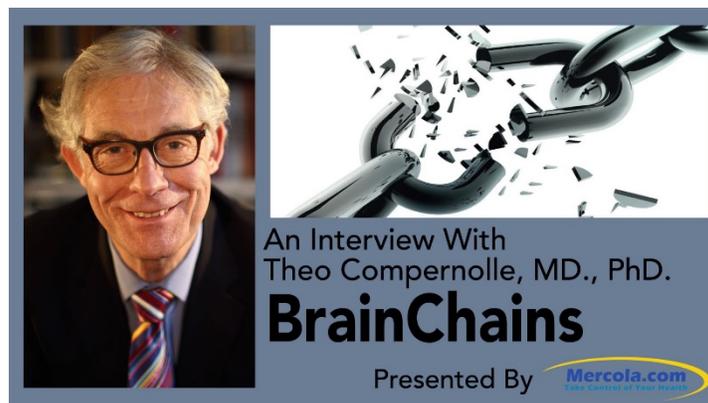


Understanding Your Brain Can Make You Calmer and Much More Productive

By: Dr. Mercola
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Dr. Theo Compernelle: Brain Chains – <https://youtu.be/VEpiF3MH82s>

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The human being is the only animal that has a reflective brain, yet most of us sabotage it every day, and in doing so, we limit our productivity and well-being. Dr. Theo Compernelle is a Belgian physician with about three decades-worth of experience in clinical psychiatry, neuropsychiatry, and neurology.

His book, "[Brain Chains: Discover Your Brain, to Unleash Its Full Potential In a Hyperconnected, Multitasking World](#)," reveals how to distinguish between the reflexive and the reflective brain, and how understanding the inner workings of your brain can dramatically improve your productivity and quality of life.

In the last year, I've read about 150 books or so, and "Brain Chains" is clearly one of the top 10 books I've read. It has my strong endorsement and recommendation, because it provides so many useful tips, and it's so well written.

The Reflex Brain

This is the one we have in common with all animals. In evolutionary terms, it's about 600 million years old. The characteristic of the reflex brain is that it is totally focused in the here and now. It takes in information from all senses and reacts in a flash.

The only world that exists for your reflex brain is what you experience with your senses. All this information is taken in very rapidly by your reflex brain. But as soon as something is outside of or beyond your senses, it "doesn't exist" anymore.

This is the part of your brain that is engaged when you're surfing the Web, and why you can look up and realize that an entire hour has disappeared while your attention was caught in the World Wide Web.

The Reflecting Brain

This part allows you to think abstractly. It's what you use when you think back to the past, or imagine the future. It can only think about one thing at a time, and therefore cannot multitask.

In evolutionary terms, the reflecting brain is a more recent phenomenon. Moreover, humans are the only animal that can truly reflect and think in the abstract.

Some animals, such as dogs, cats, and apes, may be capable of some minor reflecting, but not to the degree humans can. Your reflective brain is what allows you to ponder things that are not currently present. It allows you to think about that which does not yet exist.

This is what managers, professionals, and every single person is doing all the time — we imagine, and we make contingency plans based on what we think might happen in the future.

The reflective brain also allows you to create; to invent something that never existed before. Mathematics also belongs to the reflecting brain, as it is pure abstraction.

The problem with innovations meant to help us multitask is that it doesn't allow you to fulfill the potential of your reflecting brain. To me, it's somewhat frightening because we're really sabotaging the human species unless we get a handle on how to properly use this technology.

The Archiving Brain

This part of your brain does exactly that — it stores information into memory. However, your archiving brain is in competition with your thinking brain, as it uses the same "processor" — your working memory.

It's important to understand that your cortex always uses 100 percent of this processor. This means that when you're working (thinking) hard, there's not too much archiving going on. Most archiving into memory occurs when you're *not* thinking very hard.

Your archiving brain has the greatest opportunity to archive information when you take a break from thinking. The most effective break of all being at night, when you're sleeping. During sleep, your brain is actually working very hard.

The first part of the night, you are storing, archiving, and reorganizing the information. The last part of the night, your archiving brain is preparing you for the next day, so it's really important not to skimp on sleep.

Give Up Multitasking to Become More Productive

Let's say you're working on a report. As you're thinking about what you're writing, you have all the information in your working memory. But then all of a sudden, a little pop-up screen appears signaling you have a new email message in your inbox.

"Just having the pop-up screen on makes you lose two minutes of concentration," Dr. Compernelle says. "It's a dip in your concentration, even if you don't look at it. But this time, you look at it. You think, 'All right. It's a little email from HR. I can answer this.'"

However, to do so, your brain has to go through a number of different maneuvers that can completely sabotage your productivity. First, your brain must take the complex creative ideas you were thinking about, and put them into temporal memory. Then, it must clean out your working memory, and go to long-term memory to retrieve the information you need to answer the email.

Typically, one email leads to another, and the entire process starts all over again. However, your temporal memory is limited. Little by little, all those little emails push out the complex information relating to your work report that you "parked" in your temporal memory. On average, 11 emails later, you recall you were working on a report and need to get back to it. So you retrieve what information is left in your temporal memory, and get back to work.

"So you write your report and send it to your boss who is also a multitasker. Two minutes later, you have him on the phone, saying, 'Your report, it's OK. But you completely forgot the chapter About ...' Forgotten? No, you lost it in temporal memory, especially when you were doing your emails so rapidly that your archiving brain, didn't have the time and opportunity to store it in long-term memory," Dr. Compernelle explains.

Batch Processing Emails and Other Tips to Dramatically Improve Your Efficiency

Dr. Compernelle offers a number of excellent recommendations to improve your efficiency with regards to emails. Probably the most common email client in the world is Microsoft Outlook, which has a sound alert set on by default. Step 1 would be to turn off the automatic sound notification. Next, be sure that spell check is "on."

Those modifications alone can go a long way toward eliminating distractions and improving your efficiency. With respect to the proper use of email, Dr. Compernelle suggests:

- Batch process your emails, at most four times per day. In between, do not look at your inbox or messages
- Avoid CC'ing people, especially in a business environment, as it increases wasted time for multiple people. If a person doesn't *need* to see the email, don't include them. You can also set up your email to automatically filter all emails you're CC'd on into a special folder that you don't look at unless you really have extra time

- Understand that you do not have to answer all emails. Many "obsessive-compulsive" people think every email requires some form of reply. Realizing that not every email received must be answered can be an empowering and time-saving insight
- Avoid using "Reply to All." It creates an avalanche of unnecessary emails when everyone on the mailing list starts replying to everyone. Companies can gain a lot of productivity simply by eliminating the group function from their email system
- Don't use email:
 - For making appointments. Meetings and appointments are most efficiently set over the phone
 - When giving someone negative news or negative feedback. This too should be done over the phone. Employers definitely should not fire employees via email or text
 - When communicating an emotional issue
 - When you're angry

Other Tips That Can Make You More Efficient

There are certainly many other strategies that can boost your efficiency. For example, simply upgrading your search engine can be helpful. The X1 desktop search engine allows you to search for emails and files on your desktop, OneNote, and SharePoint. It's a great tool that is relatively inexpensive; about \$49 for a lifetime license.

Other sound advice offered in Dr. Compennolle's book includes avoiding any and all electronic gadgets about an hour and a half or more before you plan to close your eyes. At that time write down the 2 most important tasks for the next day and trust your archiving brain to work for you while you sleep. In the morning, complete your most important thinking tasks first, including any important reading, writing and meetings, *before* opening and batch processing your email.

But the first and most important strategy is to *disconnect*. You need to regularly disconnect from your communications devices to give your archiving brain a chance to log everything into your memory banks. You also need to disconnect to recuperate your thinking brain, which uses a lot of energy. So begin by batch processing your emails. It'll make you a lot more efficient. And then move on from there.

Avoid Using Your Smartphone for Work-Related Emails

In addition to batch processing your emails, make sure you're using a regular computer when doing so. Smartphones are consumer gadgets; not professional instruments. If you do your emails as a professional, make sure you have a nice big screen, a professional keyboard, a good ergonomic chair, and then set aside 30 minutes or so to do your emails. Once done, don't look at your email again until it's time to process the next batch.

Interestingly, more than half of all people currently use their smartphones for email, and the numbers are rising. Many have completely shifted away from using desk computers, and this trend

is actually making people wildly stressed and inefficient, even if they haven't connected the dots for themselves yet.

Aside from being a time-drain, being constantly connected to your smartphone also prevents you from reaching many of your goals in life. First of all because when you interrupt your work all the time for messages, you will need up to 4 times more time to do your work, working longer hours, sleeping less, while making much more mistakes and experiencing more stress.

Secondly because it's virtually impossible to set and reach goals without setting aside blocks of time in which you can deeply reflect on what you are doing, where you are and where you're going.

"I call this the consumer-professional trap," Dr. Compennolle says. "This little instrument in your pocket is fantastic as a consumer to — with your reflexive brain — get lost on the Internet. The people who developed the software and the hardware really want you hooked in the sense of addicted. Recently, there was a little book published called 'Hooked.' It describes how to develop habit-forming products. That's the dream of all of them.

In a way, there's nothing wrong with that. That's the economy. But what you should learn to do is to put a wall between your role as a consumer and your role as a professional, and to use this technology as a professional where you are in charge and pay uninterrupted attention. You decide when you use your technology and what for.

As a consumer, you're not paying attention. The attention of your reflex brain is trapped and that's a totally different story. If you want to be a consumer, do it. Enjoy it. But don't let the consumer-attitude ruin your work, because you need your thinking brain for your professional work, or for kids, for learning.

You have to keep the two roles divided, in separated batches. It's going to make you much more efficient. Once people try applying this, the word that comes back again and again is, "I have time now! For the first time in so long, I have the feeling of having time."

When Driving, Turn OFF Your Communications Devices

Dr. Compennolle dedicates an entire section of his book to the hazards of using smartphones and tablets while driving. And for good reason. The hazards are comparable to that of drunk driving. There's massive loss of life and injury occurring as a result of people talking on the phone and texting while driving.

Statistics show your risk of having an accident or causing an accident is four to eight times greater when [using a cell phone](#) in the car. When you're texting behind the wheel, that risk skyrockets to 23 times, or 2,300 percent.

Some nations have realized the scale of the problem and have begun banning use of technology in the car. The reason is simple: It's impossible to drive a car and talk or text on the phone because your thinking (reflective) brain can only think about one thing at a time.

This point deserves reiteration. It is a neurological fact: *Your reflective brain cannot multitask.* While your reflex brain is taking care of the routine of driving, your reflective brain should be on standby in order to consider and imagine non-routine future events that are out of the reach of your reflex brain.

The ideal option is to turn your phone off while driving, to avoid the distraction of pinging message notifications from your email and social media. It's also important to realize that there is NO difference between holding the phone in your hand versus using it hands-free. The reason for this is because the limitation is in your brain, not your hands. Whether you hold your phone or not, your brain still has to multitask when you're using it while driving.

Also, talking on the phone is much more dangerous than having a light conversation with a passenger. First of all because you only have a passenger once in a while, and your phone is claiming your attention every time all the time. Secondly because the passenger is there with you, observing the same environment as you are.

Someone on the other side of the phone line is more distracting, because they're completely unaware of your surroundings, and cannot alert you to a potential hazard on the road like a passenger is likely to do—even while having a conversation.

Open Floor Plans Sabotage Creativity and Intelligence

The layout of your office can also support or detract from effective and efficient brain work. In an open-plan office, people are interrupted on average every three minutes. According to Dr. Compennolle, open-plan offices are a disaster for brain work, noting that "companies hire the cleverest people they can find, and then put them in working circumstances where they lose a lot of their intelligence and creativity."

So what can you do to compensate, should you find yourself in that kind of environment? While there are creative ways to create a sense of privacy, the distraction that is most difficult to avoid is *sound* — especially other people's telephone conversations.

"I developed a very simple test to know if you're in the right office for the work you're doing. If you need to do work that needs attention and concentration, and you can hear any phone conversations of others around you, you're in the wrong office," Dr. Compennolle says. *"I think companies should start building flexible offices, where you have the environment you need for the brain work you're doing at the time, but focus should be the first priority."*

This is exactly the opposite of the usual flexible offices, where you can go to a separate corner or office if you need to concentrate. The open office should be dead quiet –like a library- for people to concentrate, while people who want to talk or phone should move out.

Moreover, open office do not improve communication: there is much more talking and much less real conversations. Clever companies are starting to understand how much they lose in the long-term for a little bit cost-cutting in the short term."

In meantime, if you're in a less than ideal office for the type of work you're doing, buy earplugs. Waxed earplugs are the most efficient for all wavelengths of sound. You can also use insulating headphones, either with or without music. Extroverts tend to do well with music, while introverts typically do not want any sound whatsoever to do their best thinking.

The Importance of Micro-Breaks

When you're under [stress](#), it's going to massively limit your ability to be productive. One way to reduce the constant onslaught is to take what Dr. Compernelle calls micro-breaks, during which you have contact with people.

"In the elevator, why would you stare at your phone instead of saying, 'Hello. Good morning. How are you?' In the beginning of a meeting, it's very important to have a little small talk, a chit-chat. These little breaks are important for several reasons. They're important [to counteract] stress. They are moments for recuperation. They are important for your thinking brain to recuperate, and they are important for your archiving brain," he explains.

"So, stop thinking in terms of losing time. You're not losing time. Consider it 'archiving time.' You should even introduce more 'doing nothing' time. You're coming from an important meeting and you run immediately to another one. No. That's not what you should do.

Take a break, so that your archiving brain can archive the information from the meeting you had, and prepare yourself for the meeting to come. You should not try to not to lose time; you should lose more time—more time of your thinking brain doing nothing and your archiving brain coming up with creative ideas."

The Three Commandments

In closing, Dr. Compernelle's advice can be summarized into the following "Three Commandments," plus a very strong fourth recommendation:

1. Ruthlessly, radically eradicate multitasking
2. Disconnect from electronic media to reflect — to use your thinking brain
3. Disconnect to have a break; a break for your reflecting brain to recuperate and for your archiving brain to archive
4. Never ever use your phone while driving

To learn more, I highly recommend picking up Dr. Compernelle's book, "[Brain Chains](#)." It's a well-written, magnificent read that, if implemented, can really have a tremendously beneficial impact on your quality of life, not to mention your professional productivity.

He also has a Website, www.brainchains.info where you can find additional information and resources, amongst other texts a free book: "The Open Office is Naked" about why open offices are a disaster for brainworkers and what to do about it.