

# LET US TEACH FOR REAL!

## A PLEA FOR TRADITIONAL TEACHING

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(Received 28 May 2019; revised version received 17 June 2019; final version accepted 17 June 2019)

### Abstract

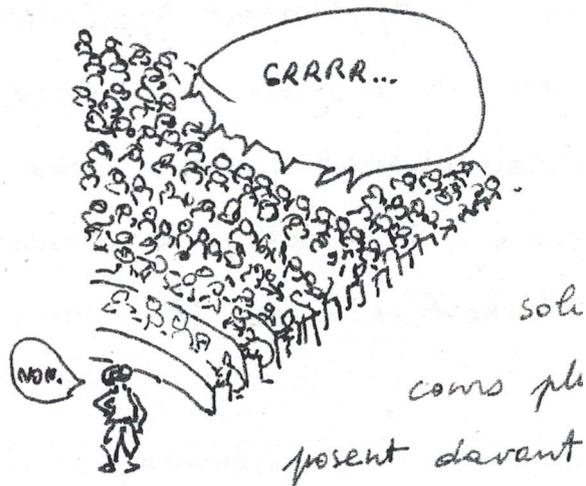
Before we even noticed, electronic devices and the internet have invaded our lives and our universities. Far from being just an instrument, they change the way we teach, whether we want it or not. Unfortunately, instead of helping, they carry negative effects, well documented by research in psychology, psychiatry and neuroimaging over the last decade. They affect our attention, our memory, and our social skills. Without even being aware of it, we are playing the Sorcerer's Apprentice. Since 2011, the author has banned the digital and reinvigorated traditional teaching methods: a demanding, yet hugely rewarding experience. The present paper is a vibrant plea by a scholar to fellow scholars: let us get rid of the virtual! Let us teach for real!

#### *Keywords*

*Planning education, learning methods, tech-free teaching.*

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Wednesday, 5 October 2011, 8:55.

I enter the classroom with butterflies in my stomach: "Dear students, welcome. Before we begin, I must tell you that in my class, all electronic devices are forbidden."

At first, I meet with their heavy disapproval. But a few minutes later, it's magic: they are attentive, alert and cheerful.

Figure 1 - D-Day. This is an excerpt from a letter to my daughter where I am describing the beginning of my experience. (Geppert, 2012, *Lettre à Sophie* 95, 6 Oct. 2011).

## 1. From a Personal Experience to a Call for Action

For the past eight years, I have upheld the ban of all electronic devices, for the students as well as for myself. I got rid of desktop presentations, learning management systems, Massive Online Open Courses, even e-mails. The journey back to traditional methods has been a demanding, yet hugely rewarding experience. For some time now, I have been willing to share it with our community. In 2017, I proposed 'Planning Education in a Digital World' as the main theme for the AESOP Heads of Schools meeting. However, I never fully expressed my thoughts on the matter, perhaps because they needed to mature. The kind invitation from the Editorial Board of Transactions gives me this opportunity. Thank you!

While my intuitions were maturing, psychologists and psychiatrists were coping with the effects of the digital revolution. In 2013, the American Psychiatric Association included internet gaming disorder (IGD) in its list of non-substantive addictions (APA, 2013). Psychology researchers claim that compulsive internet use and social media addiction should be added to the list of agreed mental disorders (Pantic, 2014; Ryan et al., 2014). They have also developed indicators and methods for the evaluation of these disorders (Van den Eijnden et al., 2016), whilst countless surveys have shown the correlation between the use of smartphones and uneasiness, anxiety, feeling of loneliness, and depression. Young children are the most vulnerable (Clement and Miles, 2017). Don't give your children smartphones!

As far as education is concerned, ten years ago, a seminal study by Ophir et al. (2009) demonstrated that heavy media multitaskers perform worse than others in task-switching. The paradox is apparent: the 'scattered attention hypothesis' suggests that the distraction provided by digital environments causes attention deficits and depressive moods, hampering the heavy multitasker's performance. In the last decade, much research has investigated the effects of the digital environments on our cognition. Empirical research shows that academic performance is negatively impacted by the use of social media (Kirschner and Kaprinski, 2010), as well as smartphones (Lepp et al., 2014). In a recent experiment, a 20 minute lecture was delivered to two groups: one kept their smartphones, the other had them removed. No surprise: the group 'without smartphones' performed much better in the subsequent quiz (Mendoza et al., 2018).

No wonder that Steve Jobs, Bill Gates and other high-tech CEOs kept their offspring well protected from the products that made their fortunes, restricting their access to electronic devices. For their own children, they preserved printed books, outdoor activities, real life. (Bilton, 2014). But what about our students?

The present paper is personal and engaged. Initially, I wanted to share my still developing experience of tech-free teaching. While working on it, I discovered that an abundant literature, in psychology and psychiatry, confirmed a number of my intuitions. The most impressive was the 'online brain' by Firth et al. (2019). Confronting the findings of a very large literature, the authors analyse how the internet affects our cognition in three areas: our attention, our memory, and our social interactions. In each of these, the use of the internet can produce both acute and sustained alterations, reflected by visible changes in the brain. However, my paper remains what it was meant to be, a plea by a scholar to fellow scholars.

## **2. Teach for Real!**

Virtual 'reality' is invading our universities as well as our daily lives. With the generalisation of smartphones, it became ubiquitous. Far from being just an instrument, electronic devices and the internet have changed the way we teach. In my opinion, we should opt them out.

### **2.1. Paper, Pen and Pencils**

The digital revolution seems to have rendered obsolete handwriting – we can type on a computer, using software that will eventually correct or complete the text. The development of speech recognition applications seems to pave the way for even more easiness. Likewise, courses of computer-aided design are outcompeting traditional drawing. Whereas in business, it may seem convenient to dictate letters and realise visualisations swiftly, in education, slowness is necessary.

Handwriting is painstaking. It cannot be corrected and updated by deleting, backspacing, or rewriting. It cannot be endlessly moved and multiplied by cutting, pasting, and copying. These very limits force us to choose what we are writing, to decide what is important; to think. While writing, we organize the finite space of our sheet of paper. Whether hearing a lecture or writing an essay, we are doing it physically. This, again, helps us to structure reflection. Last but not least, handwriting is a wonderful support for memory. How many times, uncertain of the spelling of a word, have we scribbled it on a piece of paper? What we write gets fixed in our minds for good.

Hand drawing has irreplaceable educational value. In France, where planning is embedded in social sciences, my pupils are astonished when I ask for a hand drawing. Interestingly, every year, one or two of them discover an artistic talent that they weren't aware of. My hypothesis is that albeit hidden, this sensibility was part of their calling to our discipline. Skilled or not, all the students experience drawing as a way of looking at the surrounding world. With their pens and pencils, they reproduce the physical structure of buildings and landscapes, they try to catch colours, shapes, lights and shadows, atmospheres, and attitudes. It broadens their perception and improves their understanding of the world that they will soon be taking care of. Incidentally, afterwards, they also perform better in 3D modelling.

### **2.2. Books!**

Before we had even noticed, the internet had become the first place where people look for information (Colley and Maltby, 2008). It is true for our students, perhaps also for ourselves. Optimistically, we hoped that the internet would be used like a giant library. But, although one can find there some good books in digital format, it isn't used in this way. Three years ago, at a meeting with a group of international PhD candidates, I asked about their readings. The first answer was: "I read a lot of blogs".

Perhaps it shouldn't have come as a surprise. Screens are not appropriate for sustained reading. On a sample of personal laptop users, a study measured that task-switching occurs every 19 seconds and that 75% of all on-screen content is viewed for less than one minute (Yeykelis et al., 2014, cited by Firth et al., 2019). How often have we 'googled' a question and been directed to a reference underlined in blue because we have already consulted it? Moreover, as we become quasi constantly connected to our devices, we tend to confuse the

inputs from internet with our own knowledge (Fisher et al., 2015; Hamilton and Yao, 2018). Unlike Socrates, we don't know our own ignorance.

Books! Well-written books, real books, books that look at me from the shelf, books that become lifetime friends, books that have music, flavour and scent, irreplaceable books! Let's also invite to the company a few, carefully selected journals.

### 2.3. Confrontation with Real Life Planning Problems

My late father Zbigniew Geppert, artist and engineer, was passionate about mathematics and computers. In the 1960s, he was learning COBOL, and in the 1970s, Pascal. At school, entering the 6th grade, we were asked to buy a pocket calculator. To my disappointment, my father refused. He told me:

I don't want you to accept that two hundred plus two equals four hundred without noticing that something is wrong. Before you use calculators, you must know very well how to count.

And he was right.

In spatial planning, it's even more subtle, because our statistics are describing places – you don't analyse cities the way you compare the calibre of screws in a production line. By transferring the calculations and the making of maps and diagrams to machines, we tend to jump over the process of their construction, which involves the thickness of space. How many wrong maps are based on right numbers, how many biased interpretations use accurate spatial statistics? Only one who has a sound understanding of space and planning should be allowed to even touch a computer.

In planning education, we develop this understanding through 'confrontation with real life planning problems'. We organise workshops, studios, project works... however we call them in our national contexts. Such 'regular exposure to and interaction with planning practice' is "one of the distinguishing marks of a fully fledged planning education" (AESOP Core Curriculum, 1995 in Geppert and Verhage, 2008, p.25). In recent years, simulations and Fablabs have gained momentum in professional and political practice. The impact of this shift on planning decisions and planning processes deserves a separate discussion. But as far as education is concerned, the experience of real fieldwork, direct contact with people, site visits and investigations, remains unique and should not be substituted.

### 2.4. Communication?

Suddenly, we've been overwhelmed by 'communication'. After the rising tide of e-mails, came the tsunami of online activities, proudly powered by the learning management systems acquired by our universities as tokens of modernity and progress – but also happening in the innumerable Facebook groups, Instagram communities and streams of 'snaps' that our students live in. For the scholars actively engaging in these activities, and even more so for the students, it tends to be very time consuming. For what purpose?

Are we really communicating, or are we yelling "a tale, told by an idiot, full of sound and fury, signifying nothing"? (Shakespeare, Macbeth, Act.5, Sc.5). Social media is conveying a violent stream of poorly phrased and inarticulate thoughts. In this flow of filth, nuggets of valuable content are carried away, unnoticed. In spite of our efforts, our learning management systems bear hardly better fruit. Structurally, they foster quantity at the cost of quality. Altogether, social media generates a cacophony, a 'dictatorship of noise', where we cannot find ourselves, let alone the truth. To be able to really communicate, the first step is to rediscover the value of silence (Sarah, 2017).

According to Firth et al. (2019), teens as well as young adults are particularly vulnerable to the negative effects of online socialising, such as cyberbullying, loss of self-esteem, feelings of rejection and isolation, anxiety, and depression. Notwithstanding the intertwining reasons of this situation, our first responsibility is to create safe spaces protected from the internet, at least in our universities.



Figure 2 - *Homo obædiens*. Geppert, Zbigniew.1969. Crayon on paper. Collection of the Geppert Family, Reims, France.

### 3. David and Goliath

From eight years of tech-free teaching, I can present some conclusions. First, it gave me the practical confirmation, not only that this teaching style is possible in the contemporary world, but also that students like it – actually, my students prefer it. Second, ‘returning’ to traditional teaching has not been a way backwards, but a wonderful opportunity for refreshing, and hopefully improving my teaching methods. I have reduced contents in favour of steadier pace and deeper understanding. I have developed a compact but elaborate format for my handouts. The obligatory readings are few, but have to be done every week and I check their realisation. It may sound like primary school, but students perform better and we have much more mature discussions.

In the meantime, things have developed at a dramatic pace: “For better or worse, we are already conducting a mass-scale experiment of extensive Internet usage across the global population” - and this while a fuller understanding of the sustained impact of this usage across our society is yet to be gained (Firth et al., 2019, p.127).

Aren’t we playing the Sorcerer’s Apprentice? Having all the information at our fingertips is an illusion. It remains virtual – neither can we access all of it, nor could we handle it. If, at the same time, we reduce our capacities of memory, of sustained attention, of socialising, then it means that we are chasing after rainbows. The digital revolution is a threat to our minds. See the emotional waves going over the world after dramatic events, or the sudden uprise of new media icons. Where is reason? And, a few days later, what’s left of it?

In front of such issues, I feel small. I would like to have a solution for the world... But this is out of my reach. And so I keep doing my humble work, with those students that are my direct responsibility, “for what will it profit a man if he gains the whole world, and loses his own soul?” (Mark, 8:37).

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