Pushback: The Growth of Expressions of Resistance to Constant Online Connectivity

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Abstract

As a result of the increasing connectivity provided by smartphones, wireless Internet availability, and portable devices such as laptops and tablets, technology users can and often are continuously connected to the Internet and its communication services. However, many technology users who first embraced constant connectivity are now pushing back, looking for ways to resist the constant call to be permanently connected. This pushback behavior is starting to appear in the popular press, in personal blogs, and in a small number of academic studies. "Pushback" is a growing phenomenon among frequent technology users seeking to establish boundaries, resist information overload, and establish greater personal life balance. This study examines a growing body of both academic and non-academic literature in which we identified five primary **motivations** and five primary **behaviors** related to pushback by communication technology users. Primary pushback motivations include emotional dissatisfaction, external values, taking control, addiction, and privacy. Primary pushback behaviors are behavior adaptation, social agreement, no problem, tech control, and back to the woods. The implications of these motivations and behaviors surrounding pushback to communication technology are discussed.

1   Introduction

In 2011 the New Yorker magazine published a controversial column, "The Information: How the Internet Gets Inside Us" as part of *The Critic at Large* section (Gopnik, 2011). The author discussed how works on the cultural transformations in the information age tend to fall into one of three categories: the Never-Betters, who euphorically exalt the contributions of technology to improve our lives; the Ever-Wasers, who claim nothing has really changed and insist innovation is really nothing new; and the Better-Nevers, who bemoan the ways in which technology negatively impacts our daily lives and espouse nostalgia for the good old days before the Internet. However, in the almost three years since that publication, the technology user landscape has already changed. A new category of expressions is now clearly palpable in the media: a "Better-Less" group of discontents who used to be euphoric embracers of the opportunities of technological connectivity, but who are now looking for ways to push back and resist, to manage or reduce their use and perceived dependence on technology. Formerly embracing the changes that the information age has wrought, these capable comfortable users of technology are now expressing doubt, and looking for ways out.

A backlash to the exuberant reception that accompanied the introduction of recent technology innovations, from smartphones and tablets to Facebook, Twitter and other social media tools, may be inevitable. This paper reviews a growing body of literature, both academic and non-academic, about expressions of resistance and saturation with communication technologies and overload of information and relationships that they entail. UW researcher Kirsten Foot analyzed the emergence during 2008-2010 of discourses of pushback in multiple sociopolitical realms. She notes that "recent studies in this vein have focused on identity and class performance aspects of social "media refusal" (Portwood-Stacer, 2013) and "internet resistance" (Woodstock, 2011), but conceptualizes pushback more broadly, to include discourses

about reducing or avoiding media use, altering media practices, and efforts to influence media policies" (Foot, in review). Convergent with Foot's approach, we define pushback to connectivity as a reaction against the overload of information and changing relationships brought about by communication technologies such as smart phones, tablets and computers connected to the Internet. Overloaded users are pushing back against permanent connectivity, in an attempt to manage, limit or control their exposure and the saturation caused by ubiquitous and constantly connected communication technologies.

Pushback is a relatively recent phenomenon; it has only recently started to appear in academic research sources, although it is more common in personal websites, blogs, magazines and newspapers from the last few of years. We review these different types of sources, and offer a typology of motivations and behaviors for pushback. We identified five different types of motivations for pushback, as well as five different types of pushback behaviors. However, all forms of pushback have a common denominator of dissatisfaction or disillusionment with one or more types of technology and/or social media, and the users' desire to pull away from technology usage in some way. A closer examination of the pushback phenomena can offer a better understanding of technology user behavior and lend insight into how people connect with each other, with or without communication technologies. Our typologies can be used to inform future empirical studies about pushback and resistance to connectivity.

From the standpoint of Human-Computer Interaction (HCI), this response raises questions about technology design and how to better serve users. From an economic standpoint, pushback calls into question how long each new technology innovation can last as a viable profitable enterprise, and whether business models need to account for these motivations and subsequent behaviors that manifest as pushback. From a psychological perspective, pushback sheds light on the deeper emotional needs and desires that people seek to fulfill through technology. From a humanist and philosophical position, it suggests that the Internet, accessed in so many ways, is not an easy answer to the human desire for connection with others. But in the end, this desire for connection is what frequently drives people to remain tethered to their devices, despite the feelings of dissatisfaction with technology.

The remainder of this paper presents the methods employed in the study, followed by a description of some of the salient findings regarding pushback to connectivity. We then discuss these findings and suggest a typology of motivations and of behaviors that emerged from a review of the literature, and we conclude with some of the implications and possible areas for future research uncovered by this exploratory study.

2   Methods: a literature review on Pushback

After a systematic review, we compiled 73 sources, with roughly a third of them coming from personal blogs and websites, a third from popular media sources, and a third from academic conferences and journals. In an iterative process of clustering and coding, we identified two distinct themes: motivations that drive users to push back, and pushback behaviors, the things people do when pushing back. All sources were then coded along these two themes, which resulted in the emergence of five types of motivations, and five types of behaviors.

For each source, we identified the primary motivation and behavior discussed or exhibited by the user/users as a means of establishing the most pervasive expression of pushback. Some sources discussed both motivations and behaviors, and many discussed two or more motivations and/or behaviors, which means the typologies are not mutually exclusive. This was especially true of the personal testimony of bloggers, who may feel a need to defend their pushback choice with multiple reasons, anticipating judgmental or questioning responses from their readership. In these instances, the primary motivation was often the first one discussed by the blogger. Secondary motivations followed. In research studies, the primary motivations were often less distinct, and in some cases, this was a result of the focus of the research itself. Nevertheless, we centered on the most salient or conclusive results determined by the research studies.

We then returned to each source and established secondary motivations and behaviors, if relevant. Users often express multiple reasons (motivations) and methods (behaviors) of withdrawing or filtering their technology use. We compiled the data arriving at two sets of measurements: one for primary motivation and behavior and a second set of data measuring the frequency of all (primary or secondary) user motivations and behaviors as they appear overall in the coding. An assessment of both primary and secondary motivations and behaviors offers an overall picture that is, in some cases, different than when it is based only on primary drivers. We include this information as part of our data in the "overall" category in each case.

3 Findings: Pushback in Blogs, Popular Press and Academic Research

Personal web pages and blogs are the most common source to find expressions of pushback to connectivity. Ironically, people discontent with aspects of technology use technology to complain about it, though some bloggers, in particular, seem to be very aware of this irony. They address their audience as peers, discussing their experiences in a reflective way, confessing their fears and confusion to those who they presume might share the same concerns. For example, in the March 2012 entry "I Got Rid of My Smartphone" on his blog *The Rich Life*, young engineer Casey Friday writes:

> A lot of people have asked, 'Why don't you just use it less?' I think that's sort of like asking a crack addict, 'Why don't you just put the crack in the closet and do less blow?' I don't even want the option of using a smartphone, because if I have one, I will check it obsessively. It's a simple fact. (Friday, 2012, para. 13).

Personal accounts of disenchantment with technology fall short of a movement, but they represent a grassroots groundswell of activity. Sometimes, they are picked up by the press. Media coverage of changes in social media user behavior highlights studies, surveys and polls, denoting what we call the pushback movement as more than a collection of isolated anecdotes. In "The anti-social network: Life without Facebook" (2012), *CNN.com* reported:

> With a website that boasts 901 million active users and is launching an IPO on Friday, it seems unlikely that once you get on Facebook, you'd ever leave. But deactivating from the social networking site is not that unusual. Close to half of Americans think Facebook is a passing fad, according to the results of a new Associated Press-CNBC poll. More and more people are stepping away from the technological realm and de-teching (para. 4).

Two recent books, *Alone Together* by M.I.T.'s Sherry Turkle (2012) and the Pulitzer Prize finalist *The Shallows* by Nicholas Carr (2011), ask broad ethical questions about how our interaction with the Internet and technology is profoundly shaping our lives, even changing our brains, affecting both the depth of our relationships and the depth of our thinking. References to both works appear frequently in many sources as inspirational work to explore or engage in pushback to connectivity. A recent literature review "Discerning Rejection of Technology" by Murthy and Mani (2013) reports that technological complexity, technology fatigue, switching cost or loss aversion were among the most consistent reasons for user rejection of technology. An assessment of academic research published in peer reviewed conferences and journals reveals three different types of approaches in studies of pushback to connectivity, from the perspectives of information and communication, of psychology, and of youth studies.

As an example of information and communication approaches, in 2010 Jennifer Rauch, an Associate Professor of Journalism and Communication Studies at Long Island University in New York, explained the history of the "slow media" movement in the online journal *Transformations*. Pushback can be seen as a piece of this larger movement that began as an offshoot of a larger central philosophy. In the article, Rauch provides a broad historical framework for seeing the rise of technology resistance. She writes:

> Since the turn of the 21st century, people from diverse walks of life have begun to form a sub-cultural movement whose members reduce their overall time spent with media and/or their use of specific communication technologies in order to constrain the influence of digital devices and networks on their personal, professional, and family lives (Rauch, 2010, para. 1).

Examples of clinical psychology included the idea of "unplugging" as it first became popular in 2010 (Rowan). In January 2011, American Psychological Association sanctioned a series of four research studies which are discussed in the paper, "A Two-Process View of Facebook Use and Relatedness Need-Satisfaction: Disconnection Drives Use, and Connection Rewards It". The researchers conclude that:

> Overall, Facebook use appears to be a positive phenomenon, although perhaps not as positive as face-to-face sociality. However, Facebook may also offer an overly tempting coping device for the lonely, one that feels good but does not actually address underlying feelings of social disconnection in life (Sheldon et al, pp. 773-774).

By 2012, other scholars had started looking at pushback. Foot (2012) explored pushback behaviors in the political/military, organization/work, and personal/relational realms, and suggested the latter are generally motivated by a desire for freedom from being always on, deeper connection in relationships, creating space for kids to be kids, higher attention to signals/noise ratio, and dealing with privacy concerns; some of these motivations were corroborated in our study, as we will see below. Other scholarly work more deeply examined the experiences of younger technology users as well. Previous research had suggested that younger users, "digital natives", people born into the age of everyday technology usage, fared much better in terms of adopting technology, responding positively to it, and managing technology better than their parents, the "digital immigrants", those not raised in a technology-heavy environment (Prensky, 2001, pp.1-6). Not surprisingly, the Kaiser Family Foundation (2010) published the findings of one of the largest U.S. research studies of children 8-18 and their relationships with a variety of media outlets, finding a sharp increase in all media usage.

4   Analysis: Pushback Motivations and Behaviors

After analyzing the different source materials on pushback to connectivity, including blogs, popular press and academic sources, a typology emerged with five types of motivations, and five types of behaviors. Each one is described in more detail below.

4.1   Five Motivations for Pushback

We were surprised to find five remarkably consistent types of motivations that lead people to push back and resist connectivity, according to the literature we examined. While our preliminary reviews had led us to expect that users might indicate a desire to push back against technology as a result of frustration with the operation or repeated learning of new technology, fatigue resulting from this learning, or as a reaction to technology upgrading cost, this was not what we found in the literature. Instead, we found that the motivations for pushback and resistance that appear in the literature were deeply grounded in emotions, as we will see in the five types of motivations that are described below.

One exception to this trend is a recent literature review "Discerning Rejection of Technology" by Murthy and Mani (2013). Their study relies heavily on older academic research and technology trade publications, mostly based on literature published before 2010 and with many references to literature pre-2000. In that study, the authors argue that technological complexity, technology fatigue, switching cost or loss aversion were among the most consistent reasons for user rejection of technology (Murthy & Mani, 2013). Our findings do not corroborate these claims. Instead, we found that the "cost" that users today are most concerned with is the emotional cost of technology. Even in regard to privacy, which is undeniably a legal and civil rights issue for users, the greater user concern about privacy was typically rooted in either

fear of embarrassment or frustration with an inability to control an online identity, more than it was a matter of a fear of piracy, theft or disclosure of legal or financial matters.

Below are brief descriptions of the motivations for pushing back against technology and the technology user behaviors that we found emerging from the literature. These are followed by a chart with their relative frequencies, both as a primary characteristic (exclusive) and as an overall characteristic (non-exclusive).

4.1.1   Emotional dissatisfaction:
Users pushing back because their needs are not being met

Emotional dissatisfaction is often accompanied by disappointment, a result of having had high expectations regarding the technology that were not satisfied. Emotional dissatisfaction can involve bitterness or even anger, as users had adopted a form of technology use with hopeful expectations only to be disillusioned. Some research suggests that this is as much a result of the personality of the user as it is an issue with the technology (i.e., Moore & McElroy, 2011; Krasnova et al, 2013). An example of clear emotional dissatisfaction is expressed in a blog:

> For me, Facebook wasn't even a tool that fosters maintaining real relationships with old friends (and I mean real life friends). For me, it somewhat detracted from the genuine catching up that happened when I actually ran into someone from my past. I love the mystery of running into people, and learning about where they've been directly from them, rather than from a secondary feed of snippets and status updates from their manually-curated Facebook profiles. (Anonymous Associate Project Manager at Google, n.d., para. 5).

In another example of the growing unease and dissatisfaction about communication technology, Susan Conley writes as part of "In Smartphone Addiction: Why I'm Putting the Phone Down:

> So for months I've been feeling stuck -- I've got this snazzy Smartphone, and I should probably use it. And I've also been feeling a little worried -- what is this phone doing to my brain anyway? Why do I have this email compulsion? … And I'd been feeling scattered. I'd been feeling like all my thoughts were light…maybe it's not the Smartphone's fault, but [Nicholas] Carr says that because of these phones, all of us 'stop having opportunities to be alone with our thoughts, something that used to come naturally.' I knew I was going to have to throw my Smartphone away too. (Conley, 2012, para.5-7).

4.1.2   External values:
Pushing back due to political, religious or moral reasons

These people often cite a desire to reconnect with family or adhere to political religious beliefs that encourage selfless behavior and face-to-face interaction with others. Some people cite concern with the politics of the internet, fearful that marketing, consumerism and distraction are enveloping the user. For example:

> 'Everyone now wants to know how to remove themselves from social networks. It has become absolutely clear that our relationships to others are mere points in the aggregation of marketing data. Political campaigns, the sale of commodities, the promotion of entertainment – this is the

outcome of our expression of likes and affinities'. These are the opening words for the Facebook Suicide Bomb Manifesto written by Sean Dockray and first published in the iDC mailing list May 28, 2010. (Karppi, 2011, para. 1).

4.1.3   Taking back control:
Users pushing back to regain control of their time and energy

The concern is primarily about time management and feeling that some technology use, often a specific type of technology, like social media or web surfing, is "stealing" productive time from the user. This is a very frequent secondary motivation (not always the primary one) among technology users. In the web article "LabRat: What Happens When You Unplug from Your Internet Addiction?" Brittany Ancell writes, "While I was constantly searching for ways to become more efficient at work, I was idling away my free time with trivial eBay pursuits and constant email monitoring" (Abcell, n.d., para. 2).

4.1.4   Addiction:
Pushing back as a result of technology addiction

Variations on the term "addiction" are frequent in user testimony. This fear is expressed in both young and old, arguably more often in younger people. "'I clearly am addicted and the dependency is sickening,' said one student in the study. 'I feel like most people these days are in a similar situation, for between having a Blackberry, a laptop, a television, and an iPod, people have become unable to shed their media skin'" (ICMPA, 2010, para. 1).

4.1.5   Privacy:
Users pushing back due to fear about their privacy being violated

Most of all, these technology users fear that they are being monitored and/or their online identities are in jeopardy. In "Why I Left Facebook and Where You Can Find Me Online", blogger Michael W. Dean writes,

> Facebook is starting to act like The State. Instagram, which is owned by Facebook, has updated their "user agreement" to say that they can sell any of your photos and not pay you. And they can use photos of your face. They could sell a photo of you smiling with a gun to an anti-gun campaign. If you're overweight, you could end up in the "before" photo for a weight loss pill. etc.….Facebook is spying on you. Of course these days, you are being spied on everywhere, all the time, by governments and corporations, but Facebook is the worst of the worst. And their privacy settings are useless (2012, para. 4).

It is interesting to note that while emotional dissatisfaction is the most frequently reported reason to push back and resist online connectivity, taking back control over one's time, energy and attention is most frequently reported as a secondary reason for pushback. Privacy, on the other hand, is the least frequently reported reason driving pushback (both as a main driver or as a secondary one).

4.2　Five Pushback Behaviors

Behaviors for pushback and resistance to connectivity were overall more consistent in the literature, with a heavy predominance of one type of behavior: adaptation. Technical solutions, social solutions, and radical solutions (complete withdrawal) were less prevalent; also, a small cluster of pushback behavior is actually a resistance to the pushback, claiming that there is "no problem."

4.2.1　Behavior Adaptation:
Manage technology use to reduce dissatisfaction

Several adaptations to previous behaviors in relation to technology use are displayed in the literature: manage time (only use at specific times), manage applications (for example, drop Facebook and use only email, or vice versa) , digital fasting (for example, an hour/day/week of no media), and dummy accounts (to reduce spam or other unwanted communication). These types of behavioral adaptations are the most frequently cited in the literature. They are directed to responsibly managing technology use in a rational, more efficient, more "mindful" way that creates better life balance. After discussing why he is leaving Facebook, blogger Michael Dean writes where he can be found instead:

> I'm not leaving the Internet. I love the Internet. I've been on it since 1990 (before the World Wide Web), and I'm still going to be around. I just hate Facebook. You can find me on Twitter, here. You can find Freedom Feens, my thrice-weekly podcast with Neema Vedadi, here. You can subscribe to that via RSS or iTunes, and post comments on the site, and I sometimes comment back. You can subscribe to the torrent link here. (Dean, 2012, para. 6).

Some prefer to choose specific times to go online, rather than choosing specific tools, and others prefer to have times set aside *without* media. These behavior adaptations are the most common ways that people deal with their sense of dissatisfaction caused by communication technology and information overload. The following are other, less frequent, forms of coping we found in the literature.

4.2.2　Social Agreement:
Collective decisions to limit media use

An interesting modification of the behavioral adaptation is the social agreement: rather than individual change, a *group* agrees to use communication technology in a different (restricted) way for a certain period of time, often in the context of a gathering. A common example is users agreeing to turn off or put away their phones in a meeting or at a restaurant (and the first one to use it pays the bill!), or having restaurants offer a 5% discount to eat without your phone (Kim, 2012). A new trend in weddings (regular people, not celebrities) is to have parties "unplugged" by having guests check their phones at the door or explicitly request guests to turn them off (Feiler, 2013). More broadly, there are unplugging events such as the National Day of Unplugging, initiated by the Reboot Network, creators of *The Sabbath Manifesto.* Per their website:

> We increasingly miss out on the important moments of our lives as we pass the hours with our noses buried in our iPhones and BlackBerry's, chronicling our every move through Facebook and

Twitter and shielding ourselves from the outside world with the bubble of "silence" that our earphones create. If you recognize that in yourself – or your friends, families or colleagues — join us for the National Day of Unplugging, sign the Unplug pledge and start living a different life: connect with the people in your street, neighborhood and city, have an uninterrupted meal or read a book to your child. (Sabbath Manifesto, 2013, Join Our Unplugging Movement, para. 2).

4.2.3   Tech Solution:
Trusting technology to reduce media use

The tech solution ironically places the control in a technology solution to prevent information overload. Most common is the downgrade of a smart phone to a "dumb" phone. This category also includes parental controls over times or applications, or the use of a "kosher phone" or similar devices programmed to restrict content and times of use. In an increasingly common move, many people have abandoned smart phones for "dumb" phones. The tech solution forces the user to conform to more limited technology. For example, an anonymous blogger expresses the following sentiment in "Why I ditched my smartphone for a "dumbphone:"

> Smartphones are impressive gadgets that allow us to conveniently do many things and interact in ways that were unheard of 10 years ago….it ultimately comes down to my own personal journey and me trying to figure out what I want from life. Sometimes it's good to take a step back and evaluate things from a wider perspective. Am I making the best use of my time and resources? Do I really NEED some of the things I have? When it came to my smartphone I felt like it was something I could – and should – do without. (Anonymous, 2011, Conclusion).

4.2.4   Back to the Woods:
Dropping out from technology altogether

As an extreme reaction, some people are going completely offline, or at least adopting severely limited internet usage, barely minimal phone use, or both. They do it for themselves or for their families, and it sometimes goes unreported precisely because they are dropping out. In one example, a mom takes the family offline:

> With the help of her family therapist, Jindra, a single mom, devised a technology intervention…From that point on, there were no iPads, no computers, no television, and no Wii. Phones are allowed, but only when necessary. The boys did not take to this plan easily… Although he does want his computer time back sooner rather than later, Erik (10 years old) is enjoying this new lifestyle. 'I realized there's a lot of other fun things to do. Going to the park is now nicer than staying inside and sitting in front of the computer for an hour.'(Berman, 2013, para. 3-5,12).

4.2.5   No Problem:
Whatever it takes, just take it all in

Finally, in an opposite reaction, some people are also reacting to pushback, claiming there is nothing wrong with technology and their use of it. These are critical enthusiasts without reservation. In "The Dirty Truth about Digital Fasts" Alexandra Samuel writes for Harvard Business Review: "If longer-term digital fasts can remind you how to integrate offline moments back into your daily life, that's great. But you don't need a digital fast to justify meeting your needs online, and you don't need to unplug in order to justify plugging back in" (Samuel, 2010, para. 12).

5   Discussion and Conclusions

While compiling the sources for this study of the literature, we did not approach the work with preconceived hypotheses. We began by searching for information on behavior and quickly became interested in why pushback was occurring, not just "how". Searches in academic databases, (such as Academic Search Complete, Google Scholar, IEEE Explore, Compendex, and Google) included, but were not limited, to the following terms: digital fasting, technology resistance, unplugging, disconnecting, information overload, information anxiety, slow media, connecting versus disconnecting, digital overload, digital suicide, Facebook suicide, slow spaces, social media diet, digital Sabbath, over-connectedness, techno-stress. After reading through numerous blogs and websites, it was apparent that many of the reasons stated were emotional in nature, not monetary or strictly pragmatic. Emotional dissatisfaction was clearly a very strong motivation, distinct from external values (another motivation) because this motivation results from a failure of need satisfaction as a result of the user's emotional needs not being met, apart from the moral or ethical values of the external value motivation. Similarly, the word "addiction" is heavily bandied about on web pages and blogs. Control was another repeatedly important issue reported by users. As these motivations were identified, this warranted a wider scholarly search for research papers and studies that encompass both technology resistance and user emotional response.

The following are some areas that may warrant additional research:

5.1   Possible Correlations between Pushback Motivations and Behaviors

What kinds of motivations drive different types of pushback behaviors? While searching websites, blogs, and newspaper reporting, the common user behaviors defined by social agreement, adoption of tech. solutions, and behavioral adaptation became apparent. A daughter who signs a contract with her father to accept $200 in exchange for giving up her smart phone has entered into more of a social agreement, than a legal one, to limit her technology use (Gross, 2013). In "Why I ditched my smartphone for a 'dumbphone'", the user abandons a smart phone for a "dumber" flip phone and is obviously exercising a technology switching behavior, ie. a "tech." solution (Anonymous, 2011). Deactivating a Facebook account, but still using other technology is clearly a type of limited withdrawal, a means of controlling technology by limiting the type of technology used regularly, in other words, a form of behavior adaptation (Jung, 2013).

5.2   Paranoia and Privacy

We were also surprised by the lack of concern with privacy. Both as a primary issue and as a secondary issue, it was not a significant concern amongst users in the literature. Addiction (or fear of addiction) and taking control as a motivation (which revolves around feeling of wasting time) were strong secondary issues for many users. In fact, concern about wasting time was as strong a concern as emotional dissatisfaction, though emotional dissatisfaction was expressed as a primary concern more often. It is clear from the breakdown of user behavior that few people are interested in forsaking technology altogether (Back to the Woods) or using technology to limit their usage; for example, dumbing down the phone or disabling the laptop's internet capabilities. Celebrated author Jonathan Franzen has reportedly permanently disabled his computer so that he cannot access the internet while writing (Grossman, 2010, p. 2). From our research, this is an extreme and uncommon coping behavior. But the generalized lack of concern for privacy, at a

time when privacy is all but disappearing, is most troubling. In the words of New York Times columnist Ross Douthat, " 'Abandon all privacy, ye who enter here' might as well be stamped on every smartphone and emblazoned on every social media log-in page (…) the Internet, in effect *is* a surveillance state" (Douthat, 2013). How will awareness of privacy evolve and shape people's uses of technology and social media?

5.3   Rational Behavior

Behavior adaptation is the way that most technology users are managing their technology use when they are troubled by any of the five motivations identified in this literature review. That said, this is a broad category that encompasses a number of technology usage strategies. Essentially, this indicates that users are technology-friendly overall, but have decided to withdraw or limit their use of one or more types of technology. Given the modern inundation of technology options, a pushback to reclaim time, or avoid unfulfilling experiences might not be surprising. Response to technology that is only partially satisfying involves rational management of technology by: limiting usage, scheduling usage to limit addictive or compulsive behavior, or forsaking some technology altogether while still using other technology that provides greater satisfaction. Therefore, this is the predominant behavior, that of adaptation. What are the different forms of behavioral adaptation that people are exhibiting, as they learn to cope with communication technologies and information overload? What are the cultural and design implications of these shifts?

Ever-Wasers might easily argue that the new technology is no more a problem than TV was when it came out and critics railed against the waste of time and mindlessness of the new entertainment. The difference is that entertainment is only a small part of the new landscape. Social media, smartphones, texting, video calling, blogging, emailing and even YouTube videos are meant to make it so much easier to share, connect, and create with other human beings than ever before. Instead, technology users are expressing a sense of loss. Virtual connection is not turning out to be as rewarding as so many of us thought it would be, and a growing number of people are saying "better less."

Having avoided online distractions for a full year away from the Internet, technology writer Paul Miller concluded this in his blog post "I'm still here: back online after a year without the internet":

> I'd read enough blog posts and magazine articles and books about how the internet makes us lonely, or stupid, or lonely and stupid, that I'd begun to believe them. I wanted to figure out what the internet was "doing to me," so I could fight back. But the internet isn't an individual pursuit, it's something we do with each other. The internet is where people are. (Miller, 2013 para. 53).

If technology both helps us to connect, and at the same time drives us apart, we need to learn to manage technology, and know when to push back. Longing for connection to people is what makes it difficult for users to push back on technology, what brings them back. But technology seems to overpromise and underdeliver in this respect. Nonetheless, it seems Pushback may also have a pushback movement.

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