exemplifies Benton's argument by showing the "tangled and interrupted" spaces that reflect complicated lines of political contention.[15] Militarized pathways—alongside rivers, through dense forests, at particular elevations in the mountains, and all around the shoreline—marked the enclaves of association and corridors of control that characterized eighteenth-century Jamaica. This political chart of the island shows how the rebels could plausibly expect to establish semi-autonomous communities in the mountains, even if they could not hope to overthrow slavery altogether.

[11] *Slave Revolt in Jamaica*, http://revolt.axismaps.com/project.html.

[12] Mavis C. Campbell, *The Maroons of Jamaica, 1655–1796: A History of Resistance, Collaboration, and Betrayal* (Trenton, N.J., 1990).

[13] Stephanie M. H. Camp, *Closer to Freedom: Enslaved Women and Everyday Resistance in the Plantation South* (Chapel Hill, N.C., 2004).

[14] Timothy Ingold, *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill* (New York, 2011), 219.

[15] Lauren Benton, *A Search for Sovereignty: Law and Geography in European Empires, 1400–1900* (Cambridge, 2009), 2, 3; Frederick Cooper, *Colonialism in Question: Theory, Knowledge, History* (Berkeley, Calif., 2005), chap. 6. See also J. B. Harley, *The New Nature of Maps: Essays in the History of Cartography*, ed. Paul Laxton (Baltimore, 2002); Harley, *Maps and the Columbian Encounter: An Interpretive Guide* (Milwaukee, 1990); Denis Wood, *Rethinking the Power of Maps* (New York, 2010); Christian Jacob, *The Sovereign Map: Theoretical Approaches in Cartography throughout History*, trans. Tom Conley, ed. Edward H. Dahl (Chicago, 2006).

If traditional scholarly questions drove the project's inception, its execution provoked reflections on the promise of digital storytelling. Zacek notes that many of the most successful online history projects have been structured collections of archival materials organized into databases for fast search and retrieval by a computer. Among the very best of these is *Voyages: The Trans-Atlantic Slave Trade Database*, first launched in 1997 in CD-ROM format and subsequently updated and moved online. With records on nearly 35,000 slaving voyages—roughly 80 percent of all such voyages—it is an incomparable resource for scholars of the slave trade and slavery.[16] Drawing upon statistical analyses of the scale, proportion, and distribution of the trade, the database's principal investigators, David Eltis and David Richardson, have recently published a compendium of nearly two hundred thematic maps accompanied by selections from the contemporary literary and pictorial record. Titled *Atlas of the Transatlantic Slave Trade*, the prize-winning book is remarkable in many ways, but its static diagrams and quantitative focus point to unexplored possibilities.[17]

Historians continue to find that narrative stories—with their arcs, events, and points of view—attract broad attention to accounts of the past.[18] *Slave Revolt in Jamaica* takes a different approach than most online projects by foregrounding the map's capacity to act as a *narrative interface* for a database of locational information, that is, spatial coordinates derived from a variety of sources.[19] The word *data* can sometimes trigger allergic reactions from humanistic scholars.[20] Yet it seems needlessly defensive to reject the potential for computational tools to offer new ways to observe and analyze history.[21] Also, for those who fear that digital media heralds a return to econometrics, there is hope for an enlightening synthesis of quantitative, qualitative, and artistic methods.[22] Traditional modes of representation—like narrative—can guide our practice.

[16] *Voyages: The Trans-Atlantic Slave Trade Database*, http://www.slavevoyages.org/.

[17] David Eltis and David Richardson, *Atlas of the Transatlantic Slave Trade* (New Haven, Conn., 2010).

[18] Hayden White, "The Value of Narrativity in the Representation of Reality," *Critical Inquiry* 7, no. 1 (1980): 5–27.

[19] Admittedly, by making its analytical claims in the form of narrative, the animated map forecloses some of the possibilities of non-linear exploration, crowd sourcing, and openness, in order to preserve the responsibilities of authorship, multiple as it may be.

[20] I, for one, was quite happy to have entered graduate school after the heyday of the cliometric studies of the 1970s and 1980s. By the time I arrived at Duke in 1993, social historians had absorbed Herbert Gutman's trenchant critique of Robert William Fogel and Stanley L. Engerman's *Time on the Cross: The Economics of American Negro Slavery* (Boston, 1974), a quantitative study of antebellum slavery. Our advisors questioned the book's methods and conclusions, which "emerged mysteriously from a forest of statistics, equations, and formulas." They largely agreed with Gutman that an "intelligent reader does not need to know the difference between a chi-square test and a multiple-regression analysis" to learn that slavery was not so benign as depicted by Fogel and Engerman's numbers. In any event, cultural history was ascendant, and the humanistic emphasis of the 1990s seemed so much more *human*. See Ira Berlin, "Introduction: Herbert G. Gutman and the American Working Class," in Herbert G. Gutman, *Power and Culture: Essays on the American Working Class*, ed. Ira Berlin (New York, 1987), 3–69, quotations from 52, 53.

[21] For one thing, these tools can help historians to better realize the desire to examine broad structural patterns of social transformation, the promise of Fernand Braudel's admonition to focus upon the *longue durée*. Fernand Braudel, "History and the Social Sciences: The Long Duration," *American Behavioral Scientist* 3, no. 6 (1960): 3–13; Sebouh David Aslanian, Joyce E. Chaplin, Kristin Mann, and Ann McGrath, "How Size Matters: The Question of Scale in History," *AHR* Conversation, *American Historical Review* 118, no. 5 (December 2013): 1432–1472. Social historians have long built upon Braudel's approach without always sharing his disdain for the narrative conventions of political history.

[22] Orit Halpern, *Beautiful Data: A History of Vision and Reason since 1945* (Durham, N.C., 2014), chap. 2.

Some years ago, in his now-classic article "Database as Symbolic Form," Lev Manovich argued that the database and its user interface had become "the centre of the creative process in the computer age." Cinema, wherein "the storage media support the narrative imagination," offered a model for giving thematic sequential form to catalogued information. Through an interface, database collections could tell stories. What designers needed to learn, according to Manovich, was "how to merge database and narrative into a new form," using interface as the space of rhetorical convention and invention, where new narrative strategies could be employed and information given dynamic aesthetic and interpretive dimensions.[23]

This was not the way quantitative historians customarily used data sets. For many of them, numbers offered a way to analyze history without affect, without subjectivity, and, they often hoped, without moralizing and politics. Many historians, as if in response to Hayden White's critiques of narrative's exclusive claim to represent the truth of the past, retreated to the phantom certainty of mathematical precision.[24] They aspired to a comprehensive statistical record, hoping that by simply amassing more information, they could insulate their conclusions from criticism and make their interpretations look like transparent windows onto historical reality. For many others, this approach gave numeracy a bad name, and scholars of representation turned away from questions and problems that invoked statistical reasoning. But the employment of quantitative analysis wasn't by itself the source of the problem so much as its claim to transparent objectivity, which ruled out the truth claims of work that is explicitly concerned with subjective experience and treated sets of numbers as concrete facts, "the givens with which we can operate on the world."[25] The need to question these assumptions has grown more urgent with the dissemination of ever-faster computers and more powerful software applications. Rapid processing of large data sets should not obscure the fact that we observe from positions, that formal conventions mediate our knowledge, and that our truths are partial.

In a series of recent works on visual forms of knowledge production, the graphic design theorist Johanna Drucker has noted a curious historical coincidence: "the very era that witnessed the dismantling of truth claims by poststructuralist practice and deconstructive theory witnessed the rise of the cultural authority of computational media."[26] Consequently, humanities scholars who employ new technologies are often overawed by the prowess of algorithms and "whiz-bang" special effects, forgetting much of what we have learned about the nature of subjective interpretation. Drucker suggests that we shift our conception of evidence from *data*, which derives from the Latin term for *given*, to *capta*, which connotes something *taken*.[27] If that usage feels awkward, it would still be appropriate to view data in the way suggested by the information designer Laura Kurgan, as "representations, figures, mediations—subject, then, to all the conventions and aesthetics and rhetorics that we have come

[23] Lev Manovich, "Database as Symbolic Form," *Convergence* 5, no. 2 (1999): 80–99, quotations from 91, 98. See also Manovich, *The Language of New Media* (Cambridge, Mass., 2001).

[24] White, "The Value of Narrativity in the Representation of Reality."

[25] Laura Kurgan, *Close Up at a Distance: Mapping, Technology, and Politics* (New York, 2013), 34.

[26] Johanna Drucker, *SpecLab: Digital Aesthetics and Projects in Speculative Computing* (Chicago, 2009), xiv.

[27] Johanna Drucker, "Humanities Approaches to Graphical Display," *Digital Humanities Quarterly* 5, no. 1 (2011), http://www.digitalhumanities.org/dhq/vol/5/1/000091/000091.html.

to expect of our images and narratives."[28] Such a shift would help to emphasize the necessarily interpretive nature of all information, challenging scholars engaged in data visualization to recognize that interfaces are subjective conduits for the creation of meaning, rather than mere reflections of underlying facts, adornments, or embellishments.

Getting behind the numbers in this way might help to ease the tension between the condescending certainties of quantitative social science, the emphasis on subjectivity and experience characteristic of the humanities, and the creative imperatives of the arts. Scholars can advance the pursuit of knowledge by more fully recognizing the qualitative nature of data collection, categorization, and interpretation—by understanding a database as a deliberate, provisional, and even artistic act of historical research. Interface, which mediates between human users and machine protocols, can be designed to highlight rather than obscure acts of interpretation. As it disciplines, constrains, and determines a user's activity, interface then becomes a vehicle for revealing and supporting scholarly interpretations of the assembled archive, and for helping databases to tell stories.[29]

Zacek recognizes my affinity for the cinema, seeing that the interface for *Slave Revolt in Jamaica* is more like a movie storyboard than a searchable spreadsheet. The playable animation unfolds in a series of 264 steps, with events driving the movement and suggesting causes and effects. I call the map a narrative because it evokes a coherent story of insurrection and counterinsurgency. As stories generically do, it has spatial, temporal, and logical dimensions. The eighteenth-century map of Jamaica is the setting for a world populated by collective and individual agents—even characters, who speak through the left-hand column. The three phases of the rebellion, punctuated by tactical maneuvers and great battles that changed the circumstances of the combatants, constitute a narrative arc. Most importantly, the cartography unfolds according to a logic, or inner impulse: the motivation of the rebels to escape their enslavement pitched against the determination of their enemies to press them back into submission. This counterpoint integrates the information in the database into a plot. The variously colored lines on the map can even be said to offer a kind of narrator's voice.[30] Finally, if there is a moral to this story, it should be well known: power is never total, and even the most subjugated peoples have dared to plan and fight for forbidden objectives. Their failure should not diminish our appreciation of their effort.

TIME WILL TELL WHETHER *Slave Revolt in Jamaica* represents a sustainable model for new historical scholarship. Although traditional practices of the historian's craft

[28] Kurgan, *Close Up at a Distance*, 36.

[29] Drucker, *Graphesis*, 138–139, 179; Johanna Drucker, "Reading Interface," *PMLA* 128, no. 1 (2013): 213–220.

[30] Marie-Laure Ryan, "Narrative," in David Herman, Manfred Jahn, and Marie-Laure Ryan, eds., *Routledge Encyclopedia of Narrative Theory* (New York, 2005), 344–348; Ryan, "Narrative Cartography: Toward a Visual Narratology," in Tom Kindt and Hans-Harald Müller, eds., *What Is Narratology? Questions and Answers Regarding the Status of a Theory* (New York, 2003), 333–364. See also White, "The Value of Narrativity in the Representation of Reality." I am grateful to Marta Puxan-Oliva for helpful conversations about debates in narratology.

shaped the project's content and form, the website's production, circulation, and reception are something of a departure. Many historians still subscribe to a monastic ideal of scholarship that emphasizes long years of solitary contemplation, or a romantic ideal, wherein a heroic individual descends into a little-known repository and emerges triumphant with a gift of new knowledge for the world's admiration. If these archetypes ever approximated reality, few new media projects would develop along such lines.

This and other projects require new styles of collaboration, as well as great investments of money, time, and labor. In addition to taking shape amidst exchanges with peers in the fields of early American history and Atlantic slavery studies, *Slave Revolt in Jamaica* benefited from a substantial grant from the Andrew W. Mellon Foundation, which allowed me to study cartography and "counter-mapping" with experienced practitioners. I prepared the research while holding a fellowship at the National Humanities Center. My study was only the first step toward a database model, graphic design, and cartographic coding by David Heyman, Ben Sheesley, and Andy Woodruff of Axis Maps.[31] As few historians will have all the requisite skills for researching, designing, and building new-media works of scholarship, they will require close collaboration with peers in a number of different fields, allowing each to benefit from the kinds of collective thinking that have recently enhanced the natural and computing sciences. This kind of teamwork will necessarily make up a greater proportion of scholarly effort.

Even as it elevates the importance of material resources and the value of collaboration, digital scholarship reaches and informs its audience in new ways.[32] I did not begin tracking usage of the *Slave Revolt* website with Google Analytics until several months after the initial launch of the website in late 2013. But between June 2014 and April 2015, more than 6,400 users in 121 countries and 1,870 cities viewed the site, which continued to record between 1,000 and 1,500 sessions per month.[33]

Some of this traffic moves through such predictable channels as language, urban communications infrastructure, and nationality, but the breadth of the distribution is impressive. For the *Slave Revolt* site, the top three cities for viewer location are New York, London, and Kingston, Jamaica, as one might expect. But, of course, a book published in Cambridge, Massachusetts, would take much longer to reach a comparable audience even in London and New York, let alone Kingston. More significantly, these three cities account for just 13 percent of all sessions. If 80 percent of all users accessed the site from the United States, the United Kingdom, Canada, or Jamaica, single sessions have been recorded as far afield as Bahrain, Monaco, Madagascar, and Rwanda. The compression of representational space indicated by these

[31] Axis Maps, http://axismaps.com.

[32] Rather than relying on a university press or academic journal, I solicited the services of Rebecca Ladbury, a London publicist with expertise in scholarly communications: http://ladburypr.com.

[33] By contrast, over the past three years, the most accessed article on JSTOR for the scholarly journal *William and Mary Quarterly*, which would have been an ideal venue for a print essay about the Jamaican slave revolt, was Daniel K. Richter, "War and Culture: The Iroquois Experience," *William and Mary Quarterly* 40, no. 4 (1983): 528–559, accessed 4,817 times between September 5, 2012, and September 4, 2015. See Christopher F. Minty, "Finding Its Way: Gordon Wood and the *William and Mary Quarterly*," *The Junto: A Group Blog on Early American History*, September 9, 2015, http://earlyamericanists.com/2015/09/09/gordon-s-wood-and-the-william-and-mary-quarterly/.

figures has always been a great promise of the World Wide Web. The same is true for the compression of time, with perhaps less happy results.

Even before the heavy traffic of April 20, 2015, the average duration of viewing sessions for the *Slave Revolt* website was just under two minutes. A user in Bahrain spent nearly half an hour with the project, but the 5,000 sessions in the U.S. averaged one minute, fifty-one seconds. These durations offer limited insight into actual user practice. Google Analytics records the time users spend between the first and the last page they call up on any website, meaning that if a user were to spend considerable time viewing the map, but then not view another separate page before moving on, the session would record as a "bounce," showing no time spent on the site. About 20 percent of the visits recorded before April 20, 2015, are "non-bounce" sessions, in which users spent an average of about five minutes with the project. While this still does not indicate how long users spent on the last page of the site before navigating elsewhere, it helps to confirm something we should already know: people are less patient with websites than with printed texts. What can be learned in these abbreviated intervals? One could glean a summary argument and an impressionistic sense of its content, or merely feel the attractive pleasure of novelty. Such things happen quickly, with the interpretation of condensed symbols. But it is certainly possible that such speed and ease of access works *against* historians' effort to teach about complex processes that unfold unpredictably over space and time.

Nevertheless, the bits of conversation in Reddit's comment string show that, pedagogically, April 20 was not a wasted day. One Jamaican American was grateful to learn something he did not know about his home country. Another wanted to follow up on the history of the Maroons. Cavedave himself gained an introduction to the history of slave rebellions in the British Empire. His regular readers quickly made *Slave Revolt* the third most highly ranked post in his feed. The website had found its own teachable moments, which inspired processes of learning that will unfold in ways that are hard for historians to anticipate.[34]

Even more hopefully, there have been several thousand repeat users, who I expect are returning to the site in the context of classroom assignments or research projects of their own. In other words, the project is most valuable as part of a larger social and educational ecosystem.[35] This suggests that to take full advantage of media convergence, new media projects must accompany other texts, teachers, classrooms, and conversations. Digital modules such as this are teaching aids, not replacements for traditional education. The point should be obvious, but it has to be stressed at a time when university administrators seem eager to use digital technology to downsize and de-skill the educational workforce. Instructors must still impart old-fashioned methods for reading and interpreting sources; libraries need to offer the institutional stability necessary for the management of continually updating platforms; students will either expend the effort it takes to learn or remain uninformed. My own experience has convinced me that we will need *more* human resources to accompany digital

[34] www.reddit.com/r/history/comments/338032/slave_revolt_in_jamaica_17601761/; www.reddit.com/user/cavedave/submitted/?sort=top.

[35] Cathy N. Davidson and David Theo Goldberg, *The Future of Thinking: Learning Institutions in a Digital Age* (Cambridge, Mass., 2010).

content, not fewer. As ever, historians will chart new territories by adapting existing maps to changing landscapes.

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