NETWORK News
June 2008 • Volume 10(6)
THE PREMIER ONLINE DESTINATION FOR WORK AND FAMILY INFORMATION
SLOAN WORK AND FAMILY RESEARCH NETWORK
BOSTON COLLEGE

Conversations with the Experts

Distracted: The Erosion of Attention

Maggie Jackson

Bio: Maggie Jackson is an award-winning author and journalist known for her penetrating coverage of U.S. social issues. She writes the popular "Balancing Acts" column (http://www.boston.com/jobs/news/archive/balance/) in the Sunday *Boston Globe*, and her work has also appeared in *The New York Times*, *Gastronomica* and on National Public Radio.

Her latest book, *Distracted: The Erosion of Attention and the Coming Dark Age*, details the steep costs of our current epidemic deficits of attention, while revealing the astonishing scientific discoveries that can help us rekindle our powers of focus in a world of speed and overload.

Her acclaimed first book, *What's Happening to Home? Balancing Work, Life and Refuge in the Information Age*, examined the loss of home as a refuge.

A former foreign correspondent for The Associated Press in Tokyo and London, Jackson has won numerous awards for her coverage of work-life issues, including the Media Award from the Work-Life Council of the Conference Board.

In 2005-2006, she was a journalism fellow in child and family policy at the University of Maryland. A graduate of Yale University and the London School of Economics with highest honors, she lives in New York city with her family.

An Interview with Maggie Jackson

By Judi Casey and Karen Corday

Casey: What precipitated your interest in this topic area?

Jackson: I've been writing about work-life issues for over a decade now, and have always tried to broadly define the term and look at some of the roots of how we are living and operating and the resulting problems and issues. Over the few years, I have been intrigued by the impact of technology on our lives. That led me to the subject of attention; a number of years ago, I began wondering why the United States, as an affluent, super-power culture, was so often saddled with overload and split focus. We didn't seem to be using our technological tools as wisely as we could; they create freedom and flexibility, but they also create as many problems as they solved. I began to read about the history of technologies during the Industrial Age. I read about the histories of the telegraph, the bicycle, and the cinema, among others, and I looked for clues as to how we could use our new gadgets. Eventually, I realized that that era was not a separate revolution, but that we were dealing with a continuum of changes in time, space, and place that began 150 years ago. The thread of so much of this work on time and space was attention; I realized that attention was crucial to understanding how we were operating in this new environment and the key to dealing with technology, overload, speed, and split focus. It's a very important but overlooked subject in society. The same is true of the subject of "home," which was the subject of my first book.

Casey: Do you mean that people are paying more attention to work?

Jackson: "Home" and "attention" are arenas of life that are seen as very important, but we often don't really understand them or know what we want out of them. They are both intangible, difficult "mysteries of life." Home is discussed in the United States as a Hallmark-card idea, a decorating idea, or a political football; in my first book, I argued that we needed to update our notion of home in order to balance work and home. In this book,

I'm arguing that we need to update our notions of attention; we need to understand it and make attention front and center as a concept we can use to thrive in the digital age.

Casey: What is your definition of attention, and why is it so important?

Jackson: If you ask a neuroscientist that question, they immediately want to talk about attention in the plural; it's not seen as one single thing, which is very telling. In some ways, attention can't be defined with one definition. The psychologist William James said, "attention implies a withdrawal from some things in order to deal effectively with other, and is a condition which has a real opposite in the confused, dazed, scatterbrained state which in French is called distraction and Zerstreutheit in German." That's one way to describe attention, but it doesn't really define it. The word "attention" derives from the Latin "ad" and "tendere," which means "to stretch towards." This implies an effort and intentionality, but is still not a complete definition.

Neuroscience has only uncovered the enigma of attention over the last ten or twenty years. Attention is the set of skills that people need in relation to their environments in order to survive. We need to be aware in order to react to the novel, like a tiger or a storm. We also need to focus on our goals, such as the apple or the rabbit, or whatever we need to get for dinner tonight. There's a constant see-saw between reacting and focusing. Finally, in evolutionary terms, the pre-frontal cortex is the most recent part of the human brain to develop. The pre-frontal cortex is the seat of judgment, decision-making, and conscience. Attention is three sets of skills: focus, awareness, and judgment. Attention is akin to an organ system; scientists now compare it to our circulatory or digestive systems in that the brain and the body work in alignment to carry out this set of skills. Attention's importance is just beginning to be unveiled; we need to make use of this knowledge.

Casey: How did we come to be what you call an "attention deficit culture?"

Jackson: We are living in a time in which we're not using our attentional skills as well as we could. In some ways, this is connected to the environment that we now have; because of the technological revolution that's been going on for the last 150 years, we experience and sense time, space, and place in very different ways. In a nutshell, in the Medieval era, we began to mark time with clocks. In the Industrial era, we suddenly had the power to seemingly control time thanks to the cinema, the phonograph, the jet, the telegraph, and other inventions that seemed to make distances collapse. Now, we're entering a new phase of layering time—feeling as if we can have two moments in one. This is what multi-tasking and continuous partial attentions are about. We have stretched and pushed time to its limits, believing to be entirely in control. There's a cultural geographer, Yi-Fu Tuan, who describes place as a "realm of pause," while space is a "canvas of movement." We are choosing space as the way we operate; we inhabit a global universe and are neo-nomadic in many ways. We talk about "hot-desking," "surfing," and "grazing"—the list goes on and on. In addition, we add alternative universes—the virtual that we often see as real. Second Life, the alternative fantasy game, is a realm in which real companies are holding real interviews using avatars. Real money exchanges hands in virtual worlds. I would argue that people, particularly young people, take those virtual relations and worlds as an extension of life on Earth.

All of this change in how we deal with time, space, and place creates a world of "shifting sands" in the words of sociologist Zygmunt Bauman. We live in a world of flux, and that changes how we pay attention. Our awareness is a little more blurry and our focus is split and diffused. It's not just a matter of "blame the Blackberry" or blaming ourselves and the fact that we're working too hard or too long. It's really a wholesale quantum change in our society, culture, and habits. Of course, the way in which we live also gives us great positive rewards as well—freedom, mobility, the idea that careers are fluid, the flattening of hierarchies. The costs are diffusion and fragmentation, and that undermine our abilities to relate and think deeply.

Casey: What are some of the other negative consequences?

Jackson: Those are the two main points. All of what I'm talking about in the book—the difficulty of teaching kids critical thinking, the seeming inability of a lot of American kids to problem-solve, the difficulties families have in relating—all boils down to thinking deeply and relating deeply. When a surveillance-based society actually turns into a surveillance-based family, this squeezes out trust. Families are often not relating deeply; they related via snippets, glimpses, and even evidence-based records, such as a transcript of a child's instant message conversation.

Casey: Can you talk a bit about multitasking and its downsides? This was originally seen as something that would help us do more.

Jackson: More and more research shows that multitasking is costly. It, of course, depends on the task—

someone can fold laundry and watch television and still understand the program, for instance. It also depends on the amount of practice someone has with particular tasks. The bottom line, though, is that people will never do two things, especially two complex things, as well if they are doing them both at once. Sure, listening to music and reading a book is dual-tasking, as it's called in experimental psychology—doing two things at once. However, when we talk about multi-tasking, we're usually talking about toggling back and forth between two tasks, or "task switching." For example, if someone is reading an e-mail while sitting in on a conference call, he or she is blocking out the conference call in order to read the e-mail and going back and forth between the two tasks very quickly. When we do this, our brains have to focus on the new activity—here, reading the e-mail—and remember the cognitive rules and the contextual memory related to the e-mail. We have to warm up our brain to get into the e-mail, and going back to the conference call then elicits a whole new set of cognitive rules. The "switch costs" make us more likely to make errors, and some research shows we have less deep learning experiences. This point should be especially important to parents who may watch their child multitasking and assume that technological savvy is equated to good learning skills. They are two different skills. One study at UCLA that showed that teenagers could learn when they were multitasking, but their learning wasn't fluid or deep; they couldn't call on it in innovative or creative ways.

We all know we shouldn't, for instance, talk on the phone and drive, even though 20% of Americans text message while driving, and 40% of Generation Y (ages 18-27) does so. The ill-effects of multitasking go beyond "don't text and drive." There has been research on interruptions at work; interruptions are a kind of multitasking. An interruption is the pivot point between two tasks. Knowledge workers, on average, get interrupted every three minutes, all day long. There are higher levels of frustration and stress that result from interruptions. A study from the Families and Work Institute shows that a third of workers feel they can't reflect on or process the work they do because they're so distracted by interruptions all day. The Harvard Business Review had a study a few years ago that showed that people can't be creative under time pressure unless they are focused. If they're diffused or distracted, they can't be creative.

Distraction and being distracted are slippery concepts, because a distraction is in the eye of the beholder. I can be distracted by the screen, or focused on the screen and distracted by my daughter. The distraction is whatever pulls you away from your primary goal. Distraction in and of itself is not bad; in the medical world, distraction is one of the main ways in which pain can be alleviated. Distraction, for me, is shorthand for not using our attentional skills well. There are no specific distractions that are categorically bad. I'm also not arguing that technology itself is bad; I think it's great! I'm arguing that we're off-kilter; the balance has flung too far towards these shallower means of communication and thought. We need to wrestle ourselves back so we don't lose the capability to understand what it is to think deeply.

Casey: What are some of the parallels between our lives today and the Dark Ages?

Jackson: When I talk about the Dark Ages, I'm talking about plural dark ages across history, not just the Medieval Dark Ages. A dark age is a turning point in history, and it is not a one-dimensional time of negative occurrences and lack of progress. The historian Thomas Cahill calls these times "hinges of history," which to me suggests a crossroads at which a civilization can falter or crumble or have tremendous innovation. Some people argue that because of declining literacy during the Medieval Dark Ages, there were amazing technological gains. People invented eyeglasses, the fireplace, the windmill, the stirrup, the rudder, the compass, and the mechanical clock. In the Greek Dark Age, which lasted about 500 years, there were amazing shipping and tactical military advances, as well as the cultivation of the olive as a food.

We can do amazing things with our machines, and I argue that we need to look at a possible new definition of a dark age. There are big questions about the role of literacy in our world, and I'm trying to say that we need to wake up to the idea that our current ways of living are undermining our attention and our ability to think deeply. This might create new forms of ignorance. It's one thing to be ignorant because of a lack of information; it's another to be ignorant when we're surrounded by information, but we don't have the will to tap into it. If we think that what comes up first on Google is knowledge, then I argue that we as a civilization are slipping into a dark age. If the thinnest type of person-to-person contact is what we prefer, this is another sign of a dark age. People are substituting mechanistic forms of relationships for true caring. Part of my book is about patterning ourselves after machines, which is another way of life that came in with the Industrial Age. We're trying to pattern ourselves after the efficiencies and analytic problem solving capabilities of machines, which mean we are losing other innovating, creative ways of being that are human and can't be mechanistic.

Casey: When you say "ignorance," do you mean that people can't access the information that's available because they're too distracted and so they're looking for shortcuts? Are we missing out on what's out there because we can't find a way to get to it?

Jackson: I think that's true, yes. It's impossible to find direct correlations, and it's a very complicated picture

made up of our education system, new technologies, how we get information, how we define reading—these are complex topics. I do think there are red flags in our environment to which we should pay attention. For example, the Educational Testing Service has a new national exam, the iSkills Assessment, which could be called the SAT of information literacy. The first couple of years that college students took the test, they scored middling to poor. They couldn't evaluate or assess information on the web, they couldn't evaluate the authenticity of web sites…there were really poor results. We need to understand how to use these tools, and we need the willpower not to take the first answer that comes our way. This is difficult in an information overload; 60 percent of Americans don't know that there are paid and unpaid forms of content on the web. The web is automatically seen as an authentic virtual world. I think a lot of this understanding will come in time, but only if we see and accept the risks in not improving our understanding.

On OECD tests of problem solving, American 15-year-olds score 24th out of 29 developed countries. That's a really poor showing, and problem solving is one of the skills we need in going forward. I think we have a lot to worry about.

Casey: Why are other countries' kids doing so much better? Do they not have the same information overload and multitasking habits?

Jackson: That's a good question; I don't know. That question would involve a look into educational systems, how computers are used in the classroom, and home-based attitudes towards technology. It is an interesting question; evaluations of educational systems are out of the realm of my book, but I am trying to argue that attention is the gatekeeper to depth, learning, and relating, and a lack of attention is a risk.

Casey: What can we do to avert a dark age?

Jackson: In the book I call for a renaissance of attention. I am optimistic; I think we're on the cusp of slipping in many ways, but I think we can avert a dark age. Just understanding the concept of attention is important in learning that cognitive awareness is part of the essence of being a good student. If we can start a conversation about what one psychologist calls a "language of attention," that will help. I talked to a psychiatrist named Leanne Tamm in Dallas, who is teaching children at risk for ADHD and their families how to talk about attention. She says, and it's very true, that we tell kids to pay attention, but we don't really say what it is and how to do it. People need to know the difference between being aware of one's environment and then focusing on a particular task.

Different periods in history and different societies have had various dominant types of attention. The Industrial Age admired focus and concentration, which in part came from the factory system of work, an unending, unbroken concentration that workers were expected to have. Now we need a more nimble, diffused attention if we're working collectively or dealing with multiple sources of information, and that's fine, but we need to be aware of attention and have different arrows in our attentional quivers, so to speak. Some companies are developing "white space," which is usually an unwired room that is meant to be calming; people can go there and think or brainstorm, without the fear of interruption. IBM has "Think Fridays," which is a temporal white space; no meetings or conference calls are scheduled for the day, and no one is expected to send or check their e-mail. These are interesting ways to create pockets of focused attention.

All of these concepts are crucial for parents. Dan Anderson, a psychology professor at the University of Massachusetts/Amherst is doing research now on background television. Half of American homes with kids under six have the television on all or most of the time. This scientist's work links this practice to symptomatic attentional deficits. It doesn't create a kid with ADHD, but it makes a kid act like he or she has ADHD. The number of parent-child interactions under those circumstances declines by 25 percent; children plays with toys for shorter periods of time and hops from toy to toy. Constant exposure to television is a facet of American life; airports, elevators, and taxi cabs all show television all the time. This is an environmental issue similar to the green movement; we need to have an attentional green movement and change the environment. We can do a lot at work and at home to change how this is unfolding.

Casey: Do you have specific suggestions for our readers?

Jackson: Yes, I have a few suggestions. We should try and adopt attention as an area for work-life. How we pay attention affects how we do our work, how stressed we are, how good our work is, and so on. Pay attention within your organization to the environment you inhabit. For instance, if everyone needs to go home to get work done, it may be time to rethink the work environment. Steps may be taken to modify e-mail

behavior or establish signals that show that a person is working and is not to be interrupted. An employee survey can be surveyed on how overloaded they feel, how many interruptions they handle per hour…some sort of loose spot-check can be very helpful.

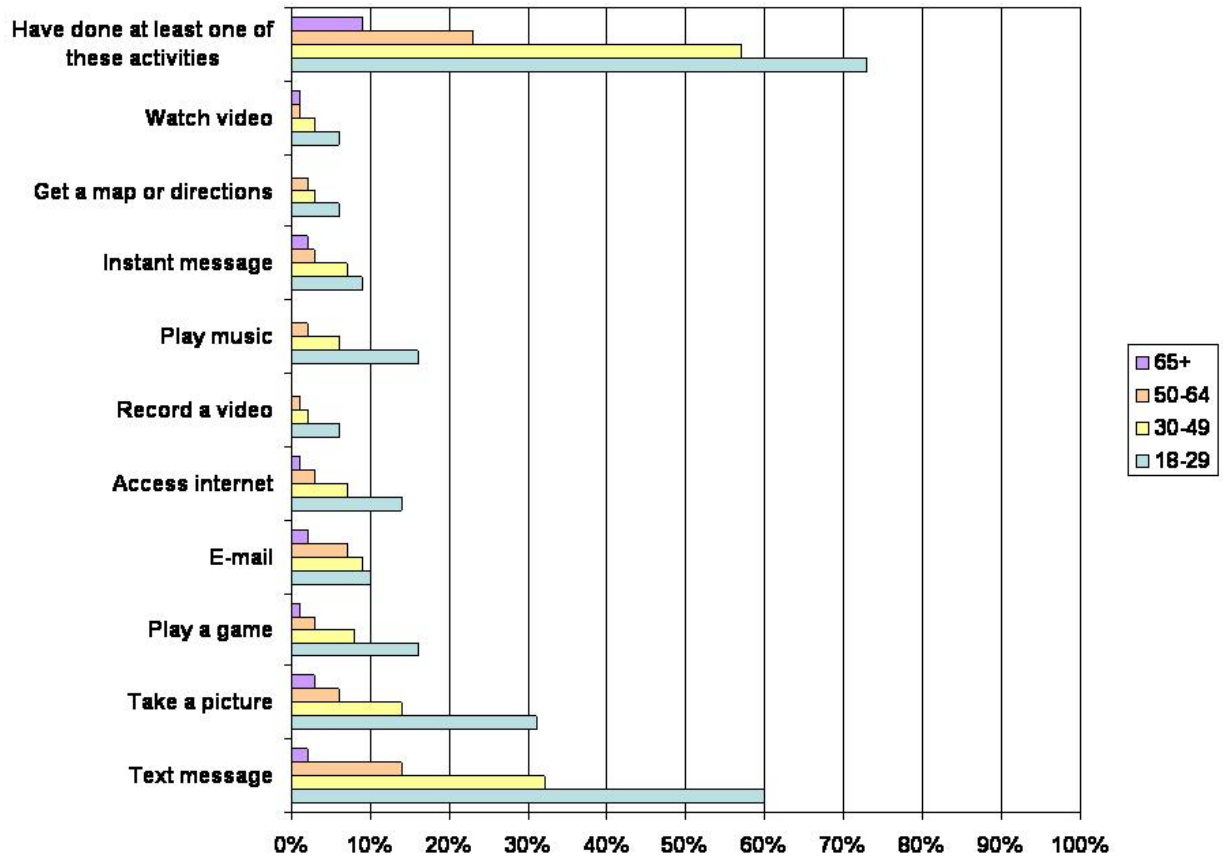
Look at ways in which we individually and collectively bias ourselves against pausing, stopping, or thinking. People often feel uncomfortable not "doing anything" at their desk because a passer-by might think they're just "zoning out." In psychological terms, zoning out is often a creative process. Another problem is a fear of spending a long time in conversation; long conversations allow thoughts to unfold on their own time. We could try to move away from clock-based time towards events-based time, allowing an event to unfold naturally.

This concept of white space is intriguing and a great beginning to create pockets and islands of focus for workers.

Finally, it's important for people in the work-life field and managers going up the corporate ladder to understand that this is an area in which leaders can be role models. It's more than just thinking twice before sending an e-mail at 8:00 am on Saturday that an underling may feel compelled to answer. Managers' behaviors in meetings are important; turning focus to a Blackberry sends messages about efficiency and importance of people in the meeting to the manage. Erving Goffman, a sociologist, did a lot of work on "co-presence" and the signals and cues we give one another when sharing the same space. Attention is the greatest gift you can give to another person; when we are fragmenting our focus and distributing it everywhere but to the person or people in the room with you, you are undermining your personal relationships.

Find Maggie Jackson online at http://www.maggie-jackson.com

Mobile Data and Communication Activities: By Age
(those who have a cell phone or personal data assistant who have done one of listed activities on a typical day)



Source: Horrigan, J. (2008). *Data memo: Mobile access to data and information*. Retrieved from the Pew Internet & American Life web site: http://www.pewinternet.org/~/media/Files/Reports/2008/PIP_Mobile.Data.Access.pdf.pdf

Additional Resources Related to Technology and Society

Berkman Center for Internet and Society: "The Berkman Center was founded to explore cyberspace, share in its study, and help pioneer its development. We investigate the real and possible boundaries in cyberspace between open and closed systems of code, of commerce, of governance, and of education, and the relationship of law to each. We do this through active rather than passive research, believing that the best way to understand cyberspace is to actually build out into it."

- http://cyber.law.harvard.edu/

Micro Persuasion: "Steve Rubel explores the impact of digital trends on business, culture, media and marketing…Rubel is a digital marketer with over 15 years experience. He currently serves as SVP, Director of Insights for Edelman Digital, a division of Edelman - the world's largest independent PR firm." His blog is on several "best of" lists, including PC Mag's 100 Favorite Blogs.

- http://www.micropersuasion.com/

Pew Internet & American Life Project: "The Pew Internet Project is an initiative of the Pew Research Center, a nonprofit "fact tank" that provides information on the issues, attitudes and trends shaping America and the world. Pew Internet explores the impact of the internet on children, families, communities, the work place, schools, health care and civic/political life."

- http://www.pewinternet.org/index.asp

Planet Focus: 10 Ways to Quell Distraction in an Attention-Deficit Age: Maggie Jackson's article for SelfGrowth.com, "the online self-improvement encyclopedia" offers specific advice on starting one's own renaissance of attention.

- http://www.selfgrowth.com

The Sloan Work and Family Research Network appreciates the extensive support we have received from the Alfred P. Sloan Foundation and the Boston College community.

E-mail: wfnetwork@bc.edu - **Phone:** 617-552-1708 - **Fax:** 617-552-9202

www.bc.edu

The Sloan Work and Family Research Network is funded by the Alfred P. Sloan Foundation