

Continuous Partial Attention and the Demise of Discretionary Time by Peter W. Pruyn

de·mise, n.: *the end of something that used to exist, especially when it happens slowly and predictably.*

Habit, Technology and Workload



Leaving work at the end of the day, I turn the corner to the long front hallway of my office building. Ahead of me I see a short, middle-aged woman carrying a stack of three medium-sized boxes in both hands. Farther down the hallway in front of her are the pair of large metal fire doors through which one must pass on the way into and out of the building. While the doors can be pushed open from either side, they are heavy enough that, even at 6'1", I frequently turn sideways and ram into them with my shoulder rather

than stiff-arm them open as I walk through them every day.

Just before she reaches the double doors, I hear the woman's cell phone ring. She shifts the boxes awkwardly to one arm and digs for the phone in her purse with the other. Precariously balancing the boxes, she answers the call while continuing to approach the doors. I consider rushing forward to open them for her, but she's too far ahead. She struggles to open the fire doors by backing into them—while carrying the boxes while talking on her cell phone. She manages to make it through without dropping anything.

Let's think about this uneventful situation for a moment.

What made the act of opening the doors more difficult than usual was that she did so while not only carrying the boxes but while simultaneously taking the call. By either momentarily standing still, resting the boxes on the long counter than happened to run the length of the hallway, or letting the call go to voicemail, she could have made that moment much easier for herself.

So why didn't she?

Perhaps she didn't stop because she was in a hurry. So then why not let the incoming call go to voice mail? Perhaps she was expecting an important call. So why not stop and put the boxes down for a moment? Or perhaps—Dr. Watson might posit—the important call was from the person to whom she was late delivering the boxes! So...why not put the boxes down and use the opportunity to update them on her arrival time?

I see this situation as a marvelous confluence of unremarkable habits. The habits in question might be characterized as:

Habit #1: When you reach a door, walk through it.

Habit #2: When carrying something, put it down when you reach its destination.

Habit #3: When the phone rings, answer it.

To be sure, nothing untoward came of this moment. She successfully negotiated the

doors without dropping anything. Nevertheless, the ingredients of this moment—habit, technology, and workload—can have far more severe consequences when our responsibilities involve more than cardboard.

In the documentary film *An Inconvenient Truth*, Al Gore offers one explanation as to why society has been so slow to address the issue of climate change. He describes the result of being creatures of habit who use rapidly advancing technology with the following two equations:

old technology + old habits = predictable consequences
new technology + old habits = dramatically altered consequences

For example, as petroleum-based products proliferate while our habits of consuming them go unchecked, we can harm something as large as a planet. Could there be similar unintended consequences from the proliferation of personal communications technologies? Is our attention becoming polluted, too?

A prerequisite for choice is awareness. What does it take for any of us to have the awareness that our behavior is not only a function of habit, but that we might benefit from revising that habit? At least in part, it takes attention.

The Limits of Multi-Tasking

Walking down the street recently I was struck by the fact that the vast majority of people I passed were talking on their cell phones. What's it like to talk with someone as they are navigating a crowd? How often have you called a friend and partway through the conversation realized that they were paying attention to something other than you? You might notice longer pauses in their responses, or hear "Uh-huh" when you expect a "Yes" or "No".

I wondered out loud to a neighbor recently how the younger generation can get their homework done while watching television. She immediately corrected me: "You mean: while watching television, listening to their iPod, surfing the internet, and text-messaging on their cell phone." She was not exaggerating. Perhaps this simply means that her children are in-training to be the Olympic multi-taskers that our modern world demands? While multi-tasking may have its place, science does not support the idea that it is always prudent.

Researchers have found that driving while using a cell phone measurably impairs driver reaction time—even using a hands-free device. Despite the popular perception that younger people are better at multi-taking, one researcher concluded that, "If you put a 20-year-old driver behind the wheel with a cell phone, his reaction times are the same as a 70-year-old driver."¹

Further research by neuroscientists, psychologists and management professors reveals the limits of our ability to multi-task.² Despite the amazing capacity of the human brain, "a core limitation is an inability to concentrate on two things at once," observed one neuroscientist quoted in the *New York Times*. Using magnetic resonance imaging to pinpoint the bottleneck in the brain, researchers can actually measure how much efficiency is lost when trying to handle two tasks at once. Studies show that distractions such as most songs with lyrics, instant messaging, and television hamper performance:

"Multitasking is going to slow you down, increasing the chances of mistakes," said David E. Meyer, a cognitive scientist and director of the Brain, Cognition and Action Laboratory at the

University of Michigan. “Disruptions and interruptions are a bad deal from the standpoint of our ability to process information....”

The insidious part is that *we don't notice our own impairment*: “We are under the impression that we have this brain that can do more than it often can....” The penalty is not merely our quality of attention while executing tasks but a hampered ability to re-focus for the next task. After conducting such studies, some researchers modified their own behavior to commit to not using their cell phone while driving and only checking their email once an hour.

What? Checking email only once an hour? Doesn't that sabotage the whole point of having high-speed internet in the first place?

Continuous Partial Attention

“The nature of the brain is such that we see what we have seen before, and what we have a name for. We are blind to things which have not been properly introduced.”

— Wolfgang Langewiesche, Pilot/Author

In 1998, Linda Stone, a former Apple and Microsoft executive, coined a phrase that gives a name to the crux of our technology-enabled addiction to information: “continuous partial attention.”³

Through the miniaturization and proliferation of wireless technologies, we now have the ability to become “a node on the network” in order “not to miss anything.” With the world continually at our fingertips, the internet provides an opportunity for the perpetual instant gratification of information, and, conversely, a perpetual lack of delaying gratification.

Linda describes one consequence of becoming habituated to drinking from this fire hose of information as “an artificial sense of constant crisis.”⁴ And since most of these crises are some place else, “We [are] everywhere except where we actually [are] physically.” A friend of mine has labeled this lifestyle “adrenaline soup”.

I reflect on how the evening news over my lifetime has degenerated into a global collage of every crisis that has popped up around the world since yesterday. Do we really need to know about all of them?

Let's contrast the act of using a Blackberry (or “Crackberry”, as some call them) on the subway for a moment with its mental opposite. What is going on in the mind of, say, an athlete tracking a ball, a surgeon incising with a scalpel, or an artist staring at a blank canvas in the natural light of her silent studio, brush poised? What can we learn from these moments of unadulterated focus? My sense is that such mental states are the source of our greatest creativity. As the author Bill Isaacs once wrote, “Truth is like a deer that comes to stand at edge of the woods to drink. If you make too much noise, it runs away. How quiet are you?”⁵

What quality of attention is required to effectively balance not cardboard boxes, but, say, family relationships? How does being habituated to multi-tasking affect one's response to a spouse coming home from work upset? What if the solution to the greatest dilemma of your marriage is only one brain synapse away—but that synapse is busy watching TV?

On a community level, could the overload of perpetual crisis management hinder civic engagement in a democracy or even the quality of decision-making at the national level? Omar

Bradley surely could not have foreseen our technological dilemmas, but his counsel from 1948 seems no less appropriate: “It is time that we steered by the stars, not by the lights of each passing ship.” Sixty years later, Linda Stone elaborates seamlessly:

“It’s crucial for CEOs to be intentional about breaking free from continuous partial attention in order to get their bearings. Some of today’s business books suggest that speed is the answer to today’s business challenges. Pausing to reflect, focus, think a problem through; and then taking steady steps forward in an intentional direction is really the key.”⁶

Discretionary Time

We are all familiar with the phrase “discretionary income”, income that is left over after one’s basic needs have been met, money that you have choice in deciding how to spend. One might propose the analogue of “discretionary time”, the adult’s version of a “free period” during our day.⁷ I fear our discretionary time is eroding.

Indications of this trend are subtle. How often do friends and neighbors “just drop by” while “passing through”? How often do we have dinner parties any more? How many of your friends still send Christmas cards? When you telephone, how often do you get voicemail as opposed to an answer? When was the last time someone spontaneously presented you with something they had baked just for you? When you ask someone, “How are you?” how often is the traditional “Fine!” replaced with “Busy!”—busy enough that only 14% of Americans take vacations of two weeks or longer anymore.⁸

For many, the act of reading printed media is a function of discretionary time. One metric for the erosion of reading time can be seen in the dilution of national newspapers. Since the introduction of *USA Today*, the number of major investigative newspapers has shrunk to only 3 or 4, to now be replaced by the likes of the meager *Metro* and, even more recently, *Boston Now*, which can include reader-submitted content from the day before via their website. One wonders how many staff reporters are standing behind the curtain.

One can now also observe reactions to these trends. One CEO asks managers to leave cell phones and PDAs at the conference room door as a pre-emptive measure against the so-called “Blackberry prayer” during meetings. Some businesses are experimenting with one “No email Day” per week to encourage more personal interaction. If a recent unscheduled network outage is any indication, forced to leave their computers, employees actually do start talking to one another.

As discretionary time decreases, socializing becomes more a function of deliberate planning rather than spontaneity. A secular multi-tasking population can suffer from “church envy”: being jealous of those with regular community-oriented social interaction. Book clubs are one attempt to fill that void.

Meanwhile, other rising trends in society appear to include: massage, yoga, meditation, and Buddhism. One sociologist characterizes these trends as “the immense movement toward social therapy that seeks to relieve society’s aches and pains.”^{9, 10}

Wouldn’t our lives be more fulfilling if we built incremental relaxation and reflection into our lives rather than relegating such practices to a self-contained activity a few times a week—if at all? Such “healing arts” are at risk of being band aids, enabling unsustainable lifestyles—“cognitive carpal tunnel syndrome”—for ourselves and our children.

A local environmental activist I know helps homeowners conserve energy by utilizing a variety of household efficiencies. When asked what behaviors people are most reluctant to change for the sake of conservation, however, at the top of the list is taking shorter showers: “A number of people feel like their shower time is a rare spot of quiet and relaxation in a busy life and just don’t want to give their lingering showers up.”

I know a middle manager who commutes an hour to work each way. When asked why she bucks the trend of her peers by choosing not to own a Blackberry, she says, “I want that time at the red light to be mine!”

Is that what our discretionary time has shrunk to, the duration of showers and red lights?

Awareness at the Counter

As I wait at the counter of my local photocopy shop, a well-dressed young woman walks into the store talking on her cell phone. She holds out two documents to the owner of the store and asks her to make copies of them.

A minute later, the owner returns with the copies and says, “Seventy-four cents, please.” The young woman, still on her cell phone, reaches into her purse and hands the owner a credit card. The owner looks at the card in disbelief.

She says to the young woman, “I’m not going to run a credit card for seventy-four cents.” The young woman looks perplexed. She says into her cell phone, “Just a second...,” and says to the owner, “What?” The owner, with simmering frustration, slowly repeats herself: “*I’m not going to run a credit card for seventy-four cents.*”

Now understanding but still holding the cell phone to her ear, the young woman begins to rummage through her purse for some cash. She comes up empty-handed.

“I don’t have any cash,” she reports matter-of-factly.

“Well, why don’t you come back when you have some,” the owner declares definitively and hands the woman’s original documents back to her. The young woman, unfazed, returns to her cell phone conversation, zips up her purse, and leaves the store.

As the door closes behind her, the owner stares after her a moment and then exclaims to no one in particular, “Have we lost something? Have we *lost something?*”

Seeding the Conversation

“That which we do not bring to consciousness appears in our lives as fate.”

— Carl Jung

I am no less human than anyone else, no less susceptible to the allure of “continuous partial attention”. My mouse-wrist hurts, and I had to turn off my “You’ve got Mail” beep multiple times in the course of writing this.

No, I don’t want to go back to horses and buggies. We can’t “go back”.

I acknowledge the wonders of our technology: unparalleled access and ability to make connections that would otherwise be highly unlikely. For example, the internet allowed me to

find the references for writing this in the blink of an eye and to share drafts with others who contributed even more. I'm just concerned that the price we are paying for more personal connections in our lives is that each connection is of less depth.

I want us to unplug, stop, and think: what are the long-term consequences of the trio of habit, technology and workload? Where will our future athletes, surgeons, and artists come from if our children have no practice with the pure attention upon which such creative practices rely? My intention is to seed this conversation, not provide “the” answer. But I think a piece of the puzzle will be managing these technologies out of awareness rather than habit.

To be sure, socio-economic status, lifestyle, and locale all influence these dynamics. When I introduced the phrase “continuous partial attention” to the father of a 2 year-old, he said, “That’s being a parent.” Parenting duties notwithstanding, these are not merely the concerns of alarmists. Experts in child development are mobilizing against the demise of reading just as the toy industry is gearing up for Christmas with computers for toddlers.^{11, 12}

“Have we lost something?”

I consider this the single most important issue of our time. Many consider global warming to be, but I see the habit of continuous partial attention as more significant because it is the “meta problem”: it affects how well we go about solving all problems—if we even recognize them at all.

The amount of discretionary time in our lives limits the quality of our attention; the quality of our attention limits the quality of our awareness; the quality of our awareness limits the possibility of evolving our habits.

Without the possibility of attention, we risk becoming prisoners of our own making.

“There is more to life than increasing its speed.” — Gandhi

Peter Pruyn is a member of the Organizational Development and Training Department at Tufts University. He lives in Cambridge, MA and can be reached at pwp [at] airmail [dot] net.

**Readers Comment on:
Continuous Partial Attention and the Demise of Discretionary Time**

Photo (c) Carsten Reisinger



“Unbelievable article. I loved it and have been hungry for someone to put it in writing.... Please let me know when the article is going to be published and when I can begin to share it with family and friends. Thanks for a wonderful piece of work.” — A Non-Profit Consortium Director

“I cried a little as I read your fine article....your article was a piece of Destiny to me.” — An Executive Coach

“...draws you right in.” — A Director of Health Services

“...wonderful...compelling.” — An Executive Coach

“I think it describes my life and the life of so many of my colleagues and beyond. Your insight is amazing and right on. It's embarrassing to admit how much of this article I could directly identify with.” — A Middle Manager

“...thoroughly enjoyed...” — Internet Entrepreneur and Social Activist

“Your insightful musings have captured the paradox of our times. Although we are consumers of more and more technology, we seem to have less and less time to connect deeply with one another.” — An Accident Investigator and Safety Instructor

“I can't agree more with the sentiments you express here. I do hope you get this published. It deserves to be.” — A Professor of Child Development, Neuroscientist and Author

“....beautifully written.” — A Clinical Psychologist

“It was a pleasure reading your paper. I read the paper right after I had finished a week of paring down my 1000+ emails in my Inbox to below 100. So very timely and riveting given my own circumstances, and, I assume, the circumstances of most of us in the modern world....thanks for introducing to me this great concept of continuous partial attention—wow, that's exactly what I live. I think you've made a creative connection of this phenomenon to the depletion of discretionary time. I really enjoyed it and learned a lot from it.” — A Health Sciences Department Chair

“YES, it's all true!.... What does it look like to just be home, together?” — An Executive Coach and Mother of Three

“It makes a very wise point and is well written. I hope you can get it published.” — A Harvard Dean and Professor of Sociology

“What's it like to grow up never knowing what silence is?” — The Owner of a Photocopy Store

Endnotes:

¹ Strayer, D. L. and Drews, F. A. (2004). “*Profiles in distraction: Effects of cell phone conversations on younger and older drivers,*” *Human Factors*, 46, 640-50.
<http://www.psych.utah.edu/AppliedCognitionLab/StrayerHFES04.pdf>.

² Lohr, Steve. “*Slow Down, Brave Multitasker, and Don’t Read This in Traffic*”, *New York Times*, March 25, 2007.
<http://www.nytimes.com/2007/03/25/business/25multi.html?ex=1332475200&en=f2956114b1265d9b&ei=5090>.

³ Stone, Linda. “*Linda Stone's Thoughts on Attention and Specifically, Continuous Partial Attention,*” <http://continuouspartialattention.jot.com/WikiHome>.

⁴ Torkington, Nat. *O’Reilly Radar*, “*Attention: The Real Aphrodisiac / ETech Keynote by Linda Stone*”, 7 March 2006. http://radar.oreilly.com/archives/2006/03/etech_linda_stone_1.html.

⁵ Isaacs, William. *Dialogue and the Art of Thinking Together* (New York: Random House, 1999), p. 60.

⁶ Maxwell, Jill Hecht. *Inc. Magazine*, “*Stop the Net, I Want to Get Off*”, January, 2002.
http://www.inc.com/magazine/20020101/23805_pagen_2.html.

⁷ Gore, Al. *The Assault on Reason* (New York: Penguin, 2007), p. 33.

⁸ Bronson, Po. “*Just Sit Back and Relax!*”, *Time Magazine*, June 18, 2006.
<http://www.time.com/time/printout/0,8816,1205369,00.html>.

⁹ de Vulpian, Alain. “*How Can We Leverage Complexity and Learn Together?*”, Keynote Address, Global Forum, Society for Organizational Learning, Vienna, September, 2005.

¹⁰ de Vulpian, Alain. “*Listening to Ordinary People: The Process of Civilization on the Way to a New Society*”, *Reflections*, Volume 6, Number 6.
http://www.solonline.org/attachmentview!/490278/8900843/reflections_6.6-7.pdf.

¹¹ National Endowment for the Arts, “*To Read or Not To Read: A Question of National Consequence*”, Research Report #47, November 2007.
<http://www.arts.gov/research/ToRead.pdf>.

¹² Richtel, Matt and Brad Stone, “*For Toddlers, Toy of Choice Is Tech Device,*” *New York Times*, November 29, 2007.
<http://www.nytimes.com/2007/11/29/technology/29techtoys.html?ref=personaltech>.