BREAKING OR MAKING CHAINS?

On dualities of the digital

Lieven Van Speybroeck Piet Zwart Institute - Networked Media Build, Break, Broadcast September - December 2010 It's in the nature of Western man to think it's his task to redeem the world from its imperfection. For a great deal that means from his own shortcomings. Some think that, with modern technology, we've created the perfect ally in this ambitious crusade, whilst others are convinced that we've hubristically given birth to a golem of unprecedented proportions. To define what this technology contains is almost impossible. Its application is interwoven in, and interweaves a huge variety of fields, making it untenable to think about it as one consistent entity. Talking about modern technology therefor requires a specific focus that could, at best, be metaphoric or serve as a springboard to make an analysis of a larger whole. Digital media is to be considered only a tiny particle in the shiny set of high-tech gears, but even within this defined field the biggest outlines of a general positivist and negativist vision on technology shimmer through. At the extreme ends of both we find respectively a utopian and a dystopian point of view, propagated by a handful of thinkers whose thoughts are in a constant state of mutual consideration and criticism. Utopian or dystopian is how they label each other, not themselves ofcourse. While accusing the other of blindness and being unreal, they regard their own ideas rather as optimistic or skeptic. They wage a battle over envisioning the future, using the present and the past as their only available weapons. Where are we headed? Which of its harbingers can we perceive today? In the constellation of utopia and dystopia, it's all about providing desire and fear with a face.

The questions above present us with a vastness of speculative sample sheets to choose from. From the more bright and colorful section, I pick Nicholas Negroponte's point of view. It's in high contrast with Andrew Keen's, which is part of the darker spectrum, not necessarily lacking color though. The first, founder of the MIT Media Lab and initiator of the OLPC (One Laptop Per Child) project, is seen as a pioneer in the field of computer-aided design. "The epiphany of the digital media utopian thinker" according to Andrew Keen (Keen, 2006), also a pioneering Internet entrepreneur and former Silicon Valley insider who traded his belief in the Internet dream for skepticism, as he confesses in *The Cult of the Amateur* (Keen, 2007, p.12). Both are pulling the opposite end of the rope when it comes to their opinion on the future of digital media.

In Negroponte's *Being Digital*, the future is no longer about atoms, it's about bits (Negroponte, 1995, p.4). He calls it a shift in the DNA of information: atoms represent the tactile, slow, 'old' forms of media (news-papers, books, magazines, CD's, DVD's, ...). When constructed of bits on the other hand, media enters a whole new era, in which information moves at the speed of light, is low in production costs, easy to distribute on a large scale and most of all: it's extremely accessible. "The change from atoms to bits is irrevo-cable and unstoppable" (Negroponte, 1995, p.4) he goes on, and so far, his predictions are holding up rather

well. Different types of old – atomic – media are gradually being replaced by new – digital – forms. They are facing extinction, or at least an endangered existence. It would be naive to deny that this revolution is happening and to this point, this vision (which is a fairly logical one if you look at the history of technological evolution) is perfectly in tune with Keen's. It's in the embrace and propagation of opportunities originating from this revolution that their views are perpendicular to each other.

Perhaps the biggest promise of Negroponte's blueprint for the future is the supremacy of democratization. A road toward global egalitarianism. A voice for everyone and a channel to broadcast it worldwide, twenty-four-seven. Everyone connected, sowing and reaping the inexhaustible field of information. Keen calls it "The Great Seduction", a Silicon Valley version of communism (Andrew Keen, n.d.), destined to end up as a cultural, social and economic disaster. He argues that the steady replacement of traditional - consistently labeled as 'mainstream' - media by a democratized version comes at high costs. Due to an increased blurring of lines between audience and author, fact and fiction, invention and reality, it becomes very hard to distinguish readers from writers, art from advertisement, amateur from expert and so on (Keen, 2007, p.27). The common state of information is a distorted one. The people and institutions that provide quality and reliability are put aside by the authority of the crowd, by YOU! (Time, 2006). Media democratization on the Internet results in a flattening of culture in which talent is deprived of all chances of development and exposure by doing away with the intermediaries, the trained professionals, the 'middlemen' that scout, polish and produce the genius. In a world where the amateur (Keen makes no distinction between amateurs and dilettantes) prevails, where no one is being paid to edit, check or evaluate materials, putting trust in media content becomes a risky business. In Negroponte's scheme however, this increased opportunity for free expression leads to an increased display of talent and richness of content. It's about the possibility of showing and reporting what never would have been found or searched for by 'the industry' or 'mainstream institutions'. Not only is this challenging the artistic and journalistic field, it's also questioning the traditional formats of scholarship and education. Digital media "provides for reaching out to find knowledge and meaning" (Negroponte, 1996, p.202). Although not directly attacking intellectualism or the 'smart smarts', Negroponte sees great advantages in injecting 'street smarts' into the superhighway of information, alias 'the Internet'. Only this way it can become a true web of human knowledge and assistance (Negroponte, 1996, p.203). It's a limitless, ever updating preservative of wisdom. An amplification of common sense. Years of experience that would otherwise remain isolated within a certain group of initiates can now be exchanged, thereby filling gaps, building bridges and securing its survival. According to Keen, this vision of augmented public knowledge is a severe overestimation of what the average Internet user has to say. He sees it more as an amplification of common nonsense. Instead of raising the level of knowledge, it's lowering the bar for real thinking. He calls it a narcissistic way of dealing with information: the Internet is telling us what we already know, it's a mirror of ourselves, a mirror of mediocrity. An unprecedented insult of the human intellect.

The crowd is more than ever a group of individuals. This individualized culture preludes a new age of radical inegalitarianism, in which a few – perhaps talented – people hold great deals of power, leaving the masses powerless. Individuals become brands. It's a future of digital fascism and feudalism with dramatic inequalities of power (Keen, 2009). To Keen, a service like Twitter is the epitome of this evolution: the loudest and most opinionated can be defined by their amount of followers. It's revealing the real topology of this new world of inequalities we're entering: one of digital Darwinism. That's a lot of digital ism's to chew on and they all tarnish the idea of a global community of equally empowered individuals, defended by Silicon Valley enthusiasts like Negroponte. It was mainly the Californian faith in the emancipatory potential of new information technologies that made the dot-com bubble grow during the 90's. Through both a left and right piston, the new (or grown up) hippies and yuppies simultaneously inflated

it with the belief in either social or economic liberation. A lot of those adventurers, such as Keen, ran out of breath quickly. The ones who didn't however, got sucked into the bubble itself, cross-fertilizing each other, mingling ideas, merging into one. When the bubble eventually burst in the early 2000's, only the strong seeds of this new amalgamated breed could germinate, grow and eventually flourish on the saturated and battered grounds of information technology. The rest shriveled, together with their unfulfilled prophecy of liberation, again. The newly born digital elite (IBM, Google, Intel, eBay, Amazon to name a few) has strong beliefs in its hybrid composition. She doesn't criticize either of its core components, instead she's convinced to turn both ideologies of social and economic emancipation – both sharing a certain resentment towards governmental potence – into reality. It's a hymn to optimism. An ambitious throw at profound global change.

Shortly after publishing Being Digital, Negroponte started the non-profit association called One-Laptop-Per-Child. Its Mission Statement: "To create educational opportunities for the world's poorest children by providing each child with a rugged, low-cost, low-power, connected laptop with content and software designed for collaborative, joyful, self-empowered learning" (One Laptop Per Child, n.d.). Kids in Peruvian, Rwandan and other underdeveloped villages around the globe have been supplied with internet-connected '\$100 laptops' without having any former education or instructions how to use this technology, let alone any real notion of what the Internet is. The majority of these children are illiterate, their parents likewise. The villages they live in are lacking the resources and infrastructure to provide for quality education. Somehow, these children would make an awkward illustration for Keen's 'infinite monkeys'. Can you just throw in a bunch of laptops in this environment and expect something good to happen from it? Yes, you can, if we are to believe Negroponte. How could this possibly work? His answer is playfulness. It's in the same philosophy of MIT's Lego-Logo project, a computer-based robotics environment for kids developed in 1989, that playing is learning. If introduced early enough in a child's life, learning technology can be as natural as learning a language. Do away with the manual, exploration is the key to understanding! One thing worth mentioning here is that Negroponte himself is dyslexic. He starts Being Digital by writing that he doesn't like to read (1995, p.3). Probably, his aversion to traditional education and the urge to develop an alternative that involves less read and more play partially originated from his personal learning experience. Education and the importance of approaching it alternatively are also the core credos of the OLPC association:

- · Children are our most precious natural resource
- *The solution to poverty, peace and environment is education*
- *Teaching is one but not the only way to achieve learning* (Negroponte, 2006)

The project's results, as presented on TEDxBrussels in November 2009, are remarkable: children are teaching each other, their parents and their teachers how to write, read, send e-mail, surf the Internet and play games on these laptops. It's reversed order. These children are the true agents of change.

Somehow, this sweet story of honey and pie craves for a grain of salt. Mark Halpern, a Californian software designer, programmer and editor who has regularly published in *The New Atlantis*, problematizes the '\$100 laptop' in an interview with Andrew Keen. He describes different stages of deficiency in the scheme, making it invaluable to accomplish its preconceived goals. The first one concerns comprehensibility: by planting computers in a techno-unfamiliar environment, you ignore the fact that using this technology assumes a great deal of sophistication of its users. A mental sophistication in terms of reading and understanding a language, both alphabetic and visual. It takes a long period of culturation to develop this understanding of symbols, icons or idioms. Proper education is crucial, but there's also the need for an environmental setup that radiates visual elements of a language, so children can learn to understand it without having any technological background. This environment (filled with books, television,...) is lacking in most of the OLPC areas, creating an atmosphere of overwhelming incomprehensibility when suddenly a shiny green device is confronting these children with a visual language that is alien to them. Even if this problem of understanding would be overcome, media literacy would be the next major obstacle. How could these kids distinguish 'the good from the bad', the marketing scams from the truthful messages? *Congratulations, you are the 100th visitor! Click here to claim your \$1.000.000 prize!* Ofcourse they'd click it, give them one reason not to. This example may be innocent, but complete media illiteracy can be a dangerous thing. People start to rely on the information they receive, putting trust in a misapprehension of it could be disastrous. If, miraculously, all these children are media literate enough to indemnify themselves from the biggest threats, there would still be a major issue: what would all this Western-oriented content bring them? What useful skills would they get from it? A specific culture asks for specific software. Children in development areas would find little use in the software toolbox of a highly developed society. Sustainable change is not established by skipping steps.

Despite the noble goals that 'non-profit' associations like OLPC publicly premise, there's always the sense of paradox between their do-gooders' status and their strong ties with a capitalist regime. The boundaries between charity and profit are thin, and in most cases, not very transparent. Today's biggest philanthropists are millionaires, celebrities of different kinds who are glad to spend a part of their fortune on welfare. Warren Buffet, Bill Gates, Bono,... all top the list when it comes to financial generosity for worthy causes like world hunger, AIDS and human rights. The ambiguity is imminent. Bono's child of benefaction for instance, (*product*)^{*RED*}, is licensed to partner companies like *Nike* and *Starbucks*, all joining the force to raise the awareness and funds to fight AIDS in Africa. Slavoj Žižek, Slovenian philosopher and psychoanalyst, makes a sharp formulation of this discrepancy in an article for *In These Times*:

Charity today is the humanitarian mask that hides the underlying economic exploitation. In a blackmail of gigantic proportions, the developed countries are constantly "helping" the undeveloped (with aid, credits, etc.), thereby avoiding the key issue, namely, their complicity in and co-responsibility for the miserable situation of the undeveloped. (Žižek. 2006)

People like Negroponte and projects like OLPC claim that their main goal is not to earn money, but to make the world a better place. Making more profit, of course, is one of the pleasant 'side-effects' of this strive. Not only is the taste of this duality sour, the benefits or permanent changes caused by these 'gifts' are usually very vague and again, not very transparent. In the case of OLPC, the corporate partners involved in the creation of the XO laptops reinforce their market position and enhance the amount of power they hold over the users of their technology. Other than their own level of control, there's also the close correlation between poverty and corrupt governments or power structures. A widespread distribution of these cheap laptops would make it possible for this corrupt force to use this technology as a leverage to increase and secure its power. The intention to break people's chains would only result in making them tighter and stronger.

Technology could have a great deal of importance in ways to 'solve' certain humanitarian issues, but it shouldn't be conceptualized as the solution itself. It doesn't work that way, certainly not when the leading figures and institutions that push technology forward are also the representatives of a capitalist power that creates many of the problems they're tackling. It's a two-faced model. The digital hymn to optimism

and emancipation is at the same time an elegy of pessimism and repression. Throughout history, any force of liberation on one level lead to enslavement on another. Iconic for the heterogeneous freedom ideals of the new digital elite are America's Founding Fathers such as Thomas Jefferson (Borbrook and Cameron, 1995), who fought for a liberal republic built by and for empowered individuals. Slavery was a justified and necessary key element to obtain this type of freedom. The digital elite has its slaves, too. Its moral ambiguity is subtle and sophisticated, disguised as a mesmerizing panacea for the future. It's a future where, eventually, we all end up simultaneously subjugating and subjugated by actively participating in and submitting to a market system that is regulated by a few key players.

There's not much room for choice. The level of social dependence on digital media has come to a point where disconnection leaves you blind, deaf and mute. Participation is almost mandatory if you want to function in the technology-based jungle we live in. That doesn't mean we just have to let this wave of digital determinism wash over us. We're more than just a passive part of the continuous 'making of'. Whether we find ourselves more comfortable with the brighter or darker sections of the digital earth catalog, it's our collective responsibility to retain a constructive space where honest debate and public criticism is possible, through whatever means of communication. In my opinion, alternatives to the Silicon Valley ideology are not to be found in the past. Not in an individualist anti-statist attitude. Not in an old belief in hierarchical order and authority. Real progression lies in an innovative way of combining state, corporations and so-called amateur initiatives to create a balanced mix of interacting forces. Their strength is their complementarity, not their individual potential. So far, most effort has been put in trying to surpass or exclude each other, while the establishment of a genuine synergy between them is probably the first step forward that doesn't involve taking one backwards too.

References

Keen, A., 2006. *AfterTV*. [podcast] March 2006. Available at: < http://files.podcast.com/aftertv/After_TV_Mark_Halpern.mp3 > [Accessed 24 November 2010].

Keen, A., 2007. *The Cult of the Amateur – How Today's Internet is Killing Our Culture and Assaulting Our Economy*. London: Nicholas Brealy Publishing.

Negroponte, N., 1995. Being Digital. London: Hodder & Stoughton.

Keen, A., n.d. *Eleven Unfashionable Thoughts About Digital Utopianism*. [online] Available at: < http://andrewkeen.typepad.com/akfiles/eleven.htm > [Accessed 21 November 2010].

TIME, 2006. TIME's Person of the Year: YOU!

Robin Wauters, 2009. *Interview With Andrew Keen At The Next Web 2009*: "*Web 2.0 Is F*Cked*" [video online] Available at: < http://techcrunch.com/2009/04/16/interview-with-andrew-keen-at-the-next-web-2009-web-20-is-fcked/ > [Accessed 9 November 2010].

One Laptop Per Child, n.d. [online] Available at: < http://laptop.org/en/vision/index.shtml > [Accessed 25 November 2010].

TED, 2006. *Nicholas Negroponte on TEDTalks* [video online] Available at: < http://blog.ted.com/2006/08/01/nicholas_negrop/ > [Accessed 3 December 2010].

Barbrook, R. and Cameron, A., 1995. *The Californian Ideology*. [online] Available at: http://www.alamut.com/subj/ideologies/pessimism/califIdeo_I.html [Accessed 6 December 2010].

Žižek, S., 2006. *The Liberal Communists of Porto Davos*. [online] Chicago: In These Times. Available at: < http://www.inthesetimes.com/article/2574/ > [Accessed 24 November 2010].