Title

Rethinking the participatory web: A history of HotWired's 'new publishing paradigm,' 1994-1997.

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Abstract

This article critically interrogates key assumptions in popular web discourse by revisiting an early example of web 'participation.' Against the claim that Web 2.0 technologies ushered in a new paradigm of participatory media, I turn to the history of HotWired, Wired magazine's ambitious web-only publication launched in 1994. The case shows how debates about the value of amateur participation vis-à-vis editorial control have long been fundamental to the imagination of the web's difference from existing media. It also demonstrates how participation may be conceptualized and designed in ways that extend (rather than oppose) 'old media' values like branding and a distinctive editorial voice. In this way, HotWired's history challenges the technology-centric change narrative underlying Web 2.0 in two ways: first, by revealing historical continuity in place of rupture, and, second, showing that 'participation' is not a uniform effect of technology, but rather something constructed within specific social, cultural and economic contexts.

Keywords

web history, participation, Web 2.0, cyberculture, digital utopianism, Wired

Introduction

In the mid-2000s, a series of popular accounts celebrating the web's newfound potential for participatory media appeared, from Kevin Kelly's (2005) proclamation that active audiences were performing a 'bottom-up takeover' of traditional media and Tim O'Reilly's (2005) definition of 'Web 2.0' to Time's infamous 2006 decision to name 'You' as the person of the year (Grossman, 2006). What these narratives had in common were the assumptions that 1) after a misguided period of boom and bust, the web's participatory nature had been revealed in a new crop of platforms for user-generated content and 2) these new forms and platforms, from blogging to YouTube and Wikipedia, would enable large-scale cultural transformation, in particular the displacement of mass and mainstream media.

Until now, criticism of discourse surrounding the participatory web has focused largely on the ideology and political economy implied, pointing for example to the uneasy conflation of a rhetoric of 'sharing' with the imperatives of commercial organizations profiting from free contributions of amateur users (Scholz, 2008; van Dijck and Nieborg, 2009; Gehl, 2012). What is less remarked upon are the assumptions of discontinuity at the root of such claims - the idea that the web had undergone a participatory 'turn' and that this new paradigm was necessarily opposed to both past web development and to the practices, forms and institutions of 'old media.' As Megan Sapnar Ankerson (2010) has argued, it is a mistake to accept the industry narrative that web history has proceeded teleologically. Where Ankerson's work unsettles the rhetoric of Web 2.0 by highlighting the contingent nature of web design - for example by situating the popularity of Flash in the late 1990s within the specific organization and dynamics of the industry at that time - in this article I aim to show how the concepts, debates and design aims surrounding the participatory web were very much a part of web production early on.

Nowhere was this presence of the participatory web within the early web more evident than in the case of HotWired, the separate publication and company created by the makers of Wired magazine in 1994. HotWired was a high-profile attempt to create what publisher Louis Rossetto

promoted as 'what Wired was meant to be from the very beginning' (quoted in Markoff, 1994), and thus a form of publication suitable for the digital age. The site's creators believed it would usher in a 'new publishing paradigm for a new medium,' one in which audience participation would play a key role (Behlendorf, 1994). From initial brainstorming sessions to the site's implementation and subsequent 'upgrades,' HotWired was the site of a series of discussions and debates that are often considered specific to the current context of Web 2.0: most importantly, the question of whether audience participation meant giving up editorial control (Keen, 2008).

Although HotWired certainly prefigured elements of the participatory web celebrated ten years later by Kelly (2005) and O'Reilly (2005), I argue that the significance of this history lies in how it challenges various claims made in the popular discourse around Web 2.0. Relying on web archives, existing histories, contemporaneous accounts and archived personal and public communications, supplemented by interviews with key participants, I show how HotWired may be seen to contextualize some of the assumptions guiding present discussion and debate, in particular the opposition normally drawn up between (mainstream, hierarchical and controlled) publishing and (alternative, bottom-up and 'open') participation.[i]

This article consists of three main sections, each of which corresponds to both an important event in HotWired's history and, on a theoretical level, a general argument or 'move' that critiques the teleology and technological determinism embedded in popular accounts of the web's development. In the first section, I ask why Rossetto and others at Wired were so certain that the web required a radically new approach to publishing, and trace their decision to create a 'web-only' publication separate from the magazine to the two main components of HotWired's production culture - the related but distinct lineages of digital utopianism (as analyzed and historicized by Turner, 2006) on the one hand and Wired's media critical outlook on the other. The section demonstrates how understandings of the web's supposedly participatory character are rooted in specific historical and cultural contexts, and thus do not simply derive from the medium itself. The second section reconstructs debates surrounding HotWired's design, from arguments about how to

include participation from readers to whether or not one should have to register in order to view content. In addition to how these debates portray early understandings of the web as a participatory medium, the *form* they took on is instructive: arguments about website design and interactivity were couched in specific, competing visions of the web's identity and purpose. In line with Flichy's (2007) study of the productive capacity of Internet discourses, this section thus shows that one cannot neatly separate imagined technological futures from the material work of web design and development. In the third and final section, I discuss HotWired's 1997 makeover as a 'platform' for 'web participants,' focusing on the main inspirations for the change (the surprise successes of HotWired sites Suck.com and Webmonkey) and how this particular vision of participation differs from that found in more recent web discourse. Where Kelly (2005) and others view user participation as a practice that displaces the power of traditional media companies, HotWired's changes suggested a kind of participation that would extend Wired's brand and influence. The final section, then, serves as a reminder that the relationship between new and existing media practices, forms and technologies may be much more complex than popular web discourse suggests: it shows how practices supposedly limited to a mass media paradigm (i.e. those associated with branding and exercising editorial control) may be re-articulated in a new, emerging 'participatory' context.

HotWired's production culture: the Whole Earth network and Wired's media criticism

The belief that HotWired represented a 'new publishing paradigm' was established well before the site's actual launch in October 1994, as was the sense that this new paradigm would collapse the distance between media professionals and audiences. To understand why these ideas about the web's nature and potential effects emerged around HotWired, one must see it in relation to two key contextual factors: first, Wired's position in an existing network of actors concerned with the economics, politics and culture of technology, especially writers and thinkers associated with the Whole Earth publications and the electronic conferencing system the Whole Earth 'Lectronic Link (the WELL); and second, the relationship fused between the digital utopianism associated with the

Whole Earth group and Wired's identity, which was epitomized by Rossetto's passionate critiques of mass media and the traditional publishing industry.

Extending the Whole Earth network

Although Wired was conceived as 'a reverse time capsule' that would perplex its readers, the strange future it depicted was in fact one that resonated with the cultural contexts and historical trajectories that contributed to the magazine's emergence (Wolf, 2003: 67; Turner 2006). Wired's basic message was that - if unleashed from industrial-age thinking and government regulation - information technology would be a subversive and powerful source of individual freedom, economic prosperity and progressive social and cultural change. With this, the magazine articulated digital technology as something subversive and cool, an image that clashed with the computer's cultural history as a symbol of state bureaucracy and corporate power (Lubar, 1992). However, as Fred Turner (2006) has shown, Wired's cybercultural utopianism did not appear suddenly, and instead represented the extension of a general transformation of the cultural meanings of information technology by members of the counterculture. Stewart Brand and others who Turner calls 'New Communalists' incorporated hi-technology and systems thinking into their efforts to create self-sufficient, non-hierarchical communes that would form an alternative to what they saw as mainstream society's cold institutional logic and suppression of individuality. In the Whole Earth Catalog, Brand's publication that stood at the center of the New Communalist movement from the late-1960s to the mid-1970s, technology was perceived not as an alienating force, but as a tool for a return to more natural forms of co-existence (Brand, 1968; Turner, 2006). In the Catalog and later network forums such as the Whole Earth Review and the Whole Earth 'Lectronic Link (the WELL), Brand helped create and reveal common ground among the values and sensibilities of hippies and engineers, hackers and entrepreneurs.

As Turner argues, Wired must in some sense be seen as an extension of the Whole Earth network, and the same may be said for HotWired. Kevin Kelly, who edited the Whole Earth Review

and co-founded the WELL before joining the magazine as executive editor, brought with him contacts in the San Francisco Bay Area and writers such as Bruce Sterling, William Gibson and Howard Rheingold (2006: 212). Early investors in Wired were found in the Global Business Network, the consultancy group founded by Stewart Brand (among others). Such material connections were also apparent in the eventual decision to launch HotWired: a series of 'brain trust' meetings held in 1993 and early 1994 to discuss the changing media landscape and Wired's prospects within it, bringing the magazine's editors together with prominent members of the Whole Earth network such as John Perry Barlow and Rheingold (Anker interview).

Most of all, the connection between Wired, its plans for an online expansion and the Whole Earth network was arguably forged through the WELL, which served as inspiration for the kind of participation that would be sought in HotWired. Rheingold, who would go on to become HotWired's executive editor, took the WELL as his central example in *The Virtual Community* (1993), arguing that networked communications technologies could provide a virtual incarnation of the public sphere. Wired's own forum on the WELL was set up in May 1992, several months before its first issue appeared, and seemed to point the way to a reshuffling of traditional lines of communication in media production. In the forum's first post, Wired employee Will Kreth (1992) wrote to the WELL's users that it was 'a unique opportunity for you to help design a radically different kind of computer magazine.' The resulting participation was multi-faceted. It included users submitting ideas for stories and discussing what they would like to see in a new computer magazine. After Wired's first issue was published in January 1993, participation increased and readers gave feedback on articles as well as on the magazine's design.

Wired's forum on the WELL was not limited to audience feedback, however, with editors and writers joining in discussions. In one case, the editor of Mondo 2000 (a rival publication based in Berkeley) noted that some of Wired's design was very similar to Mondo's. In response, Wired executive editor Kevin Kelly wrote that the magazine had a number of influences, including Mondo but also the WELL itself: 'I'd like the mag to learn from this medium, if it can' (Kelly, 1993)

Although Kelly did not explain the relationship further, the context suggests he had such networked communication (and even collaboration) among editors, writers and readers in mind. Perhaps unsurprisingly, then, it was Kelly who later recommended Rheingold for the position of executive editor at HotWired, thereby extending the Whole Earth group's influence at Wired to its plans for a web-only publication.

Media criticism and Wired style

In addition to symbolizing Wired's connection to a longer history of cybernetics-inspired counterculture, the magazine's WELL conference also contained reminders of its strong visual and editorial identity. 'Who cares if it communicates, as long as it's Hip,' wrote one commenter, using sarcasm to attack Wired's self-conscious design and hyperbolic tone (Crockford, 1993). The magazine was soon notorious for its use of bright, fluorescent colors and its jarring layout (one that consciously inverted modernist ideals of efficient, elegant communication - see Liu, 2004: 221-222), as well as its equally polarizing editorial voice (one that favored outspoken views and stories of extreme rupture, such as a feature in the first issue that argued for a complete educational overhaul in the U.S. [Perelman, 1993]). Despite the perception among critics that Wired's style was simply a means to attract attention, it is important to see how it was tied to a specific perspective on technological culture - in particular a discourse of media criticism - that would also figure into the decision to create HotWired.

Wired's editorial direction can be seen in the context of how it set itself apart from 'mainstream' computer publications like PC Magazine (first published in 1982) and Macworld (1984). Where the earlier computer press included product reports and user guides, Wired followed the likes of Mondo 2000 in treating technology as a subversive cultural phenomenon. The difference, Rossetto often explained, was analogous to Rolling Stone's entry into music publishing: 'If Rolling Stone covered music the way computer magazines cover the information society, it would be full of stories about amps and wah-wah pedals [...] Wired's main focus is not boxes, but

the people, companies and ideas creating the Digital Revolution' (Wired, 1992). In practice, this meant running profiles of technologists as 'celebrities' (Wolf, 2003: 73) alongside stories that seemed to point the way to a future radically altered by digital technology (such as Bruce Sterling's [1993] report on 'Virtual War' in the first issue). This emphasis on presenting its subjects as indicators of impending social and economic upheaval was echoed in the magazine's informational aesthetic: from the heavy use of computer graphics to displaying Nicholas Negroponte's monthly column as email, the magazine's experimental look tied into what the editors and art directors conceived of as a cultural artifact of the near-future (Wolf, 2003: 67).

Wired's style also reflected a more general effort to identify as an 'outsider' disrupting the media industry from within. The motif was clear from the first editorial, when Rossetto (1993) wrote while the digital revolution was happening, 'the mainstream media is still groping for the snooze button.' And as Wolf later recounted, '[b]arely a month went by without some chart or essay or full-length feature in Wired that purported to show how mainstream companies, and especially mainstream media companies, were dinosaurs headed for extinction' (2003: 97). In contrast to what he perceived as one of mass media's fatal flaws - a staid tone and inability to connect with audiences - Rossetto asked writers to take sides and present a strong point of view. An example is the infamous profile of Ted Nelson (best known for his personal computing advocacy and coining the term hypertext), in which Gary Wolf portrayed the computer scientist as a befuddled academic and his hypertext project Xanadu as the classic example of vaporware, or undelivered software (Wolf, 1995). As Turner writes, the idea was to 'stir up conversations and print them,' something that at times led to unconventional practices like sharing drafts of stories with sources (2006: 217). At other times, it meant that writers reflexively inserted themselves into a story to achieve a particular effect, such as when Wolf (1995) described his fear as Nelson drove them through a busy intersection, giving texture to his portrait of Nelson as wayward. Wired differentiated itself from the mainstream (computer) press not only through the content of its reporting, in other words, but also through a particular style based on a critique of mass media.

Although Rossetto believed Wired's style pointed to the future of journalism, he was also aware of how it recalled the past. He often cited as inspiration the New Journalism, the 1970s movement associated in part with Rolling Stone and spearheaded by writers like Tom Wolfe and Hunter S. Thompson. Like Wired would do later, New Journalism used literary techniques to highlight a journalist's role in a story, which in some cases brought the journalists a level of celebrity normally associated with best-selling fiction writers (Wolfe, 1972; in Wired's first year, it was often well-known fiction authors like Sterling, William Gibson and Neal Stephenson who wrote the magazine's features and were portrayed on the magazine's cover). As in Wolfe's definition of New Journalism, Wired's experimental style was clearly embedded in a normative critique of traditional news media, and posited that accuracy and integrity were not necessarily tied to journalistic norms of objectivity and equal representation of opposing viewpoints.

Although Wired's style represented a certain continuity in the publishing world, the media-centric and media-critical outlook underlying it was essential to imagining HotWired as part of a 'new publishing paradigm' and what 'Wired was meant to be' (Behlendorf, 1994; Rossetto, quoted in Markoff, 1994). Rossetto would go on to describe HotWired as 'Way New Journalism,' but at the same time tie this to a vision of a web-enabled rupture of the media landscape (HotWired, 1994). Likewise, Rheingold's ideal of 'virtual community' was both a legacy of a specific past (originating as it did from the ideas and activities of the Whole Earth group) and would become a key actor in the development of HotWired - that is, in an early, important attempt to imagine and build a publication native to the new medium. In the following section, I show how these related but distinct visions of the web's identity and purpose steered the material work of designing HotWired, often clashing in ways that resemble more recent debates about the participatory web.

Worldwide jam session or arbiter of taste? Designing Wired for the web

Work on the project that would become HotWired began in the Spring of 1994 with a business plan by Jonathan Steuer, a Stanford graduate student who was head of Wired's fledgling online division, and Andrew Anker, a former investment banker with prior experience at a startup. It continued with

the appointment of Rheingold as executive editor in May, the same month that Rossetto previewed the website to the New York Times as 'part publishing venture, part online service and part cyber-salon' (Markoff, 1994). Until the site's launch in late October, its development involved seeking a balance between two understandings of the web and HotWired's place within it. While there was agreement that HotWired represented a shift from the 'one-to-many' logic of mass media to the 'bottom-up' logic of the digital age (Rossetto, quoted in Markoff, 1994), a focus on collaboration and community embraced by Rheingold and Steuer would quickly begin to clash with Rossetto's idea that HotWired should be an 'arbiter of taste' in the new medium (Rheingold interview; Wolf interview). Here, I outline these two visions in relation to initial plans for HotWired's design, before zooming in on how they manifested in two contentious debates that occurred just before the site's launch - one about how to include reader participation, and another about whether to require users to register.

Rheingold arrived with a design goal that echoed the most hopeful vision he had outlined in *The Virtual Community*: 'HotWired uses the net as a medium for a worldwide jam session,' he wrote (quoted in Wolf, 2003: 108). He was inspired by his experiences with the WELL, but also by early innovations in web development from the likes of Steuer, who was creating a virtual community of new media professionals under the name 'Cyborganic,' and the intern Justin Hall, whose revealing, regularly updated personal website would later be acclaimed as the first weblog (see Cool, 2008 and Rosenberg, 2009: 23-24). The design clearly focused on how the site could facilitate and feature such interaction and experimental media life: an early sketch placed user interactivity at the center of a portal-like website, mixing access to internet chat channels and a text-based virtual world with various columns and features (see figure 1). It called for content to be imported from other online forums, including the WELL and AOL, and the various content types would update at different intervals, suggesting a kind of liveness or movement that Rheingold compared to Pee Wee's Playhouse (the popular children's television show in which attention would shift regularly from one fantastical character or toy to another). HotWired's own content would be

spread out among the various portals - as implied by the playhouse analogy and 'jam session' metaphor, the design suggested relatively little editorial control over the user's experience.

Figure 1. Howard Rheingold's May, 1994 sketch of HotWired (initially called "@Wired"). Courtesy of Howard Rheingold.

(Insert figure 1)

Together with Steuer, his closest collaborator at HotWired, Rheingold aligned this vision with the nature of the new medium, and the two legitimized their ideas by appealing to what was inherent to or desirable for the web. HotWired was an opportunity 'to demonstrate to the world the power and usefulness of the cooperative many-to-many culture exemplified by the Internet' (Rheingold, 1994). Similarly, in May, Steuer wrote to Rheingold that he'd reached an agreement with Rossetto 'where we will be allowed to put together whatever it is that [HotWired] needs/wants to be, and Louis will supervise from the editorial side' (Steuer, 1994). The suggestion was that the interactive environment they had in mind was in some sense inevitable, and distinct from what Steuer called 'the Wired side of things' (Steuer, 1994).

Where Rheingold and Steuer drew on their experiences with the WELL and early experiments in web publishing, Rossetto saw HotWired in light of a larger goal of building a new media empire. His ambitious plans for bringing Wired online (alongside Wired books, Wired TV, and so on) rested on two related assumptions, both of which fed into his vision of what HotWired should become. First, Rossetto believed that brands would be increasingly important in digital culture. Rossetto argued that in an age in which content could be easily copied and distributed, 'brands, not data, become the measure for determining the value of information' (quoted in Voorhees, 1994). Being able to provide a consistent, recognizable voice across media would allow Wired to command the attention of a fracturing audience. Second, in line with McLuhan's (1964) famous aphorism 'the medium is the message,' Rossetto also believed changes in the scope and scale of media production, distribution and consumption necessitated qualitative changes in content,

and this was the basis for how he distinguished HotWired's approach from traditional media: 'the mass media talks to everybody. It tries to be abstract and discover a voice and attitude that everybody can connect to. I think Hotwired focuses on a voice and attitude that certain people will connect to' (quoted in Keegan, 1995). Digital technology enabled independents to compete directly with conglomerates, meaning faster, specialized content providers would win out. As Wolf later recalled, '[Rossetto] thought the entire landscape of content was going to be remade around new brands doing new things in a new medium. It was a race' (Wolf interview).

Rossetto's assumptions were visible in his more immediate plans for HotWired, which he described as 'planting flags' (Wolf, 2003: 132). Although HotWired's initial focus would be on digital culture, similar to the magazine, the idea was to quickly supplement this with topical sites that gave a Wired take on traditional content areas - examples would eventually include Adrenaline, which focused on alternative sports news and information, and The Netizen, on politics. In this view, audience participation was important to the extent that it represented engagement and brand recognition (and to the extent that HotWired's tech-savvy audience desired it) but, according to Rossetto, what readers ultimately wanted was the site's unique point of view. HotWired's purpose was not primarily to facilitate interactivity, in other words, but to use it in order to establish Wired's brand and voice in the new medium.

Interestingly, Rheingold's 'worldwide jam session' and Rossetto's strategy of 'planting flags' shared a common base in digital utopianism, even if the work of building a website proved them to be incompatible. Both extended concepts like 'cyberspace' and the 'electronic frontier' in that they articulated the web as a radical departure from existing media and a virtual space not subject to the same constraints as the 'real' world (Kapor and Barlow, 1990; Dyson et al, 1994; on the discursive work performed by these metaphors, see Chun, 2006). These metaphors were key not only to HotWired, but more generally to how (self-)publishing on the web would be imagined and practiced in the 1990s - another significant example was Geocities, the service that allowed users to create personal pages belonging to different online 'neighborhoods.' Nonetheless, two camps developed

and clashed intensely around a number of design decisions, two of which I will discuss here: first, on the prominence to be given to user discussions; and second, on whether or not there would be a registration system, requiring readers to become 'members' before accessing content.

By August of 1994, Rheingold's initial 'playhouse' sketches had been pushed aside, and discussions shifted to whether amateur participation would be conflated with editorial content. Some interactive features were non-controversial, including one called Café Wired, in which tech-culture celebrities would chat live with HotWired members. Those that placed reader submissions on par with HotWired's product, however, were anathema to Rossetto - for example, Rheingold's and Steuer's desire to allow readers to post their own artwork to the site's Arts & Culture section (called 'Renaissance 2.0'). Such proposals were nearly always shot down, with Rossetto choosing more traditional forms of editorial selection (Anker interview). As the launch neared, Rheingold and Steuer became increasingly frustrated (as did a few other HotWired employees who were sympathetic to their views), and were reduced to arguing for 'threads' (or user discussions) to be attached to each article - a far cry from the original vision of a 'worldwide jam session' (Rheingold interview, Anker interview). Even this final proposal was rejected, and Rossetto opted for a separate members forum so that a sharper distinction was drawn between HotWired's content and audience participation - if readers were visiting the site for Wired's point of view, after all, why conflate that with the musings of the audience?

Just as the arguments about editorial control drew on more abstract understandings of the web's character and purpose, a passionate debate about the registration model (in which visitors had to log in to access most of the content) had at its heart different understandings of the new medium. Ian McFarland, one of the original HotWired staff of 14, argued that registration went against the web's open nature: who would link to a page behind an authentication wall (Wolf, 2003: 123)? It was a question of an ethos specific to the medium and those who knew it best: 'You have surrounded yourself with creative, enthusiastic people with a real grasp of net culture' he wrote to Louis, 'Why did you do that, if not to ask their opinion?' (quoted in Wolf, 2003: 124). Rossetto

countered that while links might send traffic, a basic desire for inclusion was a more potent factor. By creating an exclusive community, the registration system would function similarly to the celebritization of the digital elite in the pages of the magazine, which produced an image that readers could aspire to. Like McFarland, Rossetto legitimized his arguments in terms of his knowledge of the grand transformations underway, however the source of this knowledge (and the proof of its validity) did not come from early Internet adopters, but from the success of the magazine itself: 'When we started Wired, we got a ton of shit about the design. It was a "hassle," it was "user unfriendly," it was "pretentious" etc. We persisted, because we knew what we were doing' (quoted in Wolf, 2003: 123).

And with that, both debates ended. Deadlines had been missed and the launch was delayed, giving Rossetto and Anker impetus to take more control. In October, the site finally went live, but neither Steuer nor Rheingold would attend. Steuer had already been demoted in September, and Rheingold resigned a little over a month after the launch. Most of the original HotWired staff would follow in the next few months.

The highly charged atmosphere that attended HotWired's initial production might be interpreted in different ways, whether as a clash of egos (as various participants suggested) or in light of the uncertainties of working in a startup (Wolf, 2003). However, it would be hard not to attribute a leading role to the competing visions of the web's purpose and identity, which in turn were grounded in particular contexts (such as Rheingold's experiences with the WELL or Rossetto's success with the magazine). It must also be noted that, however abstract they were, these notions of the web were very much present in the actual work of building the site: tellingly, such different ideas about the changing media landscape could possibly have had a positive effect at Wired magazine (where the aim was to 'stir up conversations and print them' [Turner, 2006: 217]), but produced little other than friction in the work of designing Wired for the web (Wolf interview).

'Web culture' and 'participation' at HotWired 4.0

Over the next three years, HotWired's development mostly followed the ambitious vision Rossetto had outlined, growing from fourteen to over 180 employees while continuously adding new sections, websites and services. As Wolf documents with bemusement, sister-sites like the political news journal The Netizen cost a small fortune to produce and brought in little extra advertising revenue (2003: 158). The commitment to planting flags brought about the need for other investments that would drive up traffic immediately, to the point that Wired had to choose whether to cut costs dramatically or try to go public - two failed attempts at the latter in 1996 and 1997 would force Rossetto to sell Wired to the publishing house Condé Nast (Wolf, 2003).

From an editorial perspective, however, the more remarkable change at HotWired in this period was a shift in its stated focus from 'digital culture' to 'web culture.' HotWired 4.0 was announced in early 1997. The makeover was dubbed '4.0' because the site was optimized for a new generation of '4.0' browsers, but it clearly also aimed to connote an upgrade in terms of focus: HotWired was being redesigned in order to become 'the first major site to showcase the life and culture of the Web' (June Cohen, quoted in Coile, 1997). In its first iterations, HotWired (like Wired magazine) centered on the 'digital revolution' within otherwise traditional lifestyle and cultural topics, and any articles about the web itself would be found in the section Signal, which was described as 'the pulse of the digital revolution.' Now five sections were devoted to aspects of the web - Webmonkey, with how-to guides for amateur web developers; Synapse, with columns and interviews about the web; Dream Jobs, with job listings and articles about working in web production; Net Surf, with website reviews; and the Beta Lounge, with Web audio and video - and just one section, called RGB Gallery, dealt with digital art and culture. Moreover, the site now featured 'member pages' as a way of facilitating 'web community,' thus giving more prominence to the site's users (Coile, 1997). The new focus was supplemented by one of HotWired's most popular sister-sites and main inspirations for the makeover, Suck.com, which featured daily web

commentary and parody. In short, HotWired 4.0 announced that there was something called web culture, and that this was now the central focus of Wired's online publication.

Did HotWired 4.0, with its emphasis on tools for building the web and creating a community around a shared culture, perhaps signal that the worldwide jam session had prevailed over Rossetto's vision of planting flags and being an arbiter of taste? On the one hand, it appeared to reverse course, supporting what is (among each of the participants interviewed for this research) a common interpretation of the original HotWired debates - that Rheingold and Steuer had a better sense of where the web was headed, even if they were too early. For example, Jennifer Cool makes the case that Steuer's (and by extension Rheingold's) vision was more 'prescient' considering the web's turn to 'user-generated content' (2008: 199). Cool thus implies that the difference was analogous to the later distinction, made most notably in Web 2.0 manifestos, between a publishing paradigm that dominated the early web and one of participation that we now know (O'Reilly, 2004; Kelly, 2005). However, a closer look at the 4.0 makeover shows how it departed from the vision of a 'worldwide jam session' in significant ways, and helps to articulate an understanding of the participatory web very different from how this has been described by proponents in recent years.

HotWired's focus on 'web culture' and 'participants' did not appear suddenly, but extended one established already by two surprise successes, Suck.com and Webmonkey. Suck had been created anonymously by two HotWired employees, Carl Steadman and Joey Anuff, in 1995, and was sold to HotWired within a few months. Inspired by a tradition of humor and media satire that runs from Mad Magazine to the independent 'zine culture of the 1990s (represented by magazines like Spy), its daily satirical columns parodied a growing crop of sites like Netscape's 'What's Cool,' that would write glowing reviews of cool new websites each day (Wolf, 2003; Sharkey, 2005). It was the first website to focus specifically on web cultural criticism - that is, to identify some of the emerging tropes in the web production industry along with generic conventions of amateur and professional web publishing. A column would usually center around a website, person, company or product, and dissect the subject with deadpan humor. One early example, titled

'Indexing for Dollars,' made fun of dot.com exit strategies and Yahoo!, identifying the creation of a

directory as one of three ways to make money on the web - each of which involved selling to a

'real' company like Microsoft (Steadman and Anuff, 1995).

Along with its editorial focus on web culture, many of the formal features Suck devised - links used as literary devices, design consistency and constraint for readability - would become inspiration for HotWired. The most significant of these, perhaps, was its pace and the decision to put new content - not navigation - on the front page. As Wired writer Steve Silberman would later recount, 'As soon as Louis [Rossetto] saw Suck, he knew that what had to happen was that HotWired would have to update daily' and 'what you really wanted to create was an obsession' (quoted in Sharkey, 2005).

Suck also prefigured HotWired's later changes through its concentration on a specific audience - the developers, designers and other professionals involved in the web's early production - as well as its interaction with that audience. As Matt Sharkey (2005) would recollect in a piece celebrating Suck's tenth anniversary: 'While the trade magazines flattered executives with softball portraits and blind utopianism, Suck spoke to the grunts on the front lines.' Following Alan Liu, one could call Suck 'intraculture,' a means for web producers and other knowledge workers to let off steam and laugh at clueless managers before returning to work (2004: 77). Readers were soon writing down their own frustrations and sending them to Steadman and Anuff. Suck published one of these, in which a programmer ranted about executives who 'don't browse' but 'read about the Web, fer chissakes, in the New York Times' (Knauss, 1995). The larger insight was about the attraction a growing audience of web workers had to seeing themselves reflected in the content: starting in 1996, Suck began a weekly feature in which they published (and lovingly ridiculed) comments and questions e-mailed by readers. Of course, with its focus on web culture, Suck was already involving its audience. Each time the site highlighted another new genre, trope or debate on the web, Suck increased its chances of getting linked back by influential sites, if only because such public mockery was a form of flattery.

Webmonkey, launched in 1996 when June Cohen had the idea of pooling knowledge about web development at HotWired, similarly found success by tailoring its content to an audience of amateur and professional web producers. On the one hand, topics like Web Design 101 and how to write CGI scripts with Perl represented a departure from Wired's focus on the social and cultural aspects of new technology and its status as a lifestyle publication. However, Webmonkey was also unmistakably a Wired product: tutorials were delivered with irony and wit, there was no attempt to hide a preference for 'cutting-edge style,' and columns related the everyday work of web design to the larger issues of the day, such as proprietary standards and competition among browsers (see for examples Frew, 1997; HotWired, 1998; Knowland, 1997).

With an editorial focus and voice suited to a growing community around web culture, the new sites - along with the 4.0 version of HotWired they inspired - did not so much depart from Wired's ambitions as repackage them. In a much more literal sense than before, the additions of Suck and Webmonkey articulated Rossetto's vision for HotWired as an arbiter of taste in the new medium. Suck did so by pioneering web criticism, while Webmonkey did so by identifying and teaching a 'cutting-edge' in web development. Similarly, the invitation to users to express themselves on the platform may be seen as an extension of Wired's aim of providing its tech-savvy audience with images to aspire to. Where the magazine did this by portraying technologists as being on the same cultural plane as subversive rock stars, the new member pages asked users to fill in profile information such as 'why I'm cool' and 'objects of my technolust.' If this was a jam session, it was one limited to playing covers: to participate meant to write like the snarky essayists at Suck, to build sites that fit Webmonkey's definition of cutting-edge, to engage in the topics covered by Wired editors and columnists, and to find a 'dream job' at a company like HotWired.

Although the acquisition of HotWired's parent company Wired Digital by Lycos in October 1998 meant its platform for web participants was short-lived, the makeover is remarkable because of the contrasts it provides with the popular depictions of the web as a participatory medium that emerged in the mid-2000s. Participatory modes of media production tend to be portrayed as a self-

organized and bottom-up, and thus a radical departure from the presence of editorial control (Kelly, 2005; Bruns, 2005; Shirky, 2008). The reverse is seen with HotWired 4.0: its focus on 'participants' did not signal the abandonment of its editorial focus, but rather its expansion. It invites a comparable inversion in examinations of the web's participatory potential. In place of approaches that attempt to measure the validity of claims of participation (such as the presence of alternative or marginal views), one could ask how these new modes of production - from 'open news' to various genres of blogging and today's social media platforms - reproduce aspects of their mass and mainstream counterparts, whether editorial (continuity in terms of preferences for some types of content over others), formal (genres, styles) or organizational (hierarchies in the selection of content). To borrow from Gabrielle Hecht (2002), such research would thus ask how existing socio-technical practice is 'conjugated,' or articulated in a new register, much as HotWired 4.0 translated the editorial direction of Wired and previous versions of HotWired to a new context of web culture and participation.

Conclusion: web hype and web history

The history of HotWired's conceptualization, design and production serves to challenge two important assumptions guiding popular web discourse today. First, where well-known new media commentators like O'Reilly (2005), Kelly (2005) and Clay Shirky (2008) create the impression that the web's participatory potential was realized in the early 2000s, HotWired shows how similar perceptions of the web were projected onto it at a very early stage. Second, where these commentators have argued that such participation necessarily displaces editorial control, this history points to how practices and forms associated with mass media may reemerge in new contexts: from the beginning - at least for publisher Louis Rossetto - participation was aligned with a strategy for strengthening Wired's brand and influence, something that was especially visible in HotWired 4.0.

Unsettling the periodization of Web 2.0 is not simply a matter of setting the historical record straight. Rather, histories that reveal contingency and discontinuity in the web's development stand in contrast to the technology-centric change narratives that are fundamental to popular web discourses. The key rhetorical move in these accounts is to actively dismiss prior understandings of the web as naive or misinformed, and posit that new technologies point the way to the medium's actual characteristics (Kelly, 2005; O'Reilly 2005; Levy and Stone, 2006; Shirky, 2008). On the one hand, what this does is obscure the fact that 'the Internet does not exist,' in the sense that there is no interior logic guiding the technology's development or ensuring particular effects (Morozov, 2013). On the other, it points to a lack of reflexive consciousness, ignoring the complex ways in which imaginations of the web's identity and purpose become implicated in its development. As a close look at HotWired's conceptualization and production demonstrates, the medium's history is fruitful ground for dismantling these narratives on both fronts.

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Notes

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specific debates or discussions in which these played a role, but allowed for other directions

to develop during the interview.

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