

Brain Chains

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IS THIS A BOOK FOR YOU?

- In the working world you increasingly deal with non-routine and complex matters because the routine and simple work is gradually being taken over by computers. The only work left is that which only a human brain can do.
- Your efficiency and effectiveness at work will improve by at least 20% and more likely 50%. The more yeses, the greater the gain.
 - I regularly make phone calls while driving Yes/No
 - I sometimes text (sms) while driving Yes/No
 - You answered yes to at least one of these questions: Turn I immediately to Section 2, Chapter 8 and read it now. For you, this is urgent and important. You can read the rest of the book later.

Section 1: your thinking brain and its two frenemies: know them better to use them better.

- You should react against their stickiness and frequently disconnect to do the harder work of reflecting, having real conversations, doing some thorough reading and creating knowledge.
- The University Of Pennsylvania Graduate School Of Education showed however, the results are worse than disappointing despite the big and enthusiastic investments in effort and money. This study looked at millions of people who registered and found that only between 27% and 68% even bothered to look at least one lecture and only 2% to 14% more or less completed the course. An experiment providing online tutors did only marginally better^
- One of the most important reasons for this major failure has to do with the enthusiastic initiators totally underestimating, on the one hand the extent to which our behavior is influenced by the way a context is marked, and on the other the extent to which being on the www has become a context heavily marked for the consumption of trivia, which is the opposite of an environment for learning. To process information we need a totally different context, one that enhances reflection and real conversations and discussions. These are hard work and require prolonged periods of being completely disconnected from any distractions (more on this in the following chapters). This is the kind of context, structure and environment that a good college or university provides, even if their professors are not the best scientists in the world. I provided that they teach and train their pupils and students to disconnect to reflect. This is the total opposite of the www context.
- If my hypothesis is correct, moocs have no chance of succeeding, unless they teach and train their students to systematically disconnect to reflect and process information, something that seems to me to be very difficult to do while being online. My hypothesis seems to be supported by the fact that in the Penn study completion rates are somewhat higher, but still extremely poor. For courses with lower workloads for students and fewer homework assignments (about 6% versus 2.5%), clearly demanding less of the hard work of processing information. Some mooc pioneers think the solution is to put the emphasis on connections and communication among students in social media style rather than on the content delivered by a professor. As we will see further on though, virtual meetings and discussions do not make any sense whatsoever when nobody takes the time

to prepare thoroughly beforehand, with the hard work of studying, reflecting on and processing the facts. Without this preparation, communication between students becomes nothing but an idle exchange of baseless opinions.

3 AMAZING FACTS ABOUT YOUR BRAIN

- When we see someone move a hand, especially if that hand is doing something we are interested in, like taking a biscuit, the cells that make our own hand move fire up as if we had moved it, even when our hand is motionless. When we observe an emotion in another person, our emotional brain cells fire up, as if we have that emotion ourselves, even before we are aware of our empathic emotion. The cells in our brain that do this are called “mirror cells” or “mirror neurons”. (More on this in the chapter about emotional shortcuts and empathy.)
- All these research insights about the brain as a network of networks of networks lead to a totally new domain in brain research: “connectomics”, where scholars try to map all these connections.
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4 OUR UNIQUE REFLECTING BRAIN AND ITS FRENEMIES

- **What’s more**, each time a stimulus captures the attention of our reflex brain we get a little shot of dopamine in our brain, which may stimulate us to seek out these stimuli and even become addicted to them. This explains to some extent why people can become addicted to the continuous stimulation of ICT gadgets in their pocket. (Much more on this in the following chapters.)
- A human being is the only creature who can reflect.
- Reflecting and conscious thinking consume a lot of energy, literally, as I will further explain in the chapter about willpower and decision fatigue. Therefore, by getting enough good sleep and having moments where we disconnect, you kill two birds with one stone: your reflecting brain recuperates and relaxes and your archiving brain gets a chance to do its work. Hence, breaks are an integral part of the reflection process. Breaks and sleep are crucial because the reflex brain still functions on a minimum of sleep. That was good for our ancestor in the savannah who tried to survive even when he was exhausted, but for us it means that the reflex brain gets an unfair advantage over a badly treated, tired reflecting brain
- So when we think we are multitasking, we are actually constantly switching between tasks.
- **It is quite amazing** to see the real-time pictures of modern brain scans that can actually make visible what researchers have until now only guessed. When we do want a very simple task, both frontal lobes collaborate. When we do two simple tasks the left and the right more or less split the job. When we start on the third task, one of your first two just disappears from the brain scan. Writing a report, you might be able to take on a second task, like checking at one single email, without losing your train of thought. But if that email asks for decision or something else that requires some thinking, that would amount to a third task and your brain would be overwhelmed and make stupid mistakes.
- Hence, the many professionals who think that “just quickly doing this little e-mail or phone call in between doesn’t make a difference”, as well as those who think that they can do two things at the same time, are absolutely, completely, totally wrong; they utterly underestimate the negative

impact of switching between tasks. To be optimally intellectually productive, you need to focus on one task only.

- Hence, you may take on a task in a project that everybody knows takes only 30 hours to deliver. If you multitask they will have to wait 60 hours. Since they often in an organization, the output is the input for other people, these people are waiting for your input to start their work. Since you are delayed, they will start another task, and in the end, when everybody working in a delivery chain is multitasking, lead-times run out of control and you will never deliver on time, if a deadline didn't take into account the interruptions caused by your serial multitasking.
- Therefore, when people ask you to do something, you should think how much time the execution of the task will take you and then make it a rule that you never put tasks on a to-do list, but go immediately to your diary and find out when you have time, when you are going to do the task. If there is no time to do it at once or in big chunks, you refuse the task or you negotiate putting other tasks on the backburner or delegating them.
- You might remember that the first iPhones were not able to cut and paste between programs and how hundreds of thousands of (potential) users complained that such a super-simple feature was missing, it experts explained to me that in fact it was not a simple feature at all, but an example of the difficulty of programming context-switching.
- Just the little “ping” sound of an email landing in your inbox or the little pop-up announcing the email, causes a 1.5 minute drop in your concentration, even if you don't read it.
- The conclusion is very simple: multitasking is very bad for your intellectual productivity.
- Therefore, if in a management meeting two successive points on the agenda clearly belong to different domains, one dealing with numbers, figures, costs etc. and the other where you have to get inside the mind of customers or employees, you should have a break in between where you do nothing but make small task.
- Communication Professor Clifford Nass and his team wanted to find out what the special skills were of people who do a lot of multitasking, the so-called hypertaskers.
- To their great surprise, they found that all people who hypertask think they are brilliant at it, but in reality they are very clearly no better at all, in fact much worse. It will be difficult to change these people's behavior because the more they are convinced about their superior multitasking abilities, the more they do it and I the worse they are at it in reality. The people who think that they are not good at multitasking, and who do it the least, turn out to be better at it; they are better at blocking out distractions and focusing on a single task
- The average six-year-old has watched a screen for the equivalent of more than one full year of their life.
- Moreover, given that only a very small majority of digital natives is digital-savvy, that they are the exception rather than the rule, it would be a major mistake to adapt the teaching methods as if it were the case for the majority.
- “The fact that children nowadays make use of many electronic devices and are called digital natives does not make them good users of the media that they have at their disposal. First, they are capable of playing with technology, but not really using it efficiently. They can Google®, but lack the information skills to effectively find the information they need, and they also do not have the knowledge to adequately determine the relevance or truth of what they have found,” conclude Paul Kirschner and Aryn Karpinski.

- My second discovery was that young people who multitask a lot are like the adult hypertaskers: they are worse at it, not better.
- My third discovery was that hyper-connected children do significantly worse at school
- It is a causal relationship because when parents and educators set limits on the multitasking. The grades improve. When half of a class is allowed to text during the lesson and the other is not, the non-multitaskers do significantly better.
- My fifth sad discovery was that there is a strong negative link between hyper connectivity and emotional and social development. A survey of 3,500 girls, for example, showed that the more these tweens were connected and multitasking the more they felt socially unsuccessful and not normal, the more they had real friends the parents perceived as bad influences in the less they slept.
- My last discovery was that the way young people use their ICT creates a new social divide. The social divide is not between the haves and the have-nots, but between the heavy users and the medium users. Children of more well-off families spend 90 minutes a day less time with these reflection-killers and time-wasters than children in low-income families.
- Just before my book went to the publisher I got hold of a not yet printed research paper that supports my musings. Pam Mueller and Daniel Oppenheimer of Princeton discovered in a series of experiments that taking notes with pen and paper results in fewer notes, better factual recall and better conceptual learning, when compared to taking notes on a laptop, even when the laptop users were urged to take less verbatim notes. Their conclusion is that pen and paper forces students to not just record but to process the information.

5 YOUR REFLEX BRAIN IS LIGHTNING FAST BECAUSE IT RUNS ON SHORTCUTS AND HABITS

- Did you know that when you have to choose between three similar products with three prices, your reflex brain will choose the middle one and that your reflecting brain will usually go along with this? You can imagine how easy it is for sales people to exploit this bias.
- Did you know that managers, for the same reason, will make very different decisions when they first discuss a million-dollar purchase and then one costing \$10,000, compared with when they do it the other way around? Did you know that most people think it is less likely to win a lottery when you use the same numbers that drew a big win in the last one?
- Halo effect: We overestimate the abilities of successful people while underestimating the role of luck and the environment.
- Sixty years ago behavioral psychology researchers discovered, first with rats and later with children and adults, that to learn a new behavior or habit quickly you should get feedback, preferably rewarding, every time and immediately. The reward can be intrinsic, meaning that mastering the skill in itself makes us feel good.
- In a company all the habits together define the company culture.
- As you have certainly experienced yourself, habit formation can cause a lot of trouble when we need to unlearn a habit, when an old habit, like always being connected, becomes inefficient, stupid or dangerous. Luckily, about a hundred years ago a group of psychologists distanced themselves from all kinds of unscientific opinions about why we behave as we do, such as psychoanalysis, and started empirical research on how people learn and unlearn behavior. In the

beginning they over-focused on modifying the behavior itself. Later they also studied ways to change the thinking and feelings that accompany behavior. They produced thousands of research publications, resulting in a wealth of scientific knowledge about the most efficient ways to change behavior. Some of the most recent brain research is even sponsored by companies who want to know how they can best influence the habits of their customers.

- The simplest model that is still very useful for understanding. Learning and changing habits is the a-b-c model, ABC stands for Antecedent, Behavior, Consequence. Sometimes this is described as Trigger, Behavior/Habit, and Reward. Originally the B only referred to Behavior, but later it was expanded to thoughts and emotions. (More on unlearning bad habits in Section 3).
- One was the Nobel Prize winner Daniel Kahneman, the other was Gary Klein, a world famous authority on naturalistic decision-making. If you are interested in the subject of intuitions, and as a manager or other professional you have no choice but to be deeply interested in it, you should read their article “conditions for intuitive expertise”.
- Leader should be confident, but never certain. When you’re certain, you stop thinking and listening to feedback.

6 EMOTIONS: VERY INFLUENTIAL, HARD-WIRED AND SOFT-WIRED, ON THE INTERFACE BETWEEN REFLEX AND REFLECTION

- More specifically relevant for this book is that ignoring your own feelings is a bad idea because they have such a big impact on your own reflecting brain. If you just ignore them, you cannot reflect on them, you will not learn from them and you will not manage them. You will act on your intuitions and never realize you were led by powerful emotional shortcuts, which like all the others, allow us to make fast, intuitive decisions when there is no time or no resources to make an in-depth analysis. The emotional shortcuts, both the positive and the negative ones, are also rather primitive and can be totally wrong. The best way to avoid taking the wrong emotional shortcut is first of all to disconnect to reflect and secondly to take time for a real conversation with other people, who by definition have had totally different life experiences and will therefore not be guided by the same unconscious emotions. (More on this further on.)

7 OUR ARCHIVING BRAIN NEEDS BREAKS

- The information in our brain is continuously rearrange and manipulated by our archiving brain to Store it, refresh it and prepare for knowledge and insight. A most important part of this information processing happens when we are disengaged from the immediately present reality, when our reflecting brain is idling, when we don’t demand anything important from it. The less input from the outside world and the fewer demands from the reflecting brain, the busier this network of archivists.
- When we are always actively and consciously dealing with the outside world, for example by being busy with our screens big and small all the time, the archiving brain doesn’t have enough capacity to correctly process all the information coming in and link it with dad at that it has already been stored.
- **Regular idling in the** sense of taking brain-breaks, being disengaged, unoccupied, inactive and not involved in any task, is crucial for your intellectual productivity and creativity. Therefore, what most of us consider “lost time” is actually ideal “working time” for your archiving brain, and

filling every single minute being connected to your little screen is a disaster for your intellectual productivity and especially your creativity?

- That is why, in the well prepared brain, we often have our most creative ideas when our conscious thinking uses only 10-20% of our working memory's capacity. The archiving brain then has 80-90% free to manipulate, combine, store and reorganize the information.
- Let me build on an idea I learned from Herman Vandenbrouck, who in his research about learning organizations discovered that "Useful Superfluosity" is necessary to be a learning organization. He explains that work has to be organized in such a way that there is some slack. If there is no slack, the organization does not learn.

8 WHY YOU SHOULD COME TO THE RESCUE OF YOUR SLOW REFLECTING BRAIN AND YOUR ARCHIVING BRAIN

- On the other hand, and more importantly for your intellectual productivity, the faster reflex brain often gets ahead of the reflecting brain when we do intellectual work.
- Research shows that reading from paper results in better comprehension and accuracy than reading from a screen, especially if under the same time pressure, and that is a faster and less tiring. By the way, as if seen in the chapter on the myth of multitasking kids, taking notes of the pen on paper also leads to very significantly better recall and comprehension.
- There are, of course, many very successful exceptions, for example people with severe dyslexia, who have great difficulties understanding, written words. To become successful these people, Richard Branson being one of the best known, learned to become masters in learning by doing, in learning by trial and error. Trial and failure. They are also masters in developing trusting relations with excellent people, who have the cognitive competences they lack, not only to delegate part of the job to them or let them do the studying, but especially to have real, frank, undisturbed conversations with them.
- Let me quote Mark Strom and Laurent Ledoux on this: "Communication is the sharing of created meaning; conversation is the creation of shared meaning... If we are genuinely to engage in conversation, if we are to take seriously the creation of new meaning. Then we will not know in advance what meaning will be created. That can be an uncomfortable place to be. But very often it is exactly the place to which we must go. As leaders, we bear a responsibility to make room and provide contexts for the kinds of conversation where people create new shared meaning."
- Thousands of managers, even at an executive level, e-mail while in meetings. They even ignorantly think that they can engage people for their plans with e-mails, corporate social media and fliers, without real conversations.
- As I will describe in Section 3, there are tools and methods that can help you to get out of this unwinnable, never-ending race. The number one is to organize undisturbed quiet time to do important brain work, to disconnect to reflect. That is the "condition sine qua non", the most necessary precondition. Second is "batch-processing", which will help you to do much more of the things you have chosen and enjoy them more. It will even help you to become more efficient in doing the unavoidable chores you don't like at all. Third, to make the right choices there is the Eisenhower principle that helps you to reflect on the importance of your tasks in light of your priorities. Fourth, to reflect on what work is most efficient and effective to reach your goals, there is the Pareto rule.

- Where professional success depends on our brainwork but where professionals don't know how their brain works.
- Where technology makes it easy to connect virtually with anybody anywhere, but where the way we use ict makes it difficult to have undisturbed real conversations with real people.
- Corporate brain disorder.
- Thanks to ict, the brain of every brainworker is in continuous interaction with other brains that stimulate and feed it. The consolidated brain of all the brainworkers and the connections between them is what I call the "Corporate Brain". Research done by myself and others, however, shows that this Corporate Brain in little than 60% of organizations functions at a less than 60% of its potential! The main cause is that the attitude and methods used to manage brainworkers are basically still the same as those tied to manage manual workers in the 19th century.
- The first one is that there is a linear, direct connection between the number of hours worked and the value delivered. If a manual worker, think Charlie Chaplin in "Modern Times", can fix 100 bolts in an hour, he can do 1,000 if you make him work 10 hours. If 1 person can fasten 100 bolts an hour, 100 can fasten 10,000.
- Now apply this idea to brainworkers. If a brainworker had two important creative ideas last month while working 8 hours a day, he will have three if you make him work 12 hours a day. If one brainworker has one creative idea a week, 100 will have 100.
- This sounds ridiculous and it is, but if you think about it, you see this reasoning happening all the time all around us. Brainworkers and their managers clearly think that if a brainworker is delivering very well on his tasks in an 8-hour day, he will deliver 50% more if you keep him connected 4 hours a day longer, working via a computer at home, smart phone or tablet. As a matter of fact, it's the contrary: always being connected with work will decrease his performance.
- Today, however, if managers want the very best performance from brainworkers, they must adapt their leadership style not only to the personality but also to the basic needs, wishes and values of the individual team members. This is one aspect of the so-called "situational leadership". In other words, it is not sufficient to know the general brainworkers' handbook and the fundamental differences with manual workers; you should also know their personal "Instructions for use". This is not only true for managers, but also for professionals looking for the best possible collaboration with their colleagues.

SECTION 2 HOW WE UNKNOWINGLY CHAIN THE BEST OF OUR BRAIN

1 WHEN YOU CHAIN YOUR BRAIN, YOU RISK MORE THAN JUST RUINING YOUR INTELLECTUAL PRODUCTIVITY.

- **As a professional your** success does not depend on your ability to consume information but on the way that you intelligently process and produce, if not create, information.
- **More and** more ignorant companies and managers expect people to be connected 24 seven, not knowing how badly this affects the quantity and quality of brainwork.
- Reflecting is one of the most important things managers and other professionals do or should do. For their success and for the success of their company, they should regularly think broad, think deep, reflect on the past, think about the future and use their imagination.

- This study is one of many demonstrating the phenomenon of “decision fatigue”. Research in the lab and in real life shows that after having exerted self-control or having had to make many little choices, there is a decrease of self-control, a decrease of physical stamina, less persistence in the face of failure, more procrastination, less quality and quantity of arithmetic calculations and worse decision making”. Just resisting a temptation or distraction depletes your mental energy. You can overcome this low mental energy with high motivation, but this is only possible when the depletion is mild.
- Wonder if this knowledge might be (mis) used by salespeople and negotiators: let the other party make a lot of little choices and when decision fatigue sets in you come with the questions that require big decisions. The other party will be significantly less rational about them than when you do it the other way around.
- At this point you’re probably thinking, this is all very fascinating, but what does it have to do with always being connected? Well, the fewer temptations and distractions we have to resist, the fewer choices we have to make and the fewer decisions we have to take. The more energy our brain has to do the difficult, very important brainwork.
- **In brief, for optimal intellectual** productivity, you have to organize your work, your life and your decisions in such a way that you keep your brain-energy tank as full as possible. Avoid doing important thinking, important meetings and making important decisions after many little decisions (like doing e-mail), small or big acts of self-control or on an empty stomach.
- Hence, when you often switch between work and family, your work will cost more energy, take more time and the result will be of a lower quality.
- **Facebook users** are primarily motivated by three desires:
 - To voyeuristically peer into others lives
 - to create a distinctive identity for themselves
 - to act on it in her narcissistic tendencies
- Facebook use by itself increases unhappiness.
- This causes a vicious cycle: the more you check Facebook, the more unsatisfied, unhappy and lonely you will feel, the more you need the little cakes you find among the depressing ones, the more you check Facebook, the unhappier you feel.

3 BRAINCHAIN #2; MULTITASKING AND TASK-SWITCHING; THE SCATTERBRAINED HOMO INTERRUPTUS

4 BRAINCHAIN #3: A CONTINUOUS LOW LEVEL OF STRESS RUINS THE VERY BEST OF YOUR REFLECTING BRAIN.

- In other words: we experience negative stress when there is no longer a balance between what we think we must do and what we think we can do about it.
- Being connected all the time causes this kind of chronic low-level stress. When researchers disconnected office workers for five days from their e-mail, their heart rate became normal. Connected to their e-mail it showed signs of being on constant alert, constant stress’

5 BRAINCHAIN #4: LACK OF BREAKS AND SLEEP: A WAKE-UP CALL TO SLEEP MORE

- By staying awake an hour or so longer, you lose a lot more than you can ever gain. Your efficiency drops significantly so that you need more time to do the same work and its quality will be much lower.
- The problem is that for most short sleepers the unhealthy abnormal becomes normal. People can adapt to a chronic lack of sleep, but the research shows that even though these people adapt to higher levels of sleepiness, objective measures of cognitive performance, attention, and concentration remain low, although they are not aware of it.
- ‘We now know that 24 hours without sleep or a week of sleeping 4-5 hours a night induces an impairment equivalent to a blood alcohol level of 0.1%. We would never say: “This person is a great worker! He’s drunk all the time!” yet we continue to celebrate people who sacrifice sleep.
- **Drinking** caffeinated drinks is simply disconnecting the alarm signal without taking care of the disaster going on in your brain.
- Because, depending on your age and degree of addiction to being connected, 30-50% regularly wake up due to the sounds of their phone.
- We know that the effect on cognitive performance of 14 days of lack of sleep (6 hours or less a night) is the same as two nights without any sleep.
- REM sleep softens the memories of heavy emotions. Without enough sleep, people tend to remember negative experiences better than positive ones. During one or more nights of good sleep very emotional memories gradually lose their emotional qualities.
- This slow wave, deep sleep is also very important for storing memories in the long term.
- In my workshops and coaching sessions I often get questions from people who consider themselves “Owls”, i.e. “Evening Types” who function better in the evening. They contrast themselves with “Larks”, the “Morning Types” who function best in the morning. Researchers have found that these types are real, that it is partially genetic and that 60% of people are Lark-Owls, functioning somewhere in-between. Typical creative types are often Owls and business types like managers and engineers are often Larks. Interestingly, there might be a link with the way our brain functions. The two halves of our brain do not function in sync. In the morning our left, more analytical brain is faster and in the evening it is the right associative brain. This might also explain why the results of tests and assessment can be very different in the evening or the morning, depending on the extent to which they are typical right-brain or left-brain assignments.
- From national surveys done by American and Canadian authorities we learn that, depending on the generation they belong to, between 25% and 60% of drivers report having nodded off for a moment and 30% having fallen asleep while driving! Drowsy driving is responsible for 20% of all motor vehicle crashes. That would mean that drowsy driving causes approximately 1 million crashes.
- One of the best researched consequences of a lack of sleep is obesity”. On average, the people who sleep 8 hours have the healthiest weight. Sleeping less, especially when you sleep 6 hours or less, disturbs your sugar and fat metabolism, makes you crave high-calorie food and you run double the risk of becoming obese.
- Many of these problems have a bidirectional relationship with lack of sleep. The bidirectional relation between lack of sleep and depression has been well studied to: lack of sleep causes depression and depression causes sleep problems.

6 BRAINCHAIN #5 IS OUTSIDE YOUR CONTROL: BRAIN-HOSTILE OPEN OFFICES

- Every single time I ask participants in workshops or lecture what undermines their brainwork, with the exception of groups of executives, a majority always complain that one of the major factors is the open offices they have to work in. There is one other exception though: If you belong to Generation Y, born in the early eighties, you may love the lively, animated. Entertaining atmosphere of an open office. You may be convinced it does not hinder your intellectual productivity and creativity. However, think twice because, as I described in the four Brain Chains above and especially in the chapter “The sorry myth of multitasking kids” and in the separate booklet “The Fifth Brain Chain”, all the research proves you wrong.
- For managers, the consequences of all these hours spent peering at their screens and pecking at their (micro) keyboards are even worse because it prevents them from interacting, communicating, leading and coaching their people. It is their employees who therefore suffer as a result. And although they’re not aware of it, e-mailing managers are one of the most significant factors in lowering productivity because most people feel they must respond to a manager’s e-mail within minutes. Hence they become even less efficient, firstly because they constantly check their e-mails just in case a superior has sent one and so are continuously distracted by all the e-mails and secondly because they stop whatever work they are doing to respond to one of these e-mails.
- 70% of emails are opened within six seconds of arriving in Indy 5% within two minutes.

8: dangerous brain chains: using your phone while driving, even hands-free.

- In October 2011 there was a three-day total blackout of Blackberry services in the United Arab Emirates. The directors of the police departments reported that during these three days in Abu Dhabi there were 40% fewer traffic accidents (normally one every 3 minutes) and no fatal ones. In Dubai there were 20% fewer traffic accidents”
- The risk of accident is 4 to 8 times greater when you phone while driving.
- Texting while driving is a recipe for disaster: not only is your conscious brain busy but on top of that your eyes don’t look at the road for an average of 5 seconds and your hands are more or less off the wheel. Studies show that there is a logarithmic relation between the risk of an accident and the time you don’t look at the road. When you send a text or a brief e-mail, you take your eyes off the road repeatedly for an average of 5 seconds. Five seconds at about 40 miles/hour (70 km/h) means that you didn’t look at the road for about 100 yards (110 meters)! That’s the same as driving with your eyes closed for the length of an entire football or soccer field and doing so several times in a row!
- When drivers are asked simple multiple-choice questions are simple math on the phone while driving, they made 70 percent more mistakes and they were amazingly stupid ones.

SECTION 3 HOW TO UNCHAIN YOUR BRAIN BRAINGAINS AT THREE LEVELS

1 SIMPLICITY IS COMPLEXITY RESOLVED, BUT SIMPLE DOES NOT MEAN EASY

- A second time for disconnecting that works well for many people is taking 20 minutes of disconnecting on Sunday evening to plan the week, to decide what the most important tasks are, what you should delegate and to make sure there is enough quiet time every single day.

- Many fun activities habituate. This means you will gradually need more of them to get the same kick.
- **First of all, reset your** e-mail program so that it opens by default on your calendar or to do list (if you have one), not your mail program, and leave that on your screen. Although it gets you closer to the cliffs, you can also set the “For Follow Up” folder as the default. When you systematically flag e-mails that you weren’t able to finish, at the next batch-time your e-mail program opens with the most urgent or important e-mails.
- How to set this up in Ms Outlook? Start with the Tools (2003, 2007) or File (2010) tab. Select Options/ (Other)/Advanced Options. Click the Browse button of “Start in this folder” From the “Select folder” choose what you want Outlook Office to open at startup. If you want to open with the “For Follow Up” folder, expand the Search Folders. Click OK/OK/OK.
- You can even configure your e-mail program to open with an empty inbox so that you avoid temptation when you need to search for a particular e-mail or you need to write an urgent e-mail that really can’t wait until the next batch-processing slot.
- To do that, make a rule that immediately redirects ALL your incoming e-mail to your custom-made “Inbox batch”. That way your inbox is always empty. An advantage of this approach is that, if you still go to your inbox outside your set “Batch time” you can nest this “Inbox batch” in a “danger” folder and that one in a “Are you certain?” folder and that one in an “only for batch time” folder. You can make it as difficult as you need to and the names of the folders as scolding as you want to avoid going to your inbox outside batch time.
- **THE ABC MODEL AND THE ABC DIARY**
 - The ABC model is the simplest model and one that is still very useful for understanding, learning and changing habits, ABC stands for Antecedent, Behavior, and Consequence. Sometimes this is described as Trigger, Behavior/Habit, and Reward.
 - To cut a long story short: When we want to change our habits, we should look carefully at what exactly elicits this behavior and what the reward is. Then, you can change, eliminate or avoid the trigger or the reward or both. Or you can also keep the trigger and the reward and change the behavior they apply to.
- After the ABC analysis, with or without an abc diary, you decide if you will just replace one behavior by a better alternative and keep the triggers and reward intact, or if you will change the triggers or rewards too.

3 BRAINGAINS AT THE “WE” LEVEL

4 BRAINGAINS AT THE “THEY” LEVEL: ALL THE ABOVE AND...