Introduction

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Introdution

Wikipedia is one of the most visited knowledge resources in the world. The Alexa traffic rankings put it at number 7, well above the *New York Times* (104), the BBC (106), the Library of Congress (1,175), and the venerable *Encyclopedia Britannica* (3711) (Alexa, 2016). As historian Roy Rosenzweig puts it, Wikipedia has become "perhaps the largest work of online historical writing, the most widely read work of digital history, and the most important free historical resource on the World Wide Web" (Rosenzweig 2006, p. 52). Wikipedia has become so ingrained in our everyday search for information that users rarely give thought to the mechanisms and agency underneath its production of knowledge: who produces its content? And what visible and invisible structures govern this production? Indeed, we have come to take its presence for granted to a degree that editorial contributions to many Wikipedia pages are in fact stagnating (Wikipedia, n.p.; Ford, 2011).

However, the naturalized presence of Wikipedia in our everyday lives was not always apparent. The online encyclopedia's initial years were rife with controversy, as the initiative was both lauded and lamented for its potential to disrupt the traditional structures of the knowledge field and industry (Rosenzweig, 2006; Ford, this issue). The discussions revolved in particular around the authority of experts versus lay people. Today this polarization has given way to closer cooperation between Wikipedia and other traditional knowledge-producing communities such as libraries and museums.[1] Yet, as the dust settles over the expert/layman disputes, new contours of contestation have become apparent. One is the political ideology and ideological potential of Wikipedia (Firer-Blaess and Fuchs, 2014, p. 87-103; Chozik, 2013, June 27).[2] Another is its politics of transparency (Tkacz, 2015). A third is its bureaucratic structures (Jemielniak, 2014). But the most persistent point of contestation remains its gender gap problem. It was known and acknowledged early in Wikipedia's existence that contributors to Wikipedia tended to be English-speaking, males, and denizens of the Internet, and that this concentration might imply a systemic bias (Rosenzweig, 2006, p. 117-146; Reagle and Rhue, 2011). The Wikimedia community even launched a self-critical project page titled "Countering Systemic Bias" in the fall of 2004 to discuss how the demographics of its contributors affected its topical coverage (Wikipedia). Thus, when Wikipedia was ten years old in 2011, its board decided that it was time to take stock and learn more about its dynamics. And it turned out that only a fragment of the 69,000 editors were female. Upon this revelation, Sue Gardner, then-Executive Director of the foundation, set a goal to raise the share of female contributors to twenty-five percent by 2015 (Cohen, 2011). A goal that has hardly been met today.

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Studies of the Wikipedia gender imbalance offer various explanations as to why it persists.[3] In 2011 Lam et al. confirmed the presence of a large gender gap among editors and found evidence hinting at a culture that may be resistant to female participation. Further, they found a corresponding gender-oriented disparity in the content of Wikipedia's articles (Shyong et al., 2011; Gardner, 2011).[4] Reagle and Rhue (2011) have similarly argued that the gender imbalance in the Wikipedia community has resulted in gender bias in content: Comparing the biographies of individuals in Wikipedia and *Britannica*, they found that although Wikipedia had a higher number of female biographies, the proportion of missing biographies for women to that of men was relatively higher. A more recent study found that the gender gap is perhaps significantly lower than first assumed (Hill, Shaw and Sánchez, 2013). And while a different study suggested that the gender parity is due to an overall lack of internet skill (Hargittai and Shaw, 2015), yet another found that while the gender gap remained a problem, it was perhaps lodged in a different area than previously assumed. This study suggested that women were actually covered well in Wikipedia, but also revealed that a more deep-seated gender bias persisted in terms of how many times articles from women link to men. The study also noted that articles about women overuse words like "woman", "female" or "lady" while articles about men tend not to contain words like "man", "masculine", "gentleman" or, in other words, that Wikipedia editors consider maleness as the "null gender" (Wagner et al., 2015). The research landscape on the gender gap in Wikipedia thus reveals it as a thorny social issue, and also as a methodological challenge in terms of quantitative estimations, as many of the quantitative studies rely on old material and use uncertain variables.[5]

Despite-or perhaps because of-the controversies the Wikipedia gender gap offers valuable lessons for understanding the problems of archival bias, not only in Wikipedia but in crowdsourced archives more generally. This special issue of NTIK argues that archival and activist theory provides a productive theoretical framework for critiquing such bias. The issue originates from a two-day event held in Copenhagen on March 8 and 9, 2015, on the topic of gender and Wikipedia. The first part of the event was a feminist edit-a-thon that recruited female and male editors to write about women on Wikipedia. This event was supported by a Wikipedia campaign aiming at increasing the number of female editors (Wikimedia). More than 100 people attended, working together to write articles of high quality on notable women in art, science and politics. The second part of the event was an academic symposium held at the University of Copenhagen, in which the Wikimedia community convened with scholars to discuss the problems and potentials of Wikipedia and feminist initiatives such as the edit-a-thon.

The Copenhagen edit-a-thon on March 8 2015 was an autonomously organized "satellite" event under Art+Feminism, a global network of seventy-five edit-a-thons that took place over the weekend of International Women's Day, March 6-8, 2015. More than 1,500 participants in seventy-five locations worldwide created nearly four hundred new articles, while over five hundred articles received significant improvements. In Copenhagen, participants created forty-seven new articles for the Danish Wikipedia, improved eight articles significantly, and wrote eight articles for the English Wikipedia (https://da.wikipedia.org/wiki/Wikipedia:We_can_edit-a-thon_København_2015).

Art+Feminism began in New York in 2014 as a cross-professional collaboration between artists, scholars, curators, librarians, and Wikipedians (Evans et.al, 2015). The organizers facilitated the worldwide network of "satellite" edit-a-thons by providing easy access to a set of training materials through digital platforms, a social media platform that connected all posts under the hashtag #artandfeminism, and an outline of the facilities that would create a successful edit-a-thon.

Our Copenhagen edit-a-thon created a temporary community of like-minded people; its attendees identified as female and male allies, sympathetic to the cause. In such community-building, Art+Feminism and our event reflects what has been referred to as a "fourth wave of feminism" (Rampton, 2015). Fourth-wave feminism revisits core strategies from the "second wave" of feminism in the 1960s and 1970s: the idea that organizing "safe spaces" around such shared agendas can facilitate a dynamic and an interaction that can further combat sexism and discrimination on societal level. Art+Feminism responded to what it has called a "desperate need for information activism in the realm of gender politics on the

web" (Evans et.al, 2015) but it did so by organizing a valuable form of offline organizing: that of bodies in real, physical spaces. The infrastructure we adapted for our event equally reflected hands-on needs: to remove the obstacles to participation by providing free access, childcare, and food. The goal was to get people there, get them involved, and get them excited.

Much organizing of feminist Wikipedia interventions revolves around the notion of skill and access. To begin editing in Wikipedia you must be familiar with the Wikipedia interface; you must have a Wikipedia username, know basic Wikipedia coding, and be familiar with the often opaque criteria of notability and other requirements that prevent one's article from being speedily deleted. We provided face-to-face tutorials with experienced Wikipedians throughout the day and had experienced editors on hand when questions arose. The safe space that such skills-sharing creates is immanently important because, as Michael Mandiberg (Mandiberg, 2015) has pointed out, much of the labor around Wikipedia (and the reason many women opt out) is affective labor: emotional and sometimes grueling work is required to sustain edit-wars and constant doubts cast on a subject's notability. It is for such work as much as skill that the safe space of a physical structure is implemented.

In her essay, artist and activist Angela Washko points to the existence of an online feminist movement which, she says, uses organizing in physical space "in response to internet organizing activity" (Washko, 2016). Art+Feminism therefore attempts to create a physical space that can function as a springboard for online activism. In Copenhagen, we wanted to provide a forum where a wider group of participants could get involved; this broke down the threshold between the interface and the code and allowed attendants to participate in online knowledge production in real-time.

As will be highlighted throughout this issue, an edit-a-thon is not an easy fix for Wikipedia's problems. In many ways, such an event repeats the quantitative assumption that by changing the statistics of male/female articles and editors, the system will be changed. But an edit-a-thon carves out two kinds of spaces, a physical one and a digital one. The desire to effect change in the digital space manifests itself in the need for a new kind of physical space, and such interplay between off- and online locations formulates

a new set of questions for knowledge production in the digital age. Therefore, as this issue is an archival intervention into Wikipedia research and a way of making Wikipedia speak to broader archival issues in the digital age, an edit-a-thon suggests that physical spaces might be a catalyst for online change. This special issue of NTIK (published digitally as well as in print) and the symposium are, consequently, our efforts to move beyond and critically reflect upon the numbers game we ourselves created. It should be seen as a way of articulating and bridging the types of spaces in which knowledge production currently take place.

Now, in 2016, Gardner and Wikipedia's 2011 target percentage of female contributors has hardly been met, and the continuing lag should come as no surprise. In a sense, it seems that Wikipedia has inherited unfortunate traits from both its origins in the world of reference texts and the gender imbalance of the tech environment itself: women's representation as contributors and subjects in encyclopedic works has historically been low (Reagle & Rhue, 2011) just as the gender imbalance in computer-related fields-and in particular the open source community-is astoundingly low (Nafus, 2012). The gender gap thus provokes questions about archives and technology as well as our ideas of openness, neutrality and access. This special issue, which is particularly aimed at knowledge professionals and archive scholars in Nordic countries, explores some of these ideas in relation to the Wikipedia gender gap, focusing specifically on the values embedded in the site's software, its governance, its power dynamics and how the problem relates to gender bias in knowledge production in general. As crowdsourcing practices and the slogan "sharing is caring" become increasingly implemented in institutional settings, the issues inherently related to underrepresentation of certain groups seems to be only increasing in relevance. These underscore the need to understand crowdsourcing not only as openness, but also as a realm of power dynamics. In this sense a site such as Wikipedia becomes a unique resource for observing these networked and distributed dynamics of inclusion and exclusion at work. In theory, Wikipedia is completely open for everyone to contribute, yet as is often the case with any new frontiers, the transposition of power from one terrain into another does not overturn existing social dynamics.

This special issue approaches Wikipedia not as a fully demarcated stable sphere, but rather as an archival assemblage that continually morphs and merges. This has implications for the range of contributions that are purposely interdisciplinary. Being receptive to Wikipedia's archival bias, we argue, requires an *interdisciplinary* approach that includes not only insider-perspectives native to the Wikipedia community and otherwise common to much Wikipedia research, but also more general archival perspectives that can be brought to bear on the specific problems encountered in Wikipedia as a platform. As such, this issue of NTIK is both an archival intervention into Wikipedia research, but also a way of making Wikipedia speak to broader archival themes in the digital age. This special issue is therefore not confined to the dedicated Wikipedia research community, but also includes perspectives from art history, information science, language technology and artistic forms of expression. In this way, the journal issue in itself may be regarded as a theoretical and methodological assemblage that morphs and merges in dialogue with its object of study, raising implicitly the question of *how* to address these concerns -what types of languages and disciplinary traditions do we have at our disposal? Each of the following contributions display a different kind of sensibility towards the problem at stake; by bringing them together we hope to gain a better understanding of Wikipedia as a fluctuating site of knowledge production.

This way of approaching our object of enquiry also determines the diverse nature of the contributions that we have gathered in the form of commentaries (Adler, Salor), an activist manifesto (Washko), an artwork to frame and hang (Ørum) as well as more traditional academic peer-reviewed articles (Søgaard, Ping-Huang, Mai) and a foreword by one of the foremost female Wikipedia scholars from Oxford Internet Institute and an active member of the Wikimedia community, Heather Ford.

This varied material obviously displays a series of interlinkages that-had the special issue been a Wikipedia page-would have been marked as hyperlinks between contributions. For this format we have chosen instead to group the contributions in three pairings that juxtapose each other and foreground certain aspects of the problematics at hand.

Under the heading *Neutrality & Miscommunication* we pair "Wikipedians' Knowledge and Moral Duties", an article by Jens-Erik Mai, Professor in Information Science at the University of Copenhagen, with the commentary "Neutrality in the Face of Reckless Hate" by Erinc Salor, lecturer at the Amsterdam University College, who has worked extensively on how Wikipedia challenges and engages with the two millennia old encyclopedic tradition of the West. Both Mai and Salor probe the limitations of Wikipedia's *Neutral Point of View* (NPOV) policy, but from different vantage points. Whereas Salor considers the concrete case of how Gamergate challenges Wikipedia's *Neutral Point of View*, Mai makes an argument for how the NPOV would benefit from taking into account the significance of these respective points: the locality of knowledge; that Wikipedians engage in language games; that knowledge is to be likened to a rhizome with incommensurable points; that the challenges of inclusivity lie at the center and not the edges; that the policy should explicitly take an ethical pluralistic position in its enterprise. From different angles and with different objectives these contributions flag neutrality as an illusion that is nonetheless deeply engrained in the encyclopedia genre and thus needs to be consistently addressed and challenged.

In the section *Rationality & Bias* we juxtapose the article "Biases We Live By" by Professor in Language Technology Anders Søgaard at the University of Copenhagen in dialogue with the commentary "Wikipedia and the Myth of Universality" by Melissa Adler, Assistant Professor at University of Kentucky, School of Information Science, and artist Angela Washko's polemical manifesto "From Webcams to Wikipedia: There Is A Feminist Online Social Movement Happening and It Is Not Going Away." While Adler identifies classification at the root of Wikipedia's functionality as well as limitations, Søgaard unfolds some of the biases in basic language technologies, investigating how they might lead to different demographic groups' variegated experiences of the internet, and Washko takes this into the street, by arguing how feminist internet activism should go about addressing such biases. These three contributions speak from completely different traditions and methodologies, but each engages, dissects and subverts the myth of universality that accompanies communication and knowledge production in the public sphere.

Finally, under the heading *Frameworks & Infrastructures*, we couple the article "Archival Biases and Cross-Sharing" by Marianne Ping Huang, Associate Professor in Communication and Cultural Studies at Aarhus University with the visual contribution of artist Kristoffer Ørum entitled *The Gift of Mutual Misunderstanding*. With diverse aims and vocabularies these two contributions explore ways of either working within or subverting institutionalized frameworks for knowledge production. Huang addresses knowledge gaps and archival biases in cultural heritage institutions and digital research infrastructures. She thus broadens the perspective from Wikipedia itself and enters into a dialogue with Ørum's exploration of miscommunication as a critical tool in the visual language of data visualization. In this way these two contributions make apparent how the topics raised in this issue of NTIK likewise resonate in larger knowledge production ecologies.

In her foreword Heather Ford aptly identifies the unifying thread of the present issue by asking: "is Wikipedia truly advancing towards the sum of all human knowledge? Or is it reflecting a great deal of information at the expense of understanding how to engage with knowledge?" Indeed, knowledge production is at the heart of our present engagement with Wikipedia, both in the individual contributions and in the issue taken as a whole, which might be regarded as an experiment in and of itself for knowledge production about an object as complex as Wikipedia. Essentially, the issue can be read as a suggestion for ways in which Wikipedia might develop in the future. We might envision it emulating not only the encyclopedia, but also incorporate other forms of knowledge production, even ones that are extra-textual (such as Ørum's work) or that take into account the way text is read not only by humans, but also by machines (such as Søgaard).

Notes

1. See a full list of formalized collaborations titled "Wikipedian in Residence" https://outreach.wikimedia.org/wiki/Wikipedian_in_Residence

2. Wikipedia is for instance both read as being able to foster an "info-communist" mode of production and relying on a libertarian, even Ayn Randian, ideology.

3. Wikipedia offers a substantive overview of existing literature on Wikipedia's gender gap problem from both media and scholarly sources (Wikipedia, 2016)

4. Sue Gardner, then executive director of Wikipedia, collected and published a list of explanations from women themselves (Gardner, 2011, Feb 19).

5. The following mail thread provides good insight into the methodological challenges underlying most existing gender gap research: https://mail-archive.com/wiki-research-l%40lists.wikimedia.org/msg03953.html [retrieved January 25 2016).

References

Alexa. [Online]. Retrieved January 26 2016 from http://www.alexa.com/siteinfo/wikipedia.org

Chozik, A (2013, June 27). Jimmy Wales Is Not an Internet Billionaire. *New York Times*, Retrieved on January 25, 2016 from http://www.nytimes.com/2013/06/30/magazine/jimmy-wales-is-not-an-internet-billionaire.html?_r=0

Dawn, N (2012). Patches Don't Have Gender: What Is Not Open in Open Source Software. *New Media & Society*. 14 (4), 669-683.

Evans, S, Mabey, J & Mandiberg, M (2015). Editing for Equality: The Outcomes of the Art+Feminism Wikipedia Edit-a-thons, *Art Documentation: Journal of the Art Libraries Society of North America*, 34 (2), (September 2015), pp. 194-203.

Filipacchi, A (2013, April 24). Wikipedia's Sexism Toward Female Novelists. *New York Times*, Retrieved from http://www.nytimes.com/2013/04/28/opinion/sunday/wikipedias-sexism-toward-female-novelists.html?_r=1

Firer-Blaess, S & Fuchs, C (2014). Wikipedia: an Info-Communist Manifesto. *Television and New Media*, 15 (2), 87-103.

Ford, H (2011). The Missing Wikipedians. In Geert Lovink and Nathaniel Tkacz. *Critical Point of View: A Wikipedia Reader*. G. Lovink and N. Tkacz (Ed.). Amsterdam: Institute of Network Cultures, 258-267.

Gardner, S (2011, February 19). Nine reasons why women don't edit Wikipedia (in their own words). *Sue Gardner's Blog*, Retrieved from http://suegardner.org/2011/02/19/nine-reasons-why-women-dont-edit-wikipedia-in-their-own-words/

Hargittai, E & Shaw, A (2015). Mind the Skills Gap: the Role of Internet Know-How and Gender in Differentiated Contributions to Wikipedia. *Information, Communication & Society*. 18 (4), 424-442.

Hill, BM, Shaw, A & Sánchez, A (2013). The Wikipedia Gender Gap Revisited: Characterizing Survey Response Bias with Propensity Score Estimation. *Plos One*. 8 (6), Retrieved January 25 2016 from http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0065782

Jemielniak, D (2015). *Common Knowledge?: An Ethnography of Wikipedia*. Stanford, California: Stanford University Press.

Mandiberg, M (2015). The Affective Labor of Wikipedia: GamerGate, Harassment, and Peer Production. *Social Text*,[Online] Retrieved from http://socialtextjournal.org/affective-labor-of-wikipedia-gamergate/

Rampton, M (2008). Four Waves of Feminism, *Pacific Magazine*, Retrieved from http://www.pacificu.edu/about-us/news-events/four-waves-feminism

Reagle, J & Rhue, L (2011). Gender Bias in Wikipedia and Britannica. *International Journal of Communication* [Online], 5 (21) Retrieved January 25 Jan 2016 from http://ijoc.org/index.php/ijoc/article/view/777

Rosenzweig, R (2006). Can History Be Open Source?: Wikipedia and the Future of the Past. *Journal of American History*, 93, 117-146.

Shyong, L et al. (2011). Wp:clubhouse? *ACM*, [Online] Retrieved January 25 2016 from http://dl.acm.org/citation.cfm?id=2038560

Tkacz, N (2015). *Wikipedia and the Politics of Openness*. Chicago; London : University of Chicago Press.

Thomas, G (1992). *A Position to Command Respect: Women and the Eleventh Britannica*. Metuchen, N.J: Scarecrow Press.

Wagner, C et al. (2015, March 23). It's a Man's Wikipedia? Assessing Gender Inequality in an Online Encyclopedia. *Association for the Advancement of Artificial Intelligence*, http://arxiv.org/pdf/1501.06307v2.pdf

Wikipedia [Online] Retrieved January 25 2016. https://en.wikipedia.org/wiki/Wikipedia:WikiProject_Countering_systemic_bias/Gender_gap_task_force/Media_and_research