### The notion of the native

In this essay I will not so much impose on my own views, rather, as a starting point I will examine the terminology of the digital native and digital immigrant. While doing research, every piece of text I read seemed to have a point and I came to the conclusion that maybe it is not about the points that are made, but how the authors use their (self invented) terminology. I will try to explain what a digital native is, how this effects our lives (and mainly: how this effects the digital divide, the gap between the digital natives and the immigrants). I will try to put everything into perspective, by criticizing the essays I read, and then as a conclusion make a quick summary and give you my final thoughts on the matter.

# WHAT IS THE DIGITAL NATIVE?

By age 20, kids will have spent 20,000 hours online –the same amount of time a professional piano player would have spent practicing.

Digital natives are those lucky souls born into and grown up in a technology immersed revolution. It is a turning point in history: after the 80s people grew up without the computer, substantially changing their lives, distinguishing them from their parents, the digital immigrants.

Digital immigrants are usually more creative than the previous generations, and they are very able to multi task. The immigrants learned to adapt to this new environment much later in life, therefore they have a certain 'accent' in their voice, something that reminds us of where they come from. Mark Prensky, the originator of these two terms, says, "they always retain, to some degree, their 'accent,' that is, their foot in the past. [...] Our Digital Immigrant instructor who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language."

He mainly writes about the digital natives students in (high) school and how they are educated by digital immigrant or even the digital unaware professors, who are not fluent in this new language. This is because there is a huge gap between the digital natives and the digital immigrants, the digital divide. This gap happens for several reasons: technology, economy, social reasons, geographic reasons, fear of technology, lack of motivation, etc.

There are even guides online for digital immigrant parents who don't know what to do with their digital native child, because they have no clue of what's going on, or why their child is so drawn to this unknown field of internet and online video games.

#### "DIGITAL IMMIGRANT LOOKS FOR PHONE NUMBER IN A DIRECTORY, DIGITAL NATIVE LOOKS FOR A PHONE NUM-BER ON THE WEB."

Or the "Did you get my email?" phone call is also generally attributed to the immigrant.

Digital Natives are living a life online – from chats on Skype to comments on Facebook to vlogs on YouTube - they are presenting themselves, interacting with others, and publishing their thoughts, desires, and experiences on the internet for others to see. They are often experimenting with identity, sometimes bullying others, and making connections with others. Digital immigrants usually talk about their digital persona as if it were something completely different from their offline persona. Sure, online you find cliques or social groups with whom you share similar interests, which you cannot find so easily offline. You can have hobbies online that your friends don't really know about. I would say that there is only a small percentage of internet users that are considered 'trolls' or pose as someone else online. The 'digital persona' is an extension of who you are in your physical life and this is how the digital natives are using the internet. There is no such thing as 'going online' anymore. Online and offline are closely knit together, we are not just consulting the web mainly for information anymore, but through the use of, social networking websites and all sorts of useful apps it interweaves our everyday lives, blurring the line between offline and online. The first generation can't imagine their life without internet.

Numerous studies have revealed how young people actually use the Internet. The findings show that the image of the "net generation" is almost completely false - as is the belief in the

all-changing power of technology.

Why is this? People are different. The problem with the notion of the digital native is that people's lives are different, the way they were brought up was different, the amount of money their parents had to buy them expensive technology was different, and the knowledge their parents had of technology differs as well. These are all factors that define wether someone can be classified as a digital native or a digital immigrant.

When you generalize, of course people under 25 have more chances to become digital natives, and people over 25 are less likely to be digital natives, because of the lack of a technology immersed environment.

When Prensky states or at least implies that digital nativism is age bound, and that people under, let's say, 25 are digital natives, he is partially wrong. Digital nativism is not age bound in the way that everyone under 25 immediately can be classified as a digital native. But, at the same time everyone above this limit can never be a digital native. Authors writing about this subject, convinced that everyone can be a digital native if they put their mind to it, are foolish. The mind of a digital native is physically different than that of someone not nursed in the luxury of technological advances.

There are various examples of researches that prove that the brain never stops reorganizing, meaning the brain structure changes and affects the way people think throughout their entire lives. One of the most interesting researches he quotes is the following: "Researchers found that an additional language learned later in life goes into a different place in the brain than the language or languages learned as children."

When a child is used to the proximity of phones, music, encyclopedia's on your laptop, text messages, chat sessions, and being online connected to their peers in general, it is unlikely that they will have patience for slow lectures

and step-by-step logic. Their attention span is short and it's causing conflicts in the classroom. These students learn for a test properly with the TV shouting in the background, while their listening to music. Digital immigrants find this hard to believe, because they haven't been learning this skill for all of their formative years, and this is where the difference is between the digital immigrants and the natives, and why the immigrants will never be native users: their brain is different.

How do we construct learning programmes for the digital natives? They are bored in class and can't focus their attention for very long. Prensky talks about the 'digital native methodology'. His solution is to invent digital native methodologies for all subjects, his personal way of doing this is to create game based teaching techniques. In short, he uses video games to teach the native something, for example: how a certain AutoCAD application works.

But is this really helpful? They're still games designed with the help of digital immigrants for digital natives. Even though the brain of a digital native works significantly different than that of a digital immigrant, It is my opinion that these ways are trivializing the user, the students and employees of companies who use these games, in fact, it is insulting.

When you try to teach people a chunk of knowledge through a game, I feel that it's abusing the language of the digital native. It's belittling them, stating that they can only learn if they're fed small bites with a baby's spoon, by force feeding them with an assumed addiction. There's something uneasing about the older generation trying to understand the younger generation (which knows how to use the internet and digital appliances) and assuming they see what is happening and trying to find a solution for a problem they see. I'll explain this further: At my high school teachers began noticing the drop in concentration levels of the students. They tried a radi-

cal new approach to teaching. Instead of being in the classroom, they introduced special classes in the hallway of one of the wings of the school, where there was a teacher walking around while the students could work on their homework while using a laptop, the small library or the knowledge of their classmates. This was done because natives apparently want to be able to freely move between information sources. They want to be connected to their peers and only reach out for help when needed. It was a big fail.

And as both Prensky and Palfrey and Gasser say about solving native-related problems: "using our students to quide us", so did my school, not fully understanding the needs of the students. Have they ever asked us what we wanted? No. They implied, that because of 'our' nature, which is: finding useful information on the web ourselves, we don't need a teacher teaching us in the 'old way'. In their ideal picture, we could ask for help on the subject we wanted, when we wanted. This worked only for the geniuses in my high school. The rest of us was uncomfortable with taking the initiative ourselves at school. The error here is that the school board was still working with immigrant ideas: give the students a set of rules and they will examine the rules and use them. But "youth recognize[s] (...) structural properties and find[s] innovative ways of making these systems serve their purposes" (Danah Boyd). While non-natives ask for the rules, the digital native looks at his peers and deductively draws a conclusion on how he's supposed to use a certain platform.

## YOU ARE A VICTIM OF THE RULES YOU LIVE BY

TRUISMS (1979-1983) - Jenny Holzer Ah, school, this is the place where information reaches out to us, not the other way around. There still is the problem of the short attention span. Students find a lot of things tedious, but let them solve the problem themselves. Not even by just letting them grow up and teaching the new digital natives themselves, but let them have an active role in working out a solution for problems that arise from their digital lives.

I agree with Prensky that teaching the natives in a way that applies to them lies in how the subject is wrapped. But for example the way the U.S. army uses video games to recruit new soldiers is repulsive. And certainly, I do not want to be using a game for obtaining my information. I do not want to obtain information by mere child's play, this is not the Teletubby nation. I want a teacher that can tell me vivid and exciting stories on his subject, one that talks to the students with passion and love for whatever he wants them to learn. It seems to me that 'digital native' and 'digital immigrant' are terms that don't quite cover the overtone of digital literacy. Obviously, it is hard to label people and put them into certain categories. And because Prensky tries to do so, his game based learning is only applicable to a small group of people.

Another thing that I find bothersome is that digital immigrants seem to think they can inhabit the world of the natives without problems, as long as they live there long enough. Even the natives can be divided into a group of 'residents' (people who use the internet as a place to live) and a group of 'visitors' (people that see the internet as a collection of useful tools). The problem with 'going native' is: having a Myspace profile or a Facebook profile does not make you native. Immigrants will never use these social media platforms the way teenagers do, and they shouldn't either.

But what I find more interesting, is what happens when the so-called 'digital natives' as Prensky states it (again: people who were born

in the eighties or nineties) are not particularly as interested in the internet as Prensky presumes. Are these kids digital immigrants? No, in their forming years and after, they were surrounded by technology, from the VCR to computer games, writing school projects and using electronic (interactive) toys. And what happens with the kids who had rich parents? For example: my nephew has every piece of electronics he desired: he owns almost all the Nintendo Gameboys variants, gaming consoles like the XBOX and Wii, he grew up with children's laptop and now has his own 'grown-ups' laptop, fully equipped with internet and games like World of Warcraft. He always tried to use electronics in an intuitive way, since he didn't speak the languages the games were spoken in. Neither did he know how to use a VCR, but through trial and error he manages to know exactly what he's doina.

His three sisters are his exact opposites, they play piano and use coloring books for their amusement, even though they have access to their Gameboy, they just see it as another way of killing time. They're using the computer mainly for school and social networking on the (Dutch) well-known networking website Hyves. There seems to be a division in these young people born in the age of internet and computer access. The digital users are set apart from the digital natives. People with (or people who have parents with) money can have the most expensive technology in the world, if they just use it but not understand it, it doesn't make a difference. If their Macbook is broken they're going to take it to a dealer. This is no different to a digital immigrant or digital illiterate having someone fix their broken laptop or even their typewriter.

Everyone seems to be online, but how many of us learn to effectively use the internet? Many young people know how to find a movie or music, and where to express themselves or communicate with friends, but as it turns out: the internet is only a medium among many,

they still want to meet friends and play sports. Prensky is treating the digital native as a whole new species that needs to be treated differently. But the fact is: kids of today are very similar to previous generations of young people: they are mainly interested in communicating with their peers.

Another way of thinking about the matter is enunciated in John Palfrey and Urs Gasser book, by introducing a new term, namely: the 'born digital'. In the homonymous book they're dividing the population into several categories:

- 1) those who are Born Digital and also Live Digital.
- 2) those who are Born Digital (i.e., at a moment in history, today) and are \*not\* Living Digital (and are hence not Digital Natives);
- 3) those who are not Born Digital but Live Digital, "Digital Settlers";
- 4) those who are not Born Digital, don't Live Digital in any substantial way, but are finding their way in a digital world: Digital Immigrants;
- 5) those who weren't Born Digital and don't have anything to do with the digital world, whether by choice, reasons of access or cash, and so forth.

This division makes more sense, since there are so many kinds of users.

#### CONCLUSION

What defines a digital native then? It's not about the technology or the artifact, but about the culture in which those technologies and artifacts are embedded. A culture which the immigrant will never be able to integrate. It's a way of thinking you cannot mimic, no matter how much you try.

There will always be a 'last generation' to know what life is like without something. To never know what the 'old country' was like, to grow up not having to work a farm every day, to know what it's like to have to walk everywhere, to grow up without a phone, to grow up without TV, to grow up without cell phones, to go to college without Facebook, to grow up without instant gratification of communication. The truth is that lives with and lives without any one of those things are discretely different experiences.

The main difference is between native and immigrant is deductive thinking and inductive. If the digital natives can memorize 100 different Pokémon cards, surely they can remember something as simple as the capitals of the world and their geographical reference.

How should we act on this? What is the understanding of how education must be transformed to best prepare digital natives for the future? A small example is the use of the calculator: as opposed to older ways of thinking, they should always be allowed in class, it's time the views on education changed, not so much education itself.

I believe education will change automatically. This is what happens with every generation, because technology is going to change. The only struggle we have now, is that this issue is new, because digital is new. This problem seems to be very time-based.

When we - the digital natives, grow up, we still once were digital natives, or: the digital natives of today will be the digital immigrants of tomorrow. Even though we're a little bit out of sync, we are the ones making a difference for the new digital natives (or whatever new technology is going to be invented).

The digital immigrants of now can never fully understand what it's like to grow up in a world filled with video games, chat boxes, that's why they cannot change for example the educational system.