On Web Brutalism and Contemporary Web Design

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Abstract

This paper acknowledges and frames the controversial Web Brutalism movement in and around contemporary web-based interaction design, and subsequently raises critical questions about its influence on present and future web design strategies and practices. This inquiry is informed and facilitated by a comparison of two distinct perspectives.

Professor Ganci contends that this movement has the potential to have a generally positive affect, and that it is a welcome response to the homogenization of a limited set of aesthetic conventions and practices that have become pervasive across the web. Professor Ganci further argues that because it has become fairly easy to create websites that "fit the mold and that look great," this type of idle, sans-design-thinking approach will eventually lead to web design failures, as it coerces web designers to engage in formulaic processes that sacrifice real invention and innovation centered on meeting well-understood user and audience needs and desires. The ability to make, rather than design, web-based interactions that are derived from various templates and other one-size-fits-all approaches is posited as a severe limitation, with Web Brutalism posited as a counter to this, and as an effective, relatively new type of catalyzer to web design strategies and tactics.

Professor Ribeiro contends that Web Brutalism is nothing more than a momentary distraction from a more crucial set of issues contemporary and near-future web designers face, such as usability, scalability, adaptability, and, especially, broad accessibility. Twenty-plus years into its development, the web is still fairly inaccessible to people who have physical disabilities, or who must access the internet through slow connections and underpowered devices, or who have limited access to internet connectivity or electricity.

This paper raises questions regarding perception, usability, effective communication, meaningful innovation, and what added and evolved responsibilities designers should assume in the context of contemporary web design. The discourse that has been initiated here needs to continue in order to reveal the expansive potential of design across the web.

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Introduction

As we pass the twenty-year mark of visual design on the web, a new trend has emerged over the course of the last two to three years: *Web Brutalism*. This movement, or trend, in web design is guided by design processes that ensure the interface design of given websites are anything but user-friendly and aesthetically appealing. Websites like *Bloomberg Businessweek Features*, *Lifeaction-revival*, *The Drudge Report* and, perhaps most well-known of all, *Craigslist* have been designed purposefully to inhibit ease-of-use and to *not* appear professionally polished. Brutalist websites are also intentionally built to be rough, to be coded so that they appear to be uncomfortable for many audiences and users to interact with. Aesthetically and functionally, web brutalism can trace a portion of its roots to the mid 1990s and a time when web interfaces were much less affected by template-based design and functionalities that seek to manipulate particular types of user behaviors. (The term “brutalism” originated in the 1970s as a means to describe mostly institutional architecture that featured large, aesthetically heavy buildings that featured vast expanses of exposed concrete.)

For the moment, Web Brutalism is a niche movement, but it gives us pause and challenges the discipline of interaction design, and, more specifically, web design to reflect on the following questions: What roles does visual design play in the creation and evolving life of a website? What kind of place in the web design process should innovation and best practices have? How should we

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Deville, P. *Brutalist Websites*.
Online. Available at:
<http://brutalistwebsites.com/>.
(Accessed 25 May 2016).

define what constitutes quality in web design processes and their outcomes? As designers, these are important questions that we must confront effectively, or risk creating interactive experiences that inhibit usability, create misperceptions, or that waste our users precious time. The central ideas articulated in this paper will begin to examine these questions by reflecting on what the existence of Web Brutalism says about the design processes that inform and guide the look and feel of much of the contemporary web.

Akin to the architectural movement that gave rise to the term, Brutalist websites reject the polish and formulaic structures that have become ubiquitous across an increasingly homogenized web. The blog *Brutalist Websites*¹ showcases sites that its creators believe effectively demonstrate the Brutalist aesthetic and the often handmade, or “crude” coding that facilitates the delivery of the content of these websites. Pascal Deville, the site’s editor, defines the movement as follows: “In its ruggedness and lack of concern to look comfortable or easy, Brutalism can be seen as a reaction by a younger generation to the lightness, optimism, and frivolity of today’s web design.” Moreover, while the borders and concrete definitions of this movement are inexact, Brutalist websites can be broadly defined by their general rejection of the ostensible drive toward perfection that permeates so much of contemporary web design through the use of repeatable visual patterns and standardized layout conventions.

Labeling the sites Deville has identified as Brutalist feels like a bit of a stretch—its parameters, if they can be called that, and aesthetic signifiers, are difficult to define specifically—and the movement is still relatively small. While these sites embrace the utilization of raw material (in this case primitive HTML and aesthetically rough graphic form), and they also reject the formula of contemporary design—just as the original Brutalist architects of the 1970s rejected Modernism and the International Style—many of them could be described as fitting the descriptions of the following variety variety of labels: Minimalist, Avant-garde, or one of several flavors of Postmodern. That stated, websites like these are unified in that those who have created them have made a conscious effort to distinguish both their visual appearance and the nature of their interactivity from the conventional. Brutalist websites are designed to engage the viewer in a hostile way. They frequently utilize the rough aesthetics of the early web, circa 1994–98, in raw and dissonant ways. Their formal configurations and facilitation of interactive functions break nearly every commonly held modern design convention, which forces the viewer to be fully present during his/her engagement with one of these websites in order to comprehend

FIGURE 1: Deadly Sports Tragedy (deadlysportstragedy.com) fits the profile of a Brutalist website. According to its designer, Ben Patterson, the site “capture[s] the intensity and coarseness of professional sports broadcasts.”

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Budds, D. “The Internet’s 10 ‘Ugliest’ Websites.” *Fast Company*, 25 May 2016. Online. Available at: <http://www.fastcodesign.com/3060196/the-internets-10-ugliest-websites>. (Accessed 25 May 2016).

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Arcement, K. “The hottest trend in Web design is making intentionally ugly, difficult sites.” *The Washington Post*, 9 May 2016. Online. <https://www.washingtonpost.com/news/the-intersect/wp/2016/05/09/the-hottest-trend-in-web-design-is-intentionally-ugly-unusable-sites/>. (Accessed 25 May 2016).

their content. This tends to elicit strong reactions and opinions from both users and members of the design community. These types of websites also often do not utilize traditional navigation, and often mask the placement of the cursor. Perhaps most interestingly, they invite us to question the viability and efficacy of many well-established aesthetic and functional conventions that guide the design of so many modern web interfaces.

While Web Brutalism has been relatively quiet during its short life simply due to its limited scope (most of the sites on *Brutalist Websites* are personal in nature, and there are just not that many of them out there), the approach is starting to move into the view of the general public with sites like *Adult Swim* and *Bloomberg*. Some of these websites have also been gaining attention in the popular press,² with articles like “The hottest trend in Web design is making intentionally ugly, difficult sites” recently appearing in *The Washington Post*.³ So—how should we think about these discordantly

FIGURE 2: Bloomberg utilizes hints of a Brutalist aesthetic on their site, <http://bloomberg.com>

designed interfaces that sit at the fringe of web design? What do they say about the utility of particular aesthetic approaches and frameworks? What do they reveal about how and why the practice of designing websites has evolved as it has, specifically as it relates to an increasing reliance on broadly accepted conventions and patterns? Do Brutalist websites mark a renaissance of innovation, or are they merely an ostentatious distraction?

We argue that the Brutalist Web movement is both good and bad for contemporary web design. Each co-author of this piece has come to this inquiry with a distinct point of view: Professor Ganci contends that this movement can have a generally positive affect on the evolution of web design, with Professor Ribeiro contending that it is nothing more than a momentary distraction. In the following sections of this piece, we will each argue to promote our relative positions. The discourse that follows is purposefully provocative, and is intended to raise and contextually frame more questions than it answers. In the end, we will summarize our respective analyses and describe how we believe

they can begin to help the web design community move effectively forward across common ground.

Brutalism is here to save us by Aaron Ganci

Most web design that exists across the internet of 2016-17 is boring. Too many of us who practice and teach it have become complacent, or, worse, merely efficient. Web Brutalism is here to show us the error of our staid, formulaic ways. It is a necessary intervention for us, a shrill wake-up call designed to shock us out of our current state of complacency.

It is easy to look at examples of Brutalist websites and opine that their creators are naïve or self-interested. While I agree with this assessment on some levels, I argue that their approaches have a good deal to teach us about the current state of our industry, if we would simply take the time to examine these more closely and critically. It is not easy to look upon these sites as types of saviors that can redeem us from the pervasive banality that now affects so much of contemporary web design, but, in ways that mirror the behavior of an individual undergoing a psychological or social intervention, web designers have gotten good at denying that we have a problem. Before I address how I think Brutalism can save us, I will quickly discuss the current state of the discipline, and explain how we developed the need for an intervention in the first place.

Uniformity within contemporary practice

When encountering a Brutalist site, a viewer will likely have a strong-but-justified emotional or even visceral reaction. Aesthetically, as was often the case with many websites that were designed and operated during the 1990s, today's Brutalist sites are often not good by contemporary aesthetic or functional standards. We have that strong reaction today because of a prevailing, fairly rigid set of ideas about how "good" websites should look and perform. This has become especially true in recent years because of the assertion of two primary factors. First, the act of building a website has become much easier due to advances in both the design and development arenas. This has resulted in broad cross sections of websites becoming much more formulaic in their appearance and behavior. UI (user interface) frameworks, like Bootstrap, Foundation, and Semantic UI allow designers to build a site quite quickly but have, in turn, systematized layout conventions and the appearance and functionality of many design elements in the process. The satirical website *Every Bootstrap Website*

FIGURE 3: Every Bootstrap Website Ever summarizes and lampoons the uniformity of modern websites.

*Ever*⁴ lampoons this reality by exposing this ubiquitous formula. Additionally, services like Squarespace enable anyone to build a polished site that automatically conforms to the norm with almost no effort. The second factor is the homogenization of a limited set of aesthetic conventions and practices on the web. Today, many websites use the same visual patterns, layout configurations and icon systems. This is partly due to the influence of the aforementioned UI frameworks, and partly due to the popularity of services like *Dribbble* and *Pinterest* that tend to reward designers (with a high volume of views of their work) for sharing work that fits within broadly accepted trends.

In many ways, this working environment has created a sweet and comfortable spot for web designers. It has become fairly easy for us to create work that fits the mold *and* that also looks great *and* that we can also get paid for. I believe that this type of idle approach will eventually lead to widespread failure, as it coerces web designers to engage in processes that sacrifice real invention an innovation to meet user/viewer needs with only a limited array of “one size fits all” approaches. The kind of cyclical, critical inquiries that inform user experience-centered web design processes cannot occur. So many of the formulaic web design approaches that are prevalent today turn out to

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Every Bootstrap Website Ever.
Online. Available at:
<http://adventurega.me/bootstrap/>.
(Accessed 26 May 2016).

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Buchanan, R. "Branzi's Dilemma: Design in Contemporary Culture." Design Issues, 14.1 (1998): pgs. 3-20.

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Roth, S.P, et al. "Location matters, especially for non-salient features—An eye-tracking study on the effects of web object placement on different types of websites." International Journal of Human-Computer Studies. 71.3 (2013): pgs. 228-235.

yield "good enough" solutions⁵ for many contemporary UI designs, but that is all they are, and they tend toward the predictable, the banal, the "been there, done that." By breaking away from these current, prevalent-yet-conventional approaches, we position ourselves and the design processes we devise and operate more effectively to resolve many of the communication and interaction problems we encounter now, and will encounter in the near future.

The thoughtfulness of Brutalism

There are many aspects of Brutalism that will not—and should not—translate into popular web design vernacular. However, we should consider borrowing some its most effective aesthetic and functional features as we move forward. Doing so will help more web designers break away from the trend of template-based uniformity and allow us to continue to innovate in tangible, meaningful and productive ways. In this context, two aspects of Web Brutalism are most pertinent: adopting and operating a skeptical approach to the design process, and a rejection of the type of banal, visual polish that has become all too ubiquitous across the modern web.

Questioning conventions with a skeptical approach

The web design conventions so many of us use today have been contextualized and defined through a continuous process of two decades' worth of testing and refinement. This is a good thing—it exemplifies the action research-based, dynamically iterative aspects of the web design process. Along the way, a diverse array of user-centered studies have been conducted to examine the specific effects of particular types of form and texture arrangements in interface designs. Their findings have been published to help web designers refine how they should configure the forms that constitute given user interfaces in ways that have become well-established conventions. Breaking these conventions tends to be strongly discouraged, and has been cited as a causal factor that negatively affects usability.⁶

With that stated, the conventions we so often utilize today that inform and guide how web-based content should be laid out or formatted should not be taken as gospel. Web designers—and our HCI counterparts and collaborators—are sometimes too quick to implement a validated solution to merely increase efficiency, to save time, as the design process evolves. However, if we rely on these accepted conventions too heavily, we may miss opportunities to engage in more broadly informed, deeply examined and original design

decision-making. Even Jakob Nielsen, one of the definitive voices on web usability, warns us that usability guidelines cannot remain valid forever.⁷ The web is simply too dynamic and too fluid a communication medium to allow its design conventions to remain as fixed as some would have them. By encouraging radical exploration, as the Brutalists do, we position ourselves to constantly re-evaluate what is working or not working, or what could potentially work (or not), given the design challenges at hand.

Rejecting visual polish and the effect of visual design on fluency

One critique that Brutalism has leveled at contemporary web design is that today's popular, template-based aesthetic has become overly polished, minimalist and (generally) not tailored enough to meet the needs and desires of particular users. Usability experts have argued for roughly 20 years that reducing the complexity of a website will usually improve its overall usability.⁸ Counter to this, literature from cognitive psychology suggests that the polish and predictability of so many contemporary websites may have a negative effect on certain aspects of user experience. Specifically, when content is presented in expected, overly fluent, or intuitive ways, readers have a more difficult time engaging with information.⁹ Because the prevailing graphic styles on the web are so widely used, readers may *anticipate* the meaning of content based on its common visual presentation and then not fully engage with it. This is a very different reading experience than one that challenges a reader to actively engage with web-based content in ways that would allow them to effectively interpret its meaning.

By rejecting aesthetic polish, the Brutalists are promoting a disfluent approach, one that diverges from the normalized presentation of content. Studies from cognitive psychology indicate that content presented with disfluent characteristics enables readers to process information "more carefully, deeply, and abstractly."¹⁰ While these studies incorporate only minor variations in typographic style or color, they still hint at an overlooked idea within contemporary practice: that utilizing a polished, ubiquitous visual style might not be the best way to address or resolve a given visual communication design problem. Exploring divergent aesthetics might be a way for us to more fully understand the correlation between the presentation of web content and a given individual's ability to process that information.

Brutalism pushes disfluency theories to their extreme, and may very likely lead to frustration on the part of the user,¹¹ or fatigue or other

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Nielsen, J. "Durability of Usability Guidelines." Nielsen Norman Group (blog). 17 January 2005. Online. Available at: <https://www.nngroup.com/articles/durability-of-usability-guidelines/>. (Accessed 25 May 2016).

8

Whitenton, K. "Minimize Cognitive Load to Maximize Usability." Nielsen Norman Group (blog). 22 December 2013. Online. Available at: <https://www.nngroup.com/articles/minimize-cognitive-load/>. (Accessed 25 May 2016).

9

Alter, A.L., et. al. "Overcoming Intuition: Metacognitive Difficulty Activates Analytic Reasoning." Journal of Experimental Psychology. 136.4 (2007): pgs. 569-576. Available online at: <https://pdfs.semanticscholar.org/526d/fb9f8715d-48fa79d0f766caa5cd9151cf074.pdf>. (Accessed 1 September 2016).

10

Alter A.L. "The Benefits of Cognitive Disfluency." Current Directions in Psychological Science. 22.6 (2013): pgs. 437-442.

11

Diemand-Yauman, C., Daniel M. Oppenheimer, and Erikka B. Vaughan. "Fortune favors the bold (and the italicized): Effects of disfluency on educational outcomes." Cognition. 118.1 (2011): pgs. 111-115.

12

Alter A.L. "The Benefits of Cognitive Disfluency." Current Directions in Psychological Science. 22.6 (2013): pgs. 437-442.

13

Tuch, A, et al. "The role of visual complexity and prototypicality regarding first impression of websites: working towards understanding aesthetic judgments". International Journal of Human-Computer Studies. 70.11 (2012): pgs. 794-811

14

Maeda, J. Twitter post. 7 January 2014, 8:04 a.m. Available at: <https://twitter.com/johnmaeda/status/420541336060575744>. (Accessed 25 May 2016).

physiological issues.¹² This seems to us to indicate that the idea of utilizing disfluent visuals needs to be informed by applied research that examines how these types of visuals affect user behavior. This could be especially true regarding how the use of disfluent visuals affects a given user's initial impression of a website or User Interface. Research that has examined how various visual factors affect general website appeal indicates that users decide very quickly—within fractions of a second—whether they find the graphic configuration of a given website too complex and, as a result, unappealing.¹³ This is where Brutalism fails. By encouraging an aesthetic that is so disfluent, Brutalistic websites often inhibit the specific types of communication and messaging. It is exciting to think about how web designers might use disfluent strategies and tactics to enhance how various types of interface components and systems could be freshly configured to enhance visual communications and functionality. Rather than resigning ourselves to the idea that the currently dominant array of visual tropes, patterns and layout templates are immovably cemented into the structure of the web, those of us who design in this arena need to continue to critically examine and question how and why these affect not only user perceptions and actions, but our own design processes.

Saving us from ourselves

On the surface, Web Brutalism looks like a regression from the formal and functional knowledge and understandings many web designers have worked thoughtfully and diligently to construct and cultivate since the 1990s. If we can effectively challenge ourselves to look past the initial rawness inherent in these designs, they have the potential to actually teach us some important lessons. They remind us that formal and process-based design conventions often need to be challenged for our discipline and the decision-making processes that inform it to evolve, and that a divergent aesthetic can sometimes be an effective means to achieve this. Whether or not it is the intended goal of the Web Brutalists, it might behoove us to appreciate their attempt to save us from ourselves.

Brutalism is here to distract us by Bruno Ribeiro

In early 2014, John Maeda wrote that "good design is about clarity over style, and accountability over ego".¹⁴ Although Web Brutalists do not seem to be overly concerned with this approach to good design, I hereby state that I *am*. Good design is not merely rooted in understanding and achieving visually compelling and appropriate aesthetic forms and systems of forms, but it is also

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"Dieter Rams: ten principles for good design." [Vitsø](https://www.vitsoe.com/us/about/good-design). Online. Available at: <https://www.vitsoe.com/us/about/good-design>. (Accessed 15 September 2016).

16

Hamilton, I. "A simple introduction to web accessibility." [Creative Bloq](http://www.creativebloq.com/netmag/simple-introduction-web-accessibility-7116888) (blog). 27 July 2011. Online. Available at: <http://www.creativebloq.com/netmag/simple-introduction-web-accessibility-7116888>. (Accessed 25 May 2016).

17

"MYTH: Accessibility is 'blind people.'" [The A11Y Project](http://a11yproject.com/posts/myth-accessibility-is-blind-people) (blog). 11 January 2013. Online. Available at: <http://a11yproject.com/posts/myth-accessibility-is-blind-people>. (Accessed 26 May 2016).

18

"Accessibility is hard." [The A11Y Project](http://a11yproject.com/about.html) (blog). 22 July 2014. Online. Available at: <http://a11yproject.com/about.html>. (Accessed 27 May 2016).

honest in terms of its intentions, and therefore is accountable and responsible to those users and audiences who are or may be affected by the outcomes of its processes. The possibilities to achieve real innovation in and around the ever-diversifying arena(s) of web design are far from being exhausted, and are likely still largely untapped and unrealized. And, as Dieter Rams opines in his ten principles for good design, "innovation can't be an end in itself."¹⁵

It is against this contextual backdrop that the promulgation and promotion of a deliberately ugly aesthetic for web design as "innovation," especially one that emulates the worst aesthetic and functional practices from the 1990s, is at best naïve and at worst insulting. Web Brutalism is a provocation that attempts to bring a specific type of egocentric design into the spotlight at the expense of clear communication and effective functionality. It distracts web designers and their collaborators from the more crucial issues they must confront, such as usability and, especially, accessibility.

We need to make the web more accessible to more diverse groups of people

The fact that a relatively small group of web designers have decided that too much of the design they are perceiving across the web is boring is a weak and fairly one dimensional rationale for infusing it with a new aesthetic. Focusing on how content is displayed across this dynamic medium diverts attention away from the need to confront more pressing concerns in web design, such as ensuring that the content it delivers can reach the broad cross sections of people who still have limited access to it. Twenty years into its development, the web is still fairly inaccessible to people who have physical disabilities, or who must access the internet through slow connections and underpowered devices, or who have limited access to internet connectivity or electricity.

According to user experience and accessibility consultant Ian Hamilton, one fifth of the world's population has some type of physical disability.¹⁶ To help web designers more effectively address the concerns of users with limited access, he has typologized accessibility into four broad categories: visual, auditory, motor, and cognitive. This typology has been adopted by the A11Y Project,¹⁷ an effort that a variety of web designers and developers have undertaken to make web accessibility easier for people who are affected by one or more physical impairments. Broadening the accessibility of the web has proved to be a difficult, time- and capital-intensive task. Even the A11Y Project admits that the design and functionality of their own website is limited in terms of how effectively it meets the needs of those with disabilities.¹⁸ Designing a

more universally accessible web will require the time and attention of a much greater number of web designers and developers than are currently working to improve accessibility. More research and development funding from national funding agencies around the world likely needs to be made available to university-based researchers and designers to address this deficiency, as this tends *not* to be the type of endeavor that private sector funding (like venture capital sources) has shown much interest in supporting.

In addition to designing web-based interactive experiences that meet the needs of those with physical disabilities more effectively, web designers should also attempt to improve usability experiences for the hundreds of millions around the world who are new to the internet and the web, and who often have limited access to them. According to *StatCounter*, 39% of worldwide web browsing during the first quarter of 2016 was facilitated through mobile devices.¹⁹ A smartphone, or wireless mobile device (WMD), is the only computing device many people in the developing countries of the world have ever owned, and this trend of smartphones and WMDs penetrating the world's markets is continuing to grow. According to an article published in *Wired* magazine in February of 2015, "With pricing reaching an affordable \$30 to \$50 for some smartphones, people who have never before been able to afford a computing device now own one, and it fits in their pocket."²⁰ For many people living in places with limited access to electricity and the internet, a (relatively) cheap smartphone is their primary and often only means of accessing the internet. On May 19th, 2016, Tal Oppenheimer, a product manager on the Google Chrome team, gave a presentation at the Google I/O conference titled *Building for billions on the web*, during which she mentioned that 60% of globally mobile connections are facilitated using now-outdated—since roughly late 2010—second-generation, or 2G, wireless telephone technology. In India, where 108 million people connected to the internet for the first time in 2015, and 864 million people still do not have access to it, the cost of gaining and maintaining internet access is high (the equivalent of about \$13 per month in a country where the average monthly wage is \$295). Oppenheimer goes on to write that, for roughly two-thirds of India's population, 17 hours of minimum wage work is necessary to pay for 500MB of data at download speeds of between 2.5 and 5 mbps. If we consider the size of an average web page, that means that an hour's worth of minimum wage work in India yields about 15 pages worth of data.²¹ Many contemporary web designers have yet to cultivate the understandings necessary to design effectively for these contexts of use. Designing Brutalist

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"StatCounter Global Stats: Comparison from Jan to Mar 2016." *StatCounter Global Stats*. Available at: <http://gs.statcounter.com/#all-comparison-ww-monthly-201601-201603-bar>. (Accessed 26 May 2016).

20

"In Less Than Two Years, a Smartphone Could Be Your Only Computer." *Wired*. 10 February 2015. Online. Available at: <https://www.wired.com/2015/02/smartphone-only-computer/> (Accessed 1 November 2016).

21

Oppenheimer, T. "Building for billions on the web—Google I/O 2016." *Google Chrome Developers*. YouTube video. 19 May 2016. 37:13. Available at: <https://www.youtube.com/watch?v=E6hGubMknfM>. (Accessed 27 May 2016).

FIGURE 4: BostonGlobe.com was one of the first large-scale responsive websites, in 2011.

web sites, and writing and talking about them, diverts too much of today's web designers' time and attention away from confronting the types of design and development issues that need to be addressed to evolve usability on behalf of much larger and more diversely constituted populations of users.

As design for the web evolves, the weight—or download size—of a website will continue to be one of its defining logistical features, and one over which designers will likely continue to exercise a good deal of control. One thing that Web Brutalism does seem to get right is its defense of handmade HTML, rejecting templates and web pages generated by Content Management and User Interface Formatting Systems that often make relatively simple pages unnecessarily heavy. This is not to argue that the websites featured on *Brutalist Websites* are necessarily light. Rather, many of them feature large images, which makes their homepages heavier than the (already heavy) average webpage. Again, Web Brutalism is not actually solving a relevant problem in this area, and is (again) a distraction from more relevant issues. Pascal Deville praises handmade HTML,²² but bandwidth doesn't seem to be a concern for him.

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Arcement, K. "The hottest trend in Web design is making intentionally ugly, difficult sites." *The Washington Post*, 9 May 2016. Online. <https://www.washingtonpost.com/news/the-intersect/wp/2016/05/09/the-hottest-trend-in-web-design-is-intentionally-ugly-unusable-sites/>. (Accessed 25 May 2016).

23

Marcotte, E. "Responsive Web Design." *A List Apart*. 25 May 2010. <http://alistapart.com/article/responsive-web-design>. (Accessed 26 May 2016).

24

Jehl, S. *Responsible responsive design*. New York: A Book Apart. 2014.

25

Norman, D. "Emotion & Design: Attractive things work better." *Interactions Magazine*. 9.4 (2002): pgs. 36-42. Online. Available at: http://www.jnd.org/dn.mss/emotion_design_at.html. (Accessed 25 May 2016).

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Lidwell, W., Kritina Holden, and Jill Butler. *Universal principles of design*. Rockport: Gloucester, Mass.: pgs: 20-21. 2003.

We have plenty of room to innovate

As a medium that facilitates large scale, trans-global communication, the web is still relatively young, but its rise has been rapid and its reach has become widespread, aided greatly by the now decade-long worldwide advance in smart-phone, or wireless mobile device, technology. The moniker Responsive Web Design, which represents the latest major innovation in web design, was only coined in 2010 by Ethan Marcotte in an article published on the website *A List Apart*.²³ (Responsive web design, or "RWD," refers to the practice of designing user interfaces for websites that alter their appearance and proportionality based on the size of the viewcreens upon which they are rendered. RWD is what causes the same site to configure itself differently as it viewed across different types of media platforms, as depicted in Figure 4.) In 2014, Scott Jehl expanded on the idea of Responsive Web Design on his book *Responsible Responsive Design*, after spending months using the Internet in developing countries in South and Southeast Asia.²⁴ What both Marcotte and Jehl were proposing were new ways to approach web design to meet the needs of users who were accessing web content in new ways. In their case, innovation occurred as a result of attempting to solve real problems that users attempting to access content across different types of viewcreens routinely confront.

Responsive Web Design is just one example of recent innovations that have affected the discipline of web design. A diverse array of designers and organizations have discussed developing and implementing new practices and standards to make the web more accessible to users with disabilities, bad connections, or underpowered devices. As the web and the means to access it evolves, designers will have to innovate, and, at times, *invent*, to meet new needs and desires.

Good aesthetics serve a purpose

Another consequence of Web Brutalism is that it emphasizes the personal, aesthetic style of an individual designer who created a particular site, or at least the unique stylistic decisions that affected the design of these types of websites. The product, then, becomes an end in itself, rather than a means to achieve a broader goal of effectively visually communicating specific content to a given audience on behalf of a particular organization or client.

Aesthetics play an important role in web design, but not for purely stylistic reasons. Beautiful pages are actually perceived to work better²⁵ and to be easier to use.²⁶ Because of this, web designers must continue to strive to

create aesthetically well-resolved interfaces in our designs, and avoid creating gratuitous ugliness for its own sake. As is and has been the case with effective visual communications in print for the last couple of centuries (at least...), the visual style and configuration of elements designed for use in specific websites should be largely governed by what is deemed by a designer to be appropriate for a given user or audience, and that also effectively represents the interests and mission of a given organization or client. The assertion of distinct visual languages, styles and genres create different types of expectations and guide different types of experiences on given websites, much the same as they do in printed communications. Determining what is appropriate and what is not within and around a given context of use is as crucial a design consideration as it has ever been.

The old is not new

Whether you appreciate or reject the aesthetics that guide the physical and formal structure of Web Brutalism, we should avoid equating it with innovation. Applying outdated visual genres and styles purely for the sake of moving away from an established norm is not the same as moving forward. To praise these types of distractions rather than focusing attention on more prevalent issues currently confronting web designers—and their users and audiences—seems irresponsible now. There is so much more real work to be done to positively evolve web design to make it more accessible and more useful to broader populations than it currently serves. Those of us working in and around web design need to concentrate more of our efforts toward making the web more inclusive and less exclusive, and toward solving the problems that are rooted in the need to create and facilitate effective visual communications and functionalities that users deserve and expect from us.

Moving forward

While it may be a misnomer, the Web Brutalism movement—if it can actually be called that—has ignited an engaging and increasingly broadly informed discussion. The designers who are participating in it aim to expose weaknesses they see in what they perceive to be the far too predictable and banal approaches so often operated or defaulted to by so many of their peers. Are they right to do this? Have too many of us who practice and teach web design adopted processes that yield results that are too rigid, too uniform, too automatic? Critically grappling with these questions as we consider the future of our discipline,

especially as it becomes more broadly informed and less exclusive, will be essential to our continued growth and well-being, and to the growth and well-being of future web and interaction designers.

In debating the usefulness and the affects—formal and psychological—of Web Brutalism, two discursive themes have emerged. Both raise valuable questions for web designers as our discipline evolves. First, the often heavy-handed role of utilizing standardized conventions within the discipline of web design has been called into question. These conventions originated during the days of the early web, and helped guide layout, sizing, and the facilitation of navigation, and stabilized the way information was presented and used by audiences. The viewpoints articulated in this narrative suggest a clear dichotomy regarding how web design opportunities might be contextualized and addressed: by using standard formal and functional conventions, web design is mired in unoriginality but retains its usability; when these standard conventions are ignored, usability is compromised. With that stated, we believe that this apparent dichotomy is false. Innovation and usability are *not* mutually exclusive. Rather, we suggest web designers explore ways to promote usability and innovation simultaneously, and in ways that are not mutually exclusive. We believe that standardized design conventions should be approached with open eyes, and that they should continue to be evaluated in terms of their contextual appropriateness. By engaging in this dualistic process, web design can evolve positively.

The second theme articulated in this piece addressed the need for web designers to carefully consider the ramifications of their aesthetic decision-making in the context of the contemporary landscape of visual design. As the web matures and the visual patterns, genres and styles that span it continue to solidify, we need to evaluate how specific approaches to visual design affect how the content that constitutes given websites is perceived and used. Deviating from these established norms could either help or hurt our ability to communicate clearly, depending on how these deviations are formulated and operated. Decisions about aesthetics also have implications for download size, and may impact low-bandwidth users' ability to access a given site.

Brutalism's provocation is further confirmation that a great deal of research is still needed to help designers understand the consequences of visual design on the web. As promised, this paper raised more questions than it answered: how does visual design affect the perception and usability of a given website? As web designers, where should we place the lion's share of our efforts

moving forward? How can we innovate and, if necessary, invent in meaningful and effective ways? Ultimately, how can we design complex visual systems that communicate distinctively, effectively, and responsibly across the web? These are difficult but pressing questions for web designers and their collaborators to confront as web design moves into its third decade. Failing to do this effectively could mean that we overlook the full potential of design on the web.

References

- “Accessibility is hard.” *The A11Y Project* (blog). Available at: <http://a11yproject.com/about.html>. (Accessed 27 May 2016).
- Alter, A.L., et. al. “Overcoming Intuition: Metacognitive Difficulty Activates Analytic Reasoning.” *Journal of Experimental Psychology*. 136.4 (2007): pgs. 569-576. Available at: <https://pdfs.semanticscholar.org/526d/fb9f8715d-48fa79dof766caa5cd9151cf074.pdf>. (Accessed 1 September 2016).
- Alter A.L. “The Benefits of Cognitive Disfluency”. *Current Directions in Psychological Science*. 22.6 (2013): pgs. 437-442.
- Arcement, K. “The hottest trend in Web design is making intentionally ugly, difficult sites.” *The Washington Post*, 9 May 2016. Online. <https://www.washingtonpost.com/news/the-intersect/wp/2016/05/09/the-hottest-trend-in-web-design-is-intentionally-ugly-unusable-sites/>. (Accessed 25 May 2016).
- Buchanan, R. “Branzi’s Dilemma: Design in Contemporary Culture.” *Design Issues*, 14.1 (1998): pgs. 3-20.
- Budds, D. “The Internet’s 10 ‘Ugliest’ Websites.” *Fast Company*, 25 May 2016. Online. Available at: <http://www.fastcodesign.com/3060196/the-internets-10-ugliest-websites>. (Accessed 25 May 2016).
- Derville, P. *Brutalist Websites*. Website. Available at: <http://brutalistwebsites.com/>. (Accessed 25 May 2016).
- Diemand-Yauman, C., Daniel M. Oppenheimer, and Erikka B. Vaughan. “Fortune favors the bold (and the italicized): Effects of disfluency on educational outcomes”. *Cognition*. 118.1 (2011): pgs. 111-115.
- “Dieter Rams: ten principles for good design.” *Vitsø*. Website. Available at: <https://www.vitsoe.com/us/about/good-design>. (Accessed 15 September 2016).

- Every Bootstrap Website Ever*. Website. Available at: <http://adventurega.me/bootstrap/>. (Accessed 26 May 2016).
- Hamilton, I. "A simple introduction to web accessibility." *Creative Bloq* (blog). 27 July 2011. Available at: <http://www.creativebloq.com/netmag/simple-introduction-web-accessibility-7116888>. (Accessed 25 May 2016).
- "In Less Than Two Years, a Smartphone Could Be Your Only Computer." *Wired*. 10 February 2015. Online. Available at: <https://www.wired.com/2015/02/smartphone-only-computer/> (Accessed 1 November 2016).
- Jehl, S. *Responsible responsive design*. New York: A Book Apart. 2014.
- Lidwell, W., Kritina Holden, and Jill Butler. *Universal principles of design*. Rockport: Gloucester, Mass.: pgs. 20-21. 2003.
- Maeda, J. Twitter post. 7 January 2014, 8:04 a.m. Available at: <https://twitter.com/johnmaeda/status/420541336060575744>. (Accessed 25 May 2016).
- Marcotte, E. "Responsive Web Design." A List Apart. 25 May 2010. <http://alistapart.com/article/responsive-web-design>. (Accessed 26 May 2016).
- "MYTH: Accessibility is 'blind people.'" *The A11Y Project* (blog). 11 January 2013. Available at: <http://a11yproject.com/posts/myth-accessibility-is-blind-people>. (Accessed 26 May 2016).
- Nielsen, J. "Durability of Usability Guidelines." *Nielsen Norman Group* (blog). 17 January 2005. Online. Available at: <https://www.nngroup.com/articles/durability-of-usability-guidelines/>. (Accessed 25 May 2016).
- Norman, D. "Emotion & Design: Attractive things work better." *Interactions Magazine*. 9.4 (2002): pgs. 36-42. Online. Available at: http://www.jnd.org/dn.mss/emotion_design_at.html. (Accessed 25 May 2016).
- Oppenheimer, T. "Building for billions on the web—Google I/O 2016." *Google Chrome Developers*. YouTube video. 19 May 2016. 37:13. Available at: <https://www.youtube.com/watch?v=E6hGubMkNfM>. (Accessed 27 May 2016).
- Roth, S.P, et al. "Location matters, especially for non-salient features—An eye-tracking study on the effects of web object placement on different types of websites". *International Journal of Human-Computer Studies*. 71.3 (2013): pgs. 228-235.
- "StatCounter Global Stats: Comparison from Jan to Mar 2016." *StatCounter Global Stats*. Available at: <http://gs.statcounter.com/#all-comparison-ww-monthly-201601-201603-bar>. (Accessed 26 May 2016).
- Tuch, A, et al. "The role of visual complexity and prototypicality regarding first impression of websites: working towards understanding aesthetic

judgments”. *International Journal of Human-Computer Studies*. 70.11 (2012): pgs. 794-811.

Whitenton, K. “Minimize Cognitive Load to Maximize Usability.” *Nielsen Norman Group* (blog). 22 December 2013. Online. Available at: <https://www.nngroup.com/articles/minimize-cognitive-load/>. (Accessed 25 May 2016).

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