Daniel Levitin Talks Too Much Information

By Michelle Drown
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"I struggle with trying to be productive and efficient in an age when we’re being asked to do more,” said Daniel Levitin, author of the new book *The Organized Mind: Thinking Straight in the Age of Information Overload*. Considering his myriad accomplishments — he has been a comedian and a music producer and is currently a performing musician, best-selling author, college professor, and neuroscientist — it would seem Levitin is the epitome of productive and efficient. Regardless, he felt mired in the glut of information and never-ending tasks of today’s world and so set about studying what’s happening neurologically as we try to catalog the saturation of stimuli. His findings are presented in the fascinating, highly readable *Organized Mind*, which explains not only how the brain processes 21st-century data overload but also what we can do to alleviate the neurological fatigue it creates. I recently spoke with the witty and personable Levitin about the myth of multitasking, “shadow work,” and attention deficit disorder.

I thought it interesting when I saw your new book is about organization — you’ve done so many careers, you’re like 15 different people. Either you have really good skills or you are completely ADD. [Laughs.] You know, I think like many of us today, I struggle with trying to be productive and efficient, in an age when we’re being asked to do more, and there are more demands on our time … But because of my profession I have access to some of the research literature, and because of my interest in science writing I can try to talk about it in ways that might help not just me but other people.

Did you find that in writing this book you were able to hone your own organizing, or were you already there before you wrote the book? I think all of us will admit to being organized in some parts of our lives but not others. And so I would say the same is true of me — not as organized as I’d like to be in some ways, but sufficiently organized in others. My laboratory is very organized because it has to be. It’s a government-funded facility, and we have to keep records in a certain way, things like that. But my kitchen, I can never find anything.

The first part of your book focuses on attention. Maybe multitasking isn’t all it’s cracked up to be? Yeah, so we’ve just understood this in the research community from two independent sources of information. One is workplace studies, industrial organizations specialists come in and they do experiments. They ask people to either multitask or they prevent them from doing it. The other source of information is from brain scans, and the message is very clear: We don’t multitask. We think we’re juggling a lot of different things, and really what we’re like is amateur plate-spinners. We get one thing going, and then you move onto the next one, and then you have to run back to the next one to check on it, and that’s what the brain’s doing. It’s rapidly shifting attention from one thing to another, never giving your full attention to any one thing.

And in this day and age there seem to be more plates than ever. Yeah, that’s right … I had this intuition that things are getting worse, but through the research I was able to quantify it. One thing that I discovered that is quite compelling is “shadow work.” …Shadow work refers to a kind of shadow economy that doesn’t contribute to the GNP but it’s a bunch of things that used to be jobs. There were job descriptions for them, people did them for a living, and now all of us are doing them instead — and we’re not getting paid for them. So you’re pumping your own gas, making your own plane reservations, bagging your own groceries, scanning your own stuff at the checkout counter — these used to be jobs that contributed to the economy… and most of those have disappeared. What happened is that
companies have off-loaded onto us, outsourced to us, a bunch of tasks that the company’s employees used to do for us. And we’re not paying less for their services, we’re actually paying more. By some estimates, we spend five hours a week doing things that used to get done for us. And I think that’s why many of us end up at home at the end of the day feeling worn out, like we’re not getting as much done as we used to, and it’s because we’re not.

I never thought about it that way, but it’s so simple when you lay it out like that. Now, wait a minute! I’m annoyed! Right! I’m now the Accounts Payable Department for Chase Bank. They no longer send me credit card statement. I have to go into their system, which used to be the domain of experts, they were called data analysts, find the right page, which isn’t where you think it would be, and pull down a copy of the bill so I know how much to pay them!

So they’re paying fewer people and making the same amount of money, and we’re doing twice as much work and making the same amount of money. That’s part of the “information overload,” in the title of the book.

Does the majority of the population really suffer from attention deficit disorder, as so many claim? Well, there is an actual thing called Attention Deficit Disorder, and I don’t think that 80 percent of the world has it … [The] Woodstock generation says their memory is going…And I don’t think it’s early Alzheimer’s in most cases, and I don’t think the people who feel they have ADD really have it. It’s just the extraordinary amount of information coming our way. I think part of that is that we’re bombarded by a lot of stuff that isn’t really information, it’s misinformation ….These days facts and pseudo-facts are hard to distinguish, and science is more difficult than ever to distinguish from pseudo-science. Especially since the Web has become the de facto source of information for all of us. In my own experience and maybe yours, when you end up on a web page — a biased or just plain untrue or crank web page — i can look very much like an authentic one, and it can take you a while to figure out.

That’s why I go to sources that I know are authentic, but I suppose that keeps me from branching out too much. But that’s what we used to do, right? If you had a question, you’d ask your doctor.

Now you go to WebMD. Right. Or you end up on a web page sponsored by a drug company, and you don’t know it because they named it Americans for Better Health Care.org.

Has anybody come to you after reading this book and said it changed their thought process? I’ve gotten really extraordinary responses from people, from a wide range of disciplines, who found it helpful. One example is former general Stanley McChrystal, who led the Special Forces operations in Iran and Iraq…He’s been thinking a lot lately, since he left the military, about team building and leadership. And, you know, a lot of the neuroscience that underlies these concepts is laid out in the book, and it’s stuff that hadn’t been presented in this way before. And he has a new book coming out, and we met to toss some ideas back and forth — his new book is fantastic. It’s called Team of Teams. It’s about how we have to rethink [work?] as an organizational and team building and corporate building strategies in the age of information overload. But in any case, he’s an example of somebody who said he found the book useful as, and I’ve heard this from a number people in the military and academia—and artists; I get emails from musicians and painters, who say, “Wow! This has really helped me to unlock my creative potential. Because I understand better now how to maximize my creative energy.”

Regarding creativity, I tend to think I better read more, learn more, kind of scattershot everything to get more inspiration. But that just makes me tired. [Laughs.] I gave a talk about the book, similar to the one I’m giving at Santa Barbara, on the floor of the Treasury Building in the U.K. And I had a lot of government ministers and members of the House of Lords who had already read the book and found it useful in their work. And I know that David Cameron is reading the book, so it’s been an extraordinary reception.

So how the heck did you get into neuroscience after being a standup comedian and a musician? I am still performing as a musician. In fact next week, a week from Saturday, two weeks, I have a show with Rosanne Cash in Richmond, Virginia. And I’m doing a show in northern California in July, a complete show of just my own songs, which I’ve written. So, the music has always been there, it’s just that I’m no longer trying to make a living at it. That makes it
Is that one of the reasons you moved toward neuroscience, or was it just pure interest? Well, there was a guy named Sandy Pearlman, who was a producer of The Clash and Blue Oyster Cult and other bands...Anyway, when I first got interested in production in my early 20s, he took me under his wing and mentored me. And one of the things that we had in common was that we were both interested in neuroscience.... So we would go down to Stanford or across the bridge to Berkeley now and then and sit in on classes. And when the music business started to kind of implode in 1990, a lot of people I knew in the business thought that they should look for something else to do ... I loved being a producer, but there were a lot of people much better than me who were having a hard time finding work. And like many of my contemporaries, I began to worry about whether I could make a living at it or whether I needed to have something to fall back on. And being a guitar player probably was not it. [Laughs.] Or a comedian, for that matter. So, I thought, well this is one opportunity to go back to school, and Sandy encouraged me to do that, and I had such a good time being in school, that I just kept going .... So I went back to Stanford and when I graduated, I went up Highway 5 to the University of Oregon for my doctorate, and came back to Stanford and UC Berkeley for postdoctoral training. And I’ve kept a very close relationship with Santa Barbara. There was a period when I dropped out of Stanford — this is something I haven’t talked about before — when I was trying to make it as a musician, before I turned to production. I lived in Santa Barbara for a year working in the Psych Department as a research assistant [at UCSB].... And then after a year there, I moved around a bit, but eventually started playing in bands in San Francisco. When I got into academia, one of the towering figures in cognitive neuroscience was there [at UCSB], Mike Gazzaniga, and he’s credited with being father of the field of cognitive neuroscience. And he did all that early and important work on split-brain patients which led us to talk about, in popular culture, the right brain and the left brain. That’s all his work. So since Mike has been at UCSB I come down, I’d say, about once a year, just to give a talk or meet with people and it’s been very rewarding.

I saw that you did a show with Robin Williams. Did you get to chat with him? I did! We chatted backstage. I always thought, because my mother is five feet tall, I’m five foot seven and three-quarters, I thought of myself as being somewhat short in stature. And so I was surprised that Robin was shorter than me... It was a crazy scene, but yes, we had a chance to chat, and he was forthcoming.

You’ve explored so many topics. Is there a thread between them all? I guess I get interested in things, as we all do. But I listened to comedy records as a kid. As a little kid I memorized a bunch of routines by Bob and Ray and by Woody Allen, and I would perform them for the family and any school mates that wanted to hear it. It just never occurred to me that I could try to make a living at it. I was never that good. But, you know, I enjoyed doing it, and so, I was living in San Francisco in the early ’80s, and there was sort of a revival of standup comedy that we hadn’t seen since the late ’60s, in the era of Lenny Bruce and Mort Sahl, it was kind of a thing to do. What that meant was that there was not just one club in town, which had an exclusive roster of name people, but there were like six clubs in town, where they would let unknowns come in and audition or play. And so I thought, “This is a good opportunity to try this.” Just as there had been this burgeoning music scene in California in the ‘80s, with the New Wave and Punk movement, it was an opportunity for someone who might not have been at the very top levels of ability, to try it out, to try to break into it. And so there were these different things, like comedy and production and music that — and cartooning, I don’t draw, but I came up with some gags in a comic strip Bizarro [by Dan Piraro] ... I think I’ve done like 50 or 60 of them now. And it was just, it’s there, why not try it? I like trying to see what it’s like to do different things, and getting involved in the things that interest me. I think that if I had a bigger interest in, I don’t know, football, I’d be trying to play football.

Do you have a favorite in terms of being a writer or a scientist or a musician? I don’t think about it as being a favorite thing. I think the big things in my life now are writing and playing music and running a research library and doing science and teaching. And if I get away from any one of those for too long, I feel uncomfortable. And most days I get to do all four.

When you were writing this book did you find anything particular surprising? I started to think two things: One, that we’re failing the next generation. I mean we as teachers, as parents, as mentors, in that we hadn’t kept up with...
in the information age, and we hadn’t been doing a good enough job in teaching kids critical thinking. And I started thinking what critical skills the average schoolchild needed. I have a friend, Adam Gopnik, he’s a New Yorker writer, and he says the difference between today and even just half a generation ago of students is that by the time the teacher has taught the distinction between “elegy” and “eulogy,” everybody in the class has already Googled it. And this is an apt little story, or metaphor, for what’s going on. It used to be that the primary mission of teachers was to convey information. But the students are getting the information before the teacher can get to it, in many cases. But they don’t know what to do with it. They don’t know how to apply it critically and creatively. So I started thinking about critical thinking, and the kinds of things a journalist or a lawyer does all the time. “How do you know that?” You know, just because so and so said it, does that make it true? And what would you need to know, in order to satisfy yourself that this was true. The Rolling Stone scandal [regarding the University of Virginia rape story] is exactly on topic, right? I think basically starting at age 12 kids need to be taught some of the skills that investigative reporters and lawyers learn in their training. Around the time that I discovered and started writing about this, I met [neuroscientist] Stephen Kosslyn. He was looking for a bass player, somebody to play with. And he had just accepted a position as a Founding Dean at the Minerva School in San Francisco. Which is an accredited university and part of KGI, in the Claremont Consortium. And he was looking for a dean or arts and humanities, in order to design a year-long course in critical thinking. And I told him what I had written for my book and we talked about it and I took that position two years ago.

What your talk's going to be about at Santa Barbara? I’m going to talk about some of the big ideas from the book, and I’m looking forward to what the audience has to say. The most fascinating thing that’s happened to me by talking about the book is I usually come away with having learned more than the audience. Audience comments have been really great, and they get me rethinking things that I took for granted, or thinking of better ways to explain things. It’s always really interesting.