



Prototyping an Experimental Curated Publication: *Digital Humanities Now*, 2009-2014

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This White Paper provides a history of the experimental curated publication *Digital Humanities Now* from its launch in November 2009 through June 2014. During these years our goals have remained consistent—to maintain a constant niche in the scholarly communication ecosystem by intentionally distributing gray literature that lacks venues for formal publication—but the source base, technical methods, curatorial processes, and participants have changed.

This report, originally distributed as blog posts, provides real-time explanations and reflections on the concurrent processes of prototyping the *Digital Humanities Now* publication and developing the PressForward plugin for WordPress. By rapidly iterating *Digital Humanities Now* and the PressForward plugin simultaneously, we built a publication and technology that reflects our priorities of community sourcing and collaborative editing. We offer this White Paper to provide insight into our process for anyone interested in curation methodologies or developing software to facilitate scholarly communication.

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I. Introducing *Digital Humanities Now*

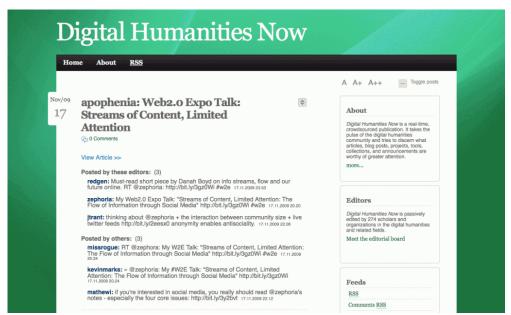
November 18, 2009 Daniel J. Cohen

Do the digital humanities need journals? Although I'm very supportive of the new journals that have launched in the last year, and although I plan to write for them from time to time, there's something discordant about a nascent field—one so steeped in new technology and new methods of scholarly communication—adopting a format that is struggling in the face of digital media. I often say to non-digital humanists that every Friday at 5 I know all of the most important books, articles, projects, and news of the week—without the benefit of a journal, a newsletter, or indeed any kind of formal publication by a scholarly society. I pick up this knowledge by osmosis from the people I follow online.

I subscribe to the blogs of everyone working centrally or tangentially to digital humanities. As I <u>have argued</u> from <u>the start</u>, and against the skeptics and traditionalists who thinks blogs can only be narcissistic, half-baked diaries, these outlets are just publishing platforms by another name, and in my area there are an incredible number of substantive ones.

More recently, social media such as <u>Twitter</u> has provided a surprisingly good set of pointers toward worthy materials I should be reading or exploring. (And as happened with blogs five years ago, the critics are now dismissing Twitter as unscholarly, missing the filtering function it somehow generates among so many unfiltered tweets.) I follow as many digital humanists as I can on Twitter, and created <u>a comprehensive list of people in digital humanities</u>. (You can follow me <u>@dancohen</u>.)

For a while I've been trying to figure out a way to show this distilled "Friday at 5" view of digital humanities to those new to the field, or those who don't have time to read many blogs or tweets. This week I saw a tweet from Tom Scheinfeldt (blog|Twitter) (who in turn saw a tweet from James Neal) about a new service called Twittertim.es, which creates a real-time publication consisting of articles highlighted by people you follow on Twitter. I had a thought: what if I combined the activities of several hundred digital humanities scholars with Twittertim.es? Digital Humanities Now (DHN) is a new web publication that is the experimental result of this thought. It aggregates thousands of tweets and the hundreds of articles and projects those tweets point to, and boils everything down to the most-discussed items, with commentary from Twitter. A slightly longer discussion of how the publication was created can be found on the DHN "About" page.



Digital Humanities Now Website, November 2009

Does the process behind *DHN* work? From the early returns, the algorithms have done fairly well, putting on the front page articles on grading in a digital age, bringing high-speed networking to liberal arts colleges, Google's law archive search, and (appropriately enough) a talk on how to deal with streams of content given limited attention. Perhaps *Digital Humanities Now* will show a need for the light touch of a discerning editor. This could certainly be added on top of the <u>raw feed of all interest items</u> (about 50 a day, out of which only 2 or 3 make it into *DHN*), but I like the automated simplicity of *DHN* 1.0.

Despite what I'm sure will be some early hiccups, my gut is that some version of this idea could serve as a rather decent new form of publication that focuses the attention of those in a particular field on important new developments and scholarly products. I'm not holding my breath that someday scholars will put an appearance in *DHN* on their CVs. But as I recently told an audience of executive directors of scholarly societies at an American Council of Learned Societies meeting, if you don't do something like this, someone else will.

I suppose *DHN* is a prod to them and others to think about new forms of scholarly validation and attention, beyond the journal. Ultimately, journals will need the digital humanities more than we need them.

II. Digital Humanities Now 2.0

November 2, 2011 Daniel J. Cohen

After five months of retooling, we're relaunching <u>Digital Humanities Now</u> (DHNow) today. As part of this relaunch it has been moved into the <u>PressForward</u> family of publications, as one of that project's new models of how high-quality work can emerge from, and reach, scholarly communities.

The first iteration of *DHNow*, which we launched <u>two years ago</u>, relied almost entirely on an automated process to find what digital humanities scholars were talking about and linking to (namely, on <u>Twitter</u>). About a year ago, in an attempt to make the signal-to-noise ratio a bit better, I took my slightly tongue-in-cheek "Editor-in-Chief" role more seriously, vetting each potential item for inclusion and adding better titles and "abstracts."

DIGITAL HUMANITIES NOW

Today we take a much larger step forward, in an attempt to find and highlight the best work in digital humanities, and curate it in such a way as to be maximally useful to the scholarly community. The *DHNow* team, including <u>Joan Fragaszy Troyano</u>, <u>Sasha Hoffman</u>, and <u>Jeri Wieringa</u>, have corralled a large array of digital humanities content into the base for the publication. Building on a Digital Humanities Registry I set up in the summer, they have located and are now tracking the content streams of hundreds of scholars and institutions (what we're calling the <u>Compendium of Digital Humanities</u>), from which we can select items for highlighting in the "news" and "Editors' Choice" columns on the site. As before, social media (including Twitter) and other means for assessing the resonance of scholarly works will serve a role, but not an exclusive one, as we seek out new and important work wherever that work may be found.

The foundation of the editorial model, <u>as I explained in this space on the launch of PressForward</u>, is that instead of a traditional process of submission to a journal that leads to a binary acceptance/rejection decision many months later (and publication many more months or years later), we can begin to think of scholarly communication as a process that begins with open publication on the web and that leads to successive layers of review. Contrary to the <u>concerns of critics</u>, this is far from a stream of unvetted work.

Imagine a pyramid of scholarship. At the bottom is a broad base of scholarship on the open web (which understandably worries many scholars who object to new models of scholarly communication that do not rely on the decisive eye of a paid editor and the scarcity of journal pages). From that base, however, a minority of scholarly works seem worthy of additional attention, and after word of mouth and dissemination of those potentially important pieces, more scholars weigh in, making a work rise or fall. As we move up the pyramid—to more exclusive

forms of "publication," fewer and fewer works survive. Far from lacking peer review, the model we are proposing involves significant winnowing as a scholarly work passes through various levels of review.

For the new *DHNow*, these levels of publication are transparent on the site, and can be subscribed to individually depending on how unfiltered or filtered scholars would like their stream to be:

- Most people will likely want to subscribe to the main *DHNow* feed, which will include the Editors' Choice articles as well as important news items such as jobs, resources, and conferences.
- Those who want full access to the wide base of the scholarly pyramid (or who don't trust the editorial board's decisions) can subscribe to the unfiltered Compendium of Digital Humanities, which includes feeds from hundreds of scholars.
- For those who felt that the original *DHNow* worked well for them, we have maintained a "top tweeted stories" feed.
- Finally, a major new addition is the launch of a quarterly review of the best of the best the top of the pyramid of review, which will likely contain less than 1% of works that begin at the base.

We will notify scholars about potential inclusion, and pass along comments and suggestions for improvement before publication. We hope and expect that inclusion in this journal form of DHNow will be worthy of inclusion on CVs, in promotion and tenure decisions, and other areas helpful to digital humanities scholars. DHNow will have an ISSN, an editorial board, and all of the other signifiers of quality and peer review that individuals and institutions expect.

You can read more about our process on *DHNow*'s "How This Works" page.

We believe this new format has several critical benefits. First, it democratizes scholarly communication in a helpful way. Over the last two years, for instance, DHNow has highlighted up-and-coming work by promising graduate students simply because they chose to post their ideas to a new blog or institutional website. Second, it democratizes the editorial process while still taking into account the scarcity of attention and without sacrificing quality. Although we have a managing group of editors here at the Roy Rosenzweig Center for History and New Media, we are accounting for the views and criticisms of a much broader circle of scholars to make decisions about inclusion and exclusion, and those decisions themselves can be reviewed. Third, DHNow broadens the definition of what scholarship is, by highlighting forms beyond the traditional article. Finally, it encourages open access publishing, which we think has an ethical benefit as well as a reputational benefit to the scholars who post their work online.

III. Digital Humanities Now 2.0: Six Month Review

May 22, 2012 Joan Fragaszy Troyano

It has been six months since *Digital Humanities Now* (*DHNow*) <u>relaunched in version 2.0</u> through the support of the PressForward Project, funded by the Sloan Foundation.

The <u>first version</u>, run between 2009 and 2010, was an automated survey of Twitter. <u>Version 1.5</u> was a one-man operation by <u>Dan Cohen</u> to vet the material using traditional methods of editorial section.

Now <u>four editors</u> spend a total of 15-20 hours a week to survey approximately 1,000 items per week produced or shared by digital humanists in all corners of the field.

In the past six months, we have winnowed down more than 20,000 items to highlight 175 pieces as Editors' Choice, along with 7 "round-ups" that grouped together related posts. We have shared 586 news items, including 218 new resources, 144 job announcements, 111 calls for papers or participation, 65 reports, and 30 funding opportunities.

In addition, we selected 22 Editors' Choice pieces from the last quarter of 2011 and solicited five new works for the inaugural *Journal of Digital Humanities*. These pieces were guided to publication by more than 30 additional comments during open peer review and by the careful work of our editors and guest editor Natalia Cecire.

What did we learn?

- Digital humanists are very active. At the moment our aggregation and curation process would
 be difficult (though perhaps not impossible) to sustain solely through volunteer efforts.
 And there is enough work happening to necessitate a sister publication, <u>Global</u>
 <u>Perspectives on Digital History</u>, which highlights digital history work from around the
 world, complete with multilingual editors. We hope to expand that publication in the
 coming year.
- Digital humanists use blogs to talk about the field as a community and a practice more than to report their scholarship. There are fewer pieces of original research (i.e., new results of work done) shared than we had expected, and many of those research-oriented pieces focus on individual text- and data-mining projects, with fewer reports from other areas of DH or from collaborative projects.
- Digital humanities has a <u>gender gap</u> and most of the content is created by individuals. Like <u>other fields</u>, many more males have brought their research blogs to our attention. (Indeed, the gap in DH may be smaller than other fields, but still conspicuous.) The individuals who identify as part of the DH community in our registry are split 40% female and 60% male (see "DH Registry"). But among <u>those who provided an RSS feed to monitor their work</u> (see "Compendium"), the ratio goes down to 33% female, 67% male. Although organizations make up about 10% of our feeds, we do not see a lot of these groups reporting on the process or results of their work, except for project launches.

What will we do next?

- Expand our Editorial Board: We already have placed a call for editors to help distribute the labor and expand the networks surveyed starting in June. So far more than thirty editorsat-large have signed up to help by survey the field and nominate items for recirculation.
- Highlight more scholarly posts from the broad field: We will continue to prioritize highlighting original research (very broadly construed) in the Editors' Choice selections. We hope to see and find more examples of works in progress, as well as white papers and reports from finished projects. In addition, we will begin to highlight scholarly projects (e.g., new tools and websites) as Editors' Choices rather than Resources.
- Strongly encourage everyone, and especially women and collaborative groups, to share more work. We can only highlight what we see and can link to. We will work to expand the networks that we survey, and find ways to supplement the currently limited group of mostly self-nominated individuals.

IV. Digital Humanities Now 2.0: Sixteen Month Review

February 19, 2013 Joan Fragaszy Troyano

Sixteen months after the relaunch of *Digital Humanities Now*, it is time again to offer a glimpse behind the scenes. While many of the trends we identified in our <u>six month report</u> remain stable, there have been two significant changes in our editorial process.

First, we have reduced our publication cycle from daily to twice weekly.

Second, we have expanded our editorial team to include 121 Editors-at-Large from the digital humanities community.

These changes have been productive and positive. Our readership has grown over the last six months and we have been more selective in the pieces we highlight. We have also had a very enthusiastic response to our calls for Editors-at-Large. These volunteers have expanded the range of items reviewed for *Digital Humanities Now* and are bringing *Digital Humanities Now* one step closer to being a community-edited journal.

The Current State of *Digital Humanities Now*

- From June to December 2012, we published 90 Editors' Choice pieces and 358 News items, the majority of which were job announcements, calls for papers, and resources. These pieces were chosen from the approximately 4000 items received each month from the blogs of the Compendium, the aggregated tweets of those we follow on Twitter, and an automated Google search. At this rate, we are publishing 0.5% of the content we see as Editors' Choice and 2% as News.
- Our readership is growing steadily. Our Twitter account, which functions as the primary distribution source for many readers, now has over 7000 followers. The links we publish, currently about 70 per month, are generating roughly 2500 clicks. In addition, there are now nearly 500 people who use RSS readers to follow our Editors' Choice selections.
- Our calls for Editors-at-Large have been very successful. We received 43 volunteers in the Summer, 39 in the Fall, and 44 in the Spring, many of whom signed up for multiple weeks. From the large stream of 4000 items per month, the Editors-at-Large recommend roughly 650 items per month, 16% of the items they review. This initial filtering by the Editors-at-Large has reduced the editorial time from 15-20 hours across four editors to approximately 10 hours by a single editor each week.
- While the majority of the blogs in our Compendium are produced by male authors (53% to 27%), the inclusion of Editors-at-Large has introduced a new gender variable. Of our 121 volunteers to date, the split between men and women is 45% to 55%. Although women represent less than 1/3 of those who are publishing their work on the web and directing our attention to that work, they represent the majority of those volunteering their time to evaluate digital humanities scholarship. At the same time, the percentage of pieces highlighted in *Digital Humanities Now* by female authors has remained stable at 30%.

The Future of *Digital Humanities Now*

Looking forward, we are beginning to use an alpha version of our PressForward plugin for WordPress. This plugin will enable a more streamlined aggregation and nomination process, and will make it possible to open the role of weekly editor to members of the digital humanities community.

We are very pleased with the ways Digital Humanities Now is continuing to develop in this second year of publication and are very grateful for the community support we have received. If you have not already done so, please add your blog to our Compendium and continue to publish your research on the web. In addition, please join our team of Editors-at-Large and help us continue to find and highlight the best of digital humanities scholarship on the web.

V. Digital Humanities Now 3.0

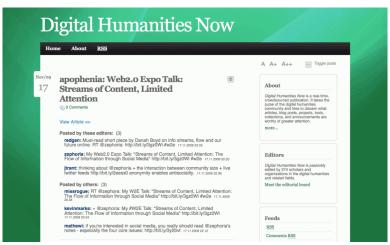
November 14, 2013 Joan Fragaszy Troyano

Over the past four years, <u>Digital Humanities Now</u> (DHNow) has used a variety of approaches to aggregating, reviewing, selecting, and disseminating scholarly content from the open web.

Originally populated with content from Twitter chosen by an algorithm and automatically-published on the website, since 2011 the content for *DHNow* has been selected and prepared by an in-house editorial group. In the past year, we have developed our own <u>PressForward plugin</u>, to facilitate the aggregation, review, and dissemination process within the WordPress dashboard. At the same time that we have significantly increased the human labor involved, we have been seeking ways to reduce the editorial burden for running such a publication.

DHNow is a critical case study in methods for highlighting and distributing scholarly communication on the open web for the <u>PressForward Project</u>, funded by the Sloan Foundation. By experimenting with *DHNow*, we are developing methodologies and technologies to facilitate community-sourced publications beyond digital humanities. In this post we detail some of the methods and technologies we have used along the way and our wish list and plans for the future.

DHNow 1.0: From Automated to Edited, 2009-2011



Digital Humanities Now Website, November 2009

- Twitter list as source base
- Twittertim.es identified most popular content
- automatic publishing on *DHNow* website

The first iteration of *DHNow*, as explained by founder Dan Cohen in <u>November 2009</u> was based on the content circulated by a collection of digital humanist on Twitter using the third-party

service Twittertim.es (no longer in existence but similar to <u>Tweeted Times</u>) to identify the most popular content discussed on the list, which was then published on the corresponding *DHNow* website.

Sensing the value of a human eye in the selection and a human touch to the presentation, after a year Dan began to select and excerpt pieces in order to improve the content on *DHNow* itself. While this effort was difficult for one person to sustain, the increased number of readers—and the growth of scholarly materials informally published on the web by the very same readers—did suggest that the digital humanities community valued the surfacing and dissemination of their work.

In 2011, *DHNow* became a critical case study in methods for highlighting and distributing scholarly communication on the open web for the <u>PressForward Project</u>, funded by the Sloan Foundation. New staff resources enabled the expansion of our source base, additions to an inhouse editorial group of research faculty and graduate students, and revised presentation for version 2.0, launched in November 2011.

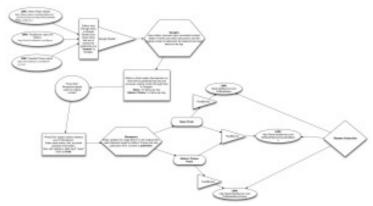




Digital Humanities Now, 2012

Since *DHNow* became a part of PressForward and a testing ground to determine the human and technical requirements for a scholarly community to surface, aggregate, identify, and disseminate communication on the open web, we have gone through two unique phases of development:

Phase 1. July 2011-May 2012



Digital Humanities Now Editorial Process, 2011-2012 *Graphic by Jeri Wieringa*

- Expanding source base by intentional and focused searching
- Offering an opt-in to the source base
- Testing additional filtering, including Yahoo Pipes and Tweeted Times
- Review of all content by all Editors to determine scope and selection criteria
- Aggregation via Google Reader
- Commenting and selection using Google Reader
- Review of all content by all Editors-in-Chief
- Final selections made in consultation with all Editors-in-Chief
- ~25 hours/week across 3 Editors
- Publication 5 days/week

First the new project staff—Director Joan Fragaszy Troyano and Graduate Research Assistants Sasha Hoffman and Jeri Wieringa—began to expand the source base to include RSS feeds. We explored off-the-shelf solutions for filtering out relevant content by comparing the content identified by Yahoo Pipes to that selected by the editors. Tweeted Times also filtered content shared via Twitter, which continued to be an important part of the source base aggregated and reviewed in Google Reader. At the same time that we developed editorial criteria, we also prepared publication and distribution methods for the relaunch of the website.

Once the site was relaunched in November 2011, we continued to establish editorial criteria and a sustainable workflow for a weekday publication with three staff. We enabled readers to add themselves to the source base. In addition, we began to scope out the requirements for a usercontrolled technology to facilitate this aggregation process. As Google removed the ability to share and comment on RSS feeds in Google Reader in order to push Google Plus, we suspected that a user-controlled RSS aggregator within our WordPress installation soon would be critical. After testing out Tiny Tiny RSS and a few other RSS aggregators, we confirmed the need to develop our own and in a relatively short timeframe. We pulled Aram Zucker-Scharff, Boone B. Gorges, and Jeremy Boggs in for the development and design work on the PressForward plugin, drawing on their expertise in journalism practices, WordPress development, and user interfaces.

Phase 2: June 2012-June 2013



Digital Humanities Now Editorial Process, 2012-2014
Graphic by Spencer Roberts

- Aggregation via Google Reader
- Additional filtering by Yahoo Pipes and Tweeted Times
- Review of everything by volunteer Editors-at-Large
- Nominations via Google Reader
- Confirmation of Editor-at-Large survey and proficiency by rotating Editor-in-Chief
- Editorial selections and commenting by Editors on Google Plus
- Final selection and publication by rotating Editor-in-Chief
- ~10 hours/week for Editor-in-Chief
- Publication 2 days/week

During this period we reduced our publication schedule from five to two times a week, partly influenced by the smaller amount of relevant content, and partly in an effort to find a sustainable workload that balanced other project requirements.

Most importantly, we added another filtering method: additional human eyes. Volunteer editors-at-large added value through the gift of their labor, as well their additional perspectives and expertise. We hacked together a system for editors-at-large to nominate items from Google Reader, and Editors-in-Chief dipped into the full stream of content as needed to confirm that volunteers were nominating the most relevant content. We continued to hold editorial discussions in a closed Google Plus circle prior to drafting new items for each post on *DHNow*.

The combination of experienced editors plus additional editors-at-large reduced internal workload from about 20 hours/week to 10 hours. Given the increased input from the community, as well as a reduction in our review time, this time managing editor-at-large signups was well-spent.

Over the year also we oversaw scope and basic development of the <u>PressForward plugin</u> leading to the beta release in June 2013.

DHNow 3.0: Community-Sourcing and Filtering, 2013-present



Digital Humanities Now, 2013

- Aggregation and nomination via <u>PressForward plugin</u>
- Additional filtering by Yahoo Pipes and Tweeted Times
- Review of everything by volunteer Editors-at-Large
- Confirmation of Editor-at-Large survey and proficiency by <u>rotating Editor-in-Chief</u> as needed
- Final selection and publication by rotating Editor-in-Chief
- ~6 hours/week for experienced Editor-in-Chief
- Publication 2 days/week

By June 2013, the three experienced editors-in-chief who worked independently and in regular rotation began to mentor new Editors joining the project team in August 2013 (Amanda Morton, Benjamin Schneider, Lindsey Bestebreurjte, <u>Lisa M. Rhody</u>, and Stephanie Westcott). Because the plugin enables the surveying, nominating, and drafting of content to occur within WordPress, the process to review, select, and publish is much easier.

Recent improvements to the editor-at-large management process also help reduce the workload to 6 hours/week for experienced editors who can review and publish content more quickly. The bulk of each editor-in-chief's time is spent reviewing and selecting items for publication, but at least 2 hours/week are required to prepare the material for distribution on the *DHNow* website. There are additional opportunities for reducing editor-in-chief workload, but they would be at the expense of consistent formatting of published materials.

Looking Forward

As we begin our third full year of running *DHNow* as an edited publication, we have an established internal process. We are continuing to enhance the functionality of the PressForward plugin as well as develop documentation and materials for others who wish to create similar publications for their field of interest.

We have been gratified to find that even as the number of sources grew, our time required has not increased. The involvement of volunteer community has reduced internal effort substantially, as has growing familiarity with selection process. We believe that our consistent quality of selections and frequency of publication encourages volunteer participation, which in turn expands *DHNow*'s coverage of this diverse field.

Because *DHNow* is a critical case study for a larger <u>PressForward</u> project, it necessarily began as an in-house project. Given the amount of staff time required to select and publish content, in addition to managing community volunteers, we will continue to maintain full responsibility for editing and publishing *DHNow* for the foreseeable future.

The challenges we face likely will not surprise any of our readers:

- staggering amounts of potential content, with very little that is important
- scarcity of time and attention from knowledgeable people
- decreasing usability of RSS feeds for individual readers and increasing capabilities of machine-enabled flows of information

At the same time, we do sense some exciting opportunities. Not surprisingly, scholarly communities continue to desire ways to filter high quality content from a river of news. We plan to turn some of our attention back to improving the automated filtering of content coming through the river of news (you can read about our first attempt here). In addition, we will continue to develop documentation for our practices and plugin to help other communities create their own community-sourced and edited publications that highlight and disseminate work already available on the open web.

We anticipate that existing scholarly communities wanting to move beyond listserv or newsletter distribution methods will be likely adopters of this "now" publication model. In addition, emerging and topically-focused communities of interest may have the interest and commitment to beginning their own publications. If you are interested, please <u>fill out our form</u>, drop us a line at info at pressforward dot org, and we will be happy to speak with you.

DHNow 2011-2013 Overview

Content

- 650 RSS feeds plus Tweeted Times
- 414 Editors' Choice Selections
- 380 Jobs
- 419 CFPs and conferences
- 418 Resources
- 106 Reports
- 31 Announcements

Editors

- From 3 to 8 rotating Editors-in-Chief (3 research faculty; 5 Graduate Research Assistants)
- Over 175 community Editors-at-Large, averaging 5/week

Reach

- from ~2, 000 Twitter followers in Spring 2011 to more than 11,500 in October 2013
- from ~75,000 unique visits by 30,000 visitors in 2010 to over 340,000 visits by nearly 95,000 unique visitors so far in 2013

Workload

- from 15-25 hours/week total shared among 3 editors
- to 6 hours/week by single editor

Technology

- from sharing and commenting via Google Reader and Google Plus
- to PressForward plugin that enables input from volunteer Editors-at-Large

VI. Prototyping Digital Humanities Now, 2009-2014

May 2014 Joan Fragaszy Troyano

Is it possible for scholars to scan the rapidly growing corpus of scholarship available on the open web? How can communities identify relevant and timely materials and share these discoveries with peers? Anyone who tries to stay current with new research and conversations in their field—ourselves included—faces an overwhelming amount of material scattered across the web.

For the past three years the <u>PressForward team</u> has been experimenting with methods for catching and highlighting web-based scholarly communication by concurrently developing our <u>Digital Humanities Now</u> (DHNow) publication and our <u>PressForward plugin</u> for WordPress.

It is important to note that nothing about this scholarly communication problem is specific to the digital humanities, and neither is our solution: we prototyped a generic model for any community who wishes to build a lightweight, collaboratively-edited publication both sourced from, and published on, the open web.

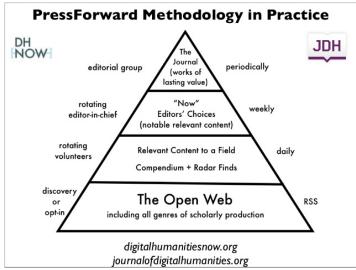
In this piece I provide a brief overview of the development of *DHNow* and the PressForward plugin, and introduce our approach to issues of scope, scale, and value. Through publishing *DHNow* I have concluded that surfacing scholarship from the open web is most manageable when done by an editorial group with committed volunteers.

Prototyping an Experimental Publication

The digital humanities community—drawn from the overlapping worlds of humanities scholars and teachers, technologists, librarians and archivists, and cultural heritage professionals—has long actively created, shared, and discussed their work on the open web. As individual publishing becomes easier through blogs and microblogs, our community of practice monitors an increasingly overwhelming number of web feeds and Twitter accounts to see what our colleagues are producing and thinking.

In an attempt to reduce duplicative efforts and increase the visibility of informally published materials, in 2009 Dan Cohen, then Director of the Roy Rosenzweig Center for History and New Media, created <u>Digital Humanities Now</u> (DHNow) as a weekly publication to highlight relevant and timely work in this emerging field.

Since 2009, *DHNow* has maintained a constant niche in the scholarly communication ecosystem for digital humanities. Rather than focusing solely on one discipline, genre, medium, topic, or method, *DHNow* intentionally distributes <u>gray literature</u>, or works that lack venues for formal publication. Every week *DHNow* highlights salient content in any form as "<u>Editors' Choice</u>," by providing an excerpt and link to the original site of publication. Additional links are provided to news items such as <u>jobs</u>, <u>resources</u>, <u>funding and opportunities</u>, <u>CFPs and conferences</u>, <u>reports</u>, and <u>announcements</u>.



PressForward Methodology for Curating the Open Web

Even though our mission remains consistent, we are <u>rapidly adjusting</u> the <u>processes</u>, <u>technologies</u>, and <u>communities</u> behind *DHNow*. From fewer than 300 feeds and Twitter profiles in 2011, we now aggregate content from nearly 700 feeds. We have moved from using Google products to read, nominate, and discuss content, to using our own PressForward plugin for editorial workflow. We have grown from an individual editor in 2009, to core group of three coeditors in 2011, to a <u>staff</u> of graduate student assistants and faculty who rotate as weekly editor-in-chief, responsible for selecting and preparing the featured works. Most importantly, we have welcomed <u>over 200 volunteer "editors-at-large"</u> who filter through the aggregated content and nominate pieces for broader distribution.

These adjustments to our sources and editorial pool in turn have influenced our <u>development</u> of the PressForward plugin. In order to facilitate collaborative editing, we designed <u>an interface for editors to read and nominate</u> the items from the feed <u>they find valuable and relevant</u> for broader distribution. In order to incorporate content from beyond our feeds, we created the *Nominate This!* bookmarklet feature to excerpt and attribute content from any web page. By rapidly iterating *DHNow* and the PressForward plugin simultaneously, we have built a publication and technology that reflects our priorities of community sourcing and collaborative editing.

Scope

While the scope of *DHNow* has remained constant—English-language materials related to digital humanities that are informally published on the open web and aggregated through web feeds—the feeds in our source base and the works distributed through *DHNow* have shifted over time.

The source base for *DHNow* has always been <u>public</u> and <u>open to self-nominations</u>. At several points we have intentionally researched new sources and actively sought input from our readership. The addition of volunteer editors-at-large in 2012 has greatly increased the range of genres, materials, and fields circulated by DHNow, beyond those included in our feed subscriptions. Moreover, we created the *Nominate This!* bookmarklet for the PressForward

plugin to allow any editor to nominate content from anywhere on the open web for distribution through *DHNow*.

Responsibility for the final selection and preparation of materials for distribution remains with PressForward graduate research assistants and faculty. Frequent adjustments to workflows and our need to beta test the technologies we are developing requires regular communication among the editorial group. Publishing *DHNow* also provides an opportunity for graduate students to lead the development of various aspects of a web publication, such as redesigning the website (Sasha Hoffman) or the process and materials for managing the editors-at-large (Jeri Wieringa and Amanda Morton). Moreover, editing DHNow provides a learning experience for our graduate students as they develop their own research and skill portfolios.

Scale

As of May 2014, *DHNow* aggregates approximately 400 individual posts each week from nearly 700 feeds from websites in all areas of digital humanities practice into our WordPress installation using the PressForward plugin. Having the technical ability to collect potential content in one place through web feeds does not alleviate the need for critical eyes to identify salient material, however.

As the number of practitioners and students of digital humanities has increased, *DHNow*'s source base and community readership have grown rapidly. After developing a manageable workflow and process, in Summer 2012 we invited volunteers to join us as "editors-at-large." For the past two years approximately six volunteers per week scan our feeds and nominate content for distribution. The addition of volunteer editors-at-large had an immediate and positive impact on the publication:

- expanded the interests and networks of editorial pool;
- diversified the materials surfaced and highlighted by *DHNow*;
- decreased the amount of time required by in-house editorial staff to select items for circulation; and
- increased community investment in the publication.

Given our broad scope and large source base it would be nearly impossible for one or two volunteers to monitor, select, and share materials for *DHNow* on the same weekly schedule. For *DHNow*, the expanded editorial pool helps to accommodate an increasing number of sources and growing field at the same time it expands the participation by our scholarly community.

Value

Because *DHNow* is invested in raising the visibility of scholarship on the open web, we measure its value not only in terms of the quantifiable numbers of readers, but also community participation and role in the communication ecosystem. The <u>inaugural winner of a digital humanities community award</u>, in the past few years *DHNow* has greatly expanded our readership who access the publication via the website, Twitter, and our own feed. Given the digital humanities community's active use of social media and the web, the wide reach of *DHNow* can

be tracked through the engagement of our 14,000 Twitter followers (up from 2,000 in 2011), in addition to the hundreds of readers of the featured pieces each week, and over time, as recorded in our server statistics.

Truly a community publication, in both the material featured and volunteer participation, DHNow also has a growing pool of volunteer editors, many of whom are new to the field. In fact, many volunteers report that their desire to survey the large amount of diverse work occurring in the field is their reason for volunteering. For the graduate assistants at RRCHNM, reviewing and selecting content for *DHNow* is an important component of their training.

Because *DHNow* distributes scholarly works that lack formal venues for publication, we also measure its value in its consistency and long-term use. By regularly surfacing scholarship first informally published online, *DHNow* reveals the large amount of gray literature that reflects and inspires dynamic work and conversation in the digital humanities. As a feeder to the more selective Journal of Digital Humanities, DHNow also provides an opportunity for informally released works to circulate and receive feedback before developing into formal publications. We are proud that DHNow and Journal of Digital Humanities regularly appear on course syllabi. For our thousands of readers, DHNow clearly fills an unmet need in the communication ecosystem of this expanding community of practice.

Customizing Our Prototype

Scholarly communities can easily develop their own curated publication by customizing the scope and the scale of their content priorities, source base, and editorial group. My experience with DHNow suggests that communities will coalesce around intellectual work that is shared freely, no matter the medium, genre, or amount of polish. It is our hope that the success of DHNow will encourage other communities to value and disseminate scholarly work from the open web.

VII. Developing the PressForward Plugin

June 2014 Joan Fragaszy Troyano

Here at PressForward, the process of developing software for scholarly communication began with a question: How can an individual make staying current with the work and conversations in their field a manageable task and still have the energy to participate in those conversations? An academic's work requires tracking the contents of journals and book lists from relevant publishers, being aware of conference presentations and published editorials and thought pieces, and keeping up to date on discipline-specific methodology or data. But as the internet has made publishing more accessible through blogs, repositories, digitized archives and online journals and publications, the job of keeping up to date has become more than one person can handle.

This is the challenge the PressForward Initiative faced in 2011. At that time, an increasing number of scholarly conversations and materials were being shared on the open web. In emerging fields, such as digital humanities, a growing number of people were sharing and conducting their work in public. In topical or interdisciplinary fields like microbiology of the built environment, scholars were trying to encourage awareness and connections between the research in one field to another. Given this environment of abundance, in which scholarship had numerous, diverse outlets, PressForward began to search for a way to help scholars keep up with work within this changing landscape.

We knew that we needed an easy way to aggregate content from the web and share select pieces, but suspected that none existed yet. Our goal was to allow a scholar's effort to be concentrated on the actual reading, considering, and selecting of content for distribution, rather than the process of searching it out. By facilitating the aggregation, curation, and distribution workflow, we hoped to enable research communities to surface and highlight valuable materials from the open web.

With generous funding from the Alfred P. Sloan foundation, a four-person editorial group consisting of two faculty and two graduate students at the Roy Rosenzweig Center for History and New Media began with some critical elements:

- a list of sources (RSS and Atom feeds, along with Twitter users)
- an existing publication using WordPress content management system (<u>Digital Humanities Now</u>)
- available labor (PressForward staff and GRAs)

The tool we produced reflects an agile development approach to software development, years of scholarship and conversation among the faculty, grad students, and readers, and feedback from editors-at-large. While the end result is specific and carefully-considered, the process itself is emblematic of the amount of time and care needed to prototype functional, flexible software. This piece details that process.

Designing for Scholarly Values

From the start, we have been committed to developing flexible methods and technologies that offer editors full control over the process of collecting, discussing, and disseminating materials of their choice. Rather than relying on third-party services such as <u>Google Reader</u> or <u>Scoop.it</u> that can (and do) disappear, we provide an extensible and open-source platform that users can maintain and adapt. Our <u>PressForward plugin</u> is a powerful feed aggregator and editorial workflow that is integrated into the popular, easy-to-use, and open-source <u>WordPress</u> web content management system.

The <u>PressForward plugin</u> intentionally reduces the technical barriers to collecting, selecting, and sharing content so editors can concentrate on the intellectual work of identifying the content most important to their communities. We designed the user interface of the PressForward plugin specifically to enable collaboration. The plugin allows multiple contributors to nominate content from anywhere on the web, in addition to choosing from the materials aggregated through feeds. Contributors work within a comfortable reading environment and can comment on individual items. Editors read, nominate, discuss, and publish content within the WordPress Dashboard, allowing them to manage all stages of web publication with a unified interface.

Prototyping our *Digital Humanities Now* publication and the software at the same time meant that we could easily iterate each element using the agile development approach of planning, designing, building, testing, and reviewing in short periods while following a basic roadmap and maintaining a backlog of desired features.

Phase 1: Experiment with Existing Tools and Define Scope

Like all good projects, we started by looking to see what others were doing. We updated and expanded the formal "environmental scan" of the grant proposal, later released as a White Paper on the locations of gray literature on the open web. We also took a close look at the curation tools and processes that already existed, how others created publications using them, and what was useful about them. We reviewed and tested the available technology and asked ourselves, "can we make modifications? Or do we need to create something entirely new?" We then embarked on a three-year, four-part process that included simultaneously exploring and developing:

- technical functionalities
- editorial workflows
- publishing processes
- community involvement

Ultimately, we wanted to create a technology and a methodology that reflected our scholarly values. As a result, we pursued an editorial process that included consideration, collaborative discussion, contextualization, and attribution in order to experiment with the technical components of curating, and the social element of community nominations. Rather than jumping to an up/down voting or crowdsourcing system like those behind *Slashdot* or *Reddit*, we modified a familiar process and retained a role for a content editor, because, at that point in time,

it more closely resembled accepted scholarly communication practices and was more likely to be accepted by scholars and practitioners.

PressForward was able to start working toward these goals by experimenting further with an already experimental publication: Digital Humanities Now (DHNow). DHNow was a perfect case study because it already existed as an aggregated and curated publication and had an audience that generally was open to experimentation and discovery.

In October 2011, we began to build an editorial workflow dependent upon existing tools in order to gain enough experience with the current options to define the scope of our development work and create a wish list for functionality and features. This involved using Google Reader and Google Plus to develop a procedure for locating and choosing content for *DHNow*.

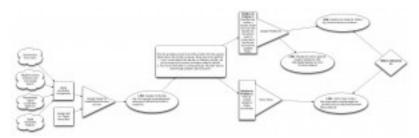
The workflow for our 4-person editorial team involved the following steps:

- aggregate RSS subscriptions in Google Reader
- read, comment, and nominate materials using Google Reader commenting and starring functionality
- create posts of selected content in WordPress manually using *Press This!* bookmarklet
- modify and prepare content for distribution on front end within WordPress Posts dashboard

We practiced this workflow and discussed selection criteria for several weeks prior to our public re-launch. However, the day before we re-launched *DHNow*, Google changed its product (of course). So given the change in the technology, we adjusted our methodology so that the editorial group would:

- read RSS feeds independently in Google Reader
- nominate content by sending posts to Google Plus
- discuss potential content in Google Plus using "comment" feature
- create post with selected content in WordPress manually using *Press This!* bookmarklet
- modify and prepare content for distribution on front end within WordPress Posts dashboard

This process, we knew, could never be a long-term solution, because it relied on a third-party service, which could (and did!) change or disappear. It wasn't the ideal solution for other reasons, too. The separation of content review and discussion from the platform of publication required a lot of separate steps. In addition, a lot of manual work was required to recreate the content in our WordPress installation for distribution on our site. You can see the extensive process detailed below:



Early model of content gathering for DHNow using Google Reader *Graphic by Jeri Wieringa*

For a point of comparison, at the same time we were using Google products in *DHNow*, we also installed the open source feed reader <u>Tiny Tiny RSS</u> (TTRSS) on our server for a separate prototype publication, <u>Global Perspectives on Digital History</u> (GPDH). TTRSS behaved much like Google Reader, except the user interface was less streamlined, and it was not as fast because it was hosted on our own server rather than Google's massive servers.

The workflow used by the four editors of *GPDH* was similar to the Google Reader workflow in *DHNow*, with the starring and sharing of content occurring within the feed reader interface. There was no easy way to have an online conversation about potential content, however, so that had to take place on a platform other than TTRSS and WordPress.

After several months of consistent publication (and the breakneck daily publication speed of *DHNow*), we were ready to have members of the community contribute to the review and nomination process. We did this for two reasons: we wanted to build a publication that reflected the interests of an ever-expanding community of practice; and we wanted to develop a replicable model for collaboratively-edited publications. We <u>invited volunteers</u> to become "editors-atlarge" to help influence the materials considered and selected for distribution, and also to assist with the work load of reviewing over 1,000 posts per week.

We designed a protocol for volunteers to subscribe to our aggregated content and share their nominations through Google Reader. When Google removed the ability to share posts from Google Reader, we incorporated a hacked script to enable the sharing to continue. This second adjustment to our process forced by changes in Google services was even more proof that reliance on an external service provider could not be a long-term solution.

Phase 2: Prepare Requirements and Development Plan

By June 2012, we had created a wish list for the ideal solution to the challenge of aggregating, curating, and disseminating web content. Our wish list included:

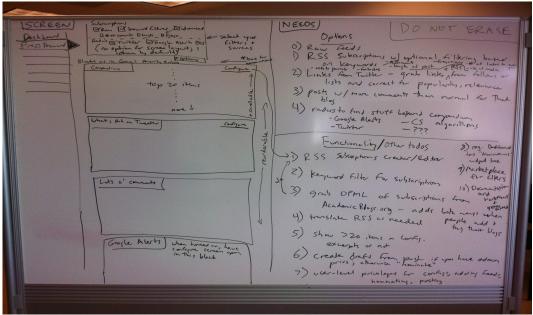
- one login for the aggregation, discussion, selection, and distribution process
- a way to collect text, images, and video content from the web (through feeds and a bookmarklet)
- a way to retain and display the original source and attribution information of the collected content
- an easy-to-use interface and comfortable reading environment
- a reliable, stable, modular, and controllable platform

Ultimately, we determined that having one platform to host the aggregation, discussion, selection, and distribution would be the best approach. We could not adjust Google services, and although TTRSS was open source, we decided it was not the right software, nor was it a useful starting point to modify. We had confirmed that we wanted to commit to WordPress as our distribution platform, because its widespread use and committed user community suggested long-term sustainability, and its plugin architecture would make modification easy.

Thus, in Summer 2012 we turned to an investigation of how we could integrate a feed reader into WordPress. WordPress already had a basic feed reader built in to the system, however it did not have the capacity nor the interface for sustained editorial work. We then had to figure out: Could we modify the core code? Or could we take that functionality and create our own plugin? Based on our experience publishing DHNow and GPDH, our requirements of any tool we created included the following features:

- located in one single platform
- aggregates content from RSS/Atom feeds
- adds web content through bookmarklet
- includes images, text, video, etc.
- displays a comfortable reading environment
- offers a way to comment
- supports a way to hold for review
- retains post content through each step
- allows editing of content prior to appearance on front end
- retains full attribution in metadata and text of post
- logs display numbers of items aggregated and nominations taken
- modular structure allows for future improvements

We also wanted this system to be self-hosted and contained (rather than a black box), and able to run without overloading or slowing down a server or WordPress install.

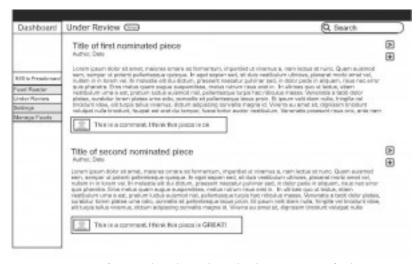


Early Draft of PressForward User Interface

After preparing our wish list and requirements, we drafted a plan for development. We asked WordPress development experts Boone Gorges (the developer of BuddyPress) and Aram Zucker-Scharff (a journalism and WordPress expert) for feedback. They responded positively, and began development in August 2012, twelve months after our initial research began. The code was organized and delivered through GitHub. The editorial group and developers tracked the progress of the plugin and options for future development in regular meetings.

As the developers worked on information architecture and basic functionality, the editorial group began to work on a potential user interface. We wrote a UX narrative and created basic wireframes, using white boards and pieces of paper prior to the creation of formal documents. We asked web designer <u>Jeremy Boggs</u> to help style the PressForward user interface, which relied on an easily modified version of <u>Twitter Bootstrap</u>. With the functionality under construction, and a UI in development, we continued to publish *DHNow* with the <u>hacked-together system</u> throughout the winter.

¹ You will see that we initially thought we would create input connectors from services, and have a directory to add subscriptions. In the end, the basic creation was all that was feasible with the resources available. However, users can still find their own services and create RSS subscriptions out of them.



Basic wireframe developed at the beginning of Phase 2

Phase 3: Build, Release, Test, Refine, Repeat

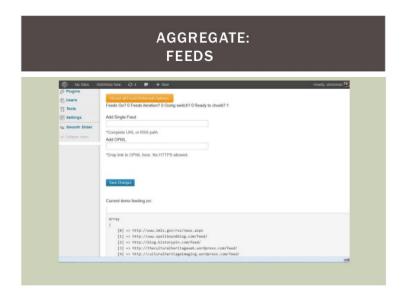
By February 2013 we were able to test the plugin in sandboxes and provide bug reports. Aram Zucker-Scharff fine-tuned the plugin's functionality, including adding a modification that improved the system for feed retrieval. At this time we also enhanced the testing to focus on reliability and usability, knowing that we needed the former and wanted the latter. In addition, we considered the visual aspects of the plugin, including display options and the placement of icons.

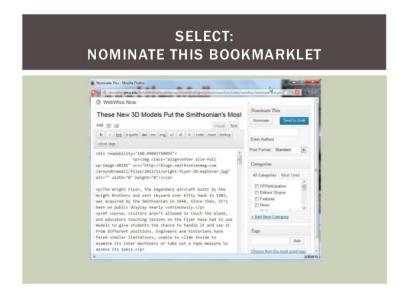
In April and May 2013 we prepared documentation and developed a few more features for a public beta release. Fortunately, we released in mid-June 2013, only two weeks before Google Reader closed. We had successfully transitioned from a third-party service just in the nick of time!

The plugin beta included the major functionalities that would be included in the public release the following year:

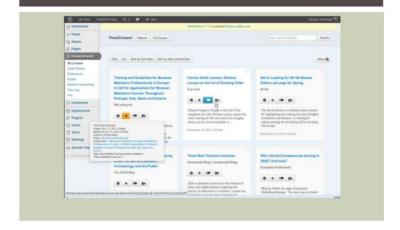
- aggregation of RSS feeds
- Nominate This! bookmarklet to collect web content
- Readability integrated for a comfortable reading environment
- commenting enabled
- starring, sorting, and archiving
- nomination process to mark potential content
- "under review" space to separate content under consideration
- "send to draft" functionality
- formatting of drafted content prior to publication
- auto-redirect back to original content
- RSS out to expose all the content
- metadata retention
- exposure of custom fields possible through theme modification

By November 2013 we had an interface that looked this way:





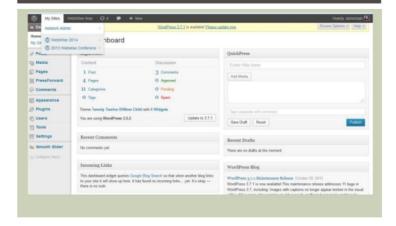
SELECT: ALL CONTENT VIEW



REVIEW: UNDER REVIEW SECTION



PUBLISH: WORDPRESS



Development continued in GitHub while we used and tested the plugin in our live publications. Incorporating the plugin in the *DHNow* publication meant that we had to adjust our editorial workflow, too. Prior to the beta release, we had developed and confirmed the new processes in our sandbox installations. We also were able to assist a few collaborators who were beta testers in their own PressForward publications. Using the plugin meant that we were responsible for creating WordPress user accounts for our guest editors, who continued to increase in numbers. However, it also meant that we also had a lot more beta testers who could report problems and add feature requests.

Phase 4: Test, Document, Officially Release

After the beta release, iterative development continued with an eye toward stability and features to enhance usability. In early 2014 we began a rigorous testing process across OS and browser platforms, single and multi-site installations, and varying user roles prior to the official release. Documentation of the plugin code continued, and we created an extensive user manual.

Just before our official release in the WordPress Directory on June 2, 2014, we prepared supplementary materials to help our new users. We finished the user manual, prepared screen shots of the user interface, wrote out FAQs, and developed a Quick Start Guide. We also finalized documentation in the code and completed a robust Developer Handbook. At the same time we worked on publicity materials such as logos, pamphlets, and, of course, stickers!

Post-release Plans

As always seems to be the case, our initial development plan included many features that went beyond what was possible in a first release. The creation of the feed aggregator was more complicated and more difficult than expected. Moreover, because we were creating publications at the same time, we found ourselves considering many useful improvements to WordPress that would streamline our process, such as a plugin to manage and adjust the roles for the large numbers of users we had on the site.

Looking forward, we have a number of items on our development wish list and backlog, including ability to aggregate content beyond RSS/Atom (e.g. through API, OAI-PMH, and other repository services) and easier exposure of content and action metrics. We'll work with our new pilot partners to further develop the plugin to meet the needs of diverse users, from individuals to multi-national organizations.

As we wrap up the first PressForward grant, we are very proud of the creation and release of a documented and functioning plugin that is modifiable and usable by anyone. If you'd like to contribute, check out our GitHub page. If you're new to plugin development, we have a set of Starter Issues that are good entry points.