

CYBERSPACE RECON

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Exploring
the virtual jungle

Xander O'Connor & Linda Sbai
with Luc Sala





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1 INTRODUCTION

Cyberspace, the future, who better to consult than the younger generation? The ones who have to create the future, rather than foresee it, as St. Exupery noted. They are the ones who have to deal with issues like freedom, privacy and the erosion of cultural and intellectual diversity in a world dominated by what the internet has spawned, not a brave, but a digitised, homogenising behemoth of a virtual world.

The generation that has facilitated and created this repository of The public and increasingly also private data that now creeps back into our lives and makes us ever more dependent on externalised information, now needs to listen to those who are now the 'netizens', the citizens of this monster machine that now spans the world.

It's far too early to predict what cyberspace will bring in the future and what the effect of all this new technology will be on things like ethics, health and consciousness. But it does make sense to survey and explore what is going on, hence the title of this book. Recon, short for reconnaissance, is a military term for gathering information, and that is what this project was all about.

This book is the result of a month long Summer Campus project at Myster, a villa and spiritual centre near Venlo on the Dutch-German border. I live there, being a writer, journalist and slowly retiring media-entrepreneur in fields as varied as ICT, alternative health, anthropology and psychedelics. My recent books are an extensive study about Ritual (English, www.lucsala.nl/ritual) and a Dutch book about cyberspace (www.lucsala.nl/cyberboek.pdf).

Maybe as a side remark here, but I tend not to believe God throws dice.

A few young and bright kids came to Myster for a summer stint, wanting to create something, produce something outside their educational track, something new and different. Now producing things is what I did all my life; books, magazines, articles, websites, television programs, companies and political initiatives.

So their request for actually producing a tangible result resonated very much with what I, as a 16 year old imprisoned in a 64 year old

body, like to do and now like to help others do. So I decided to go for it, participate in the project at a peer level, joining the forces of experience with those of enthusiasm, intuition and the sense of wonder, my young co-conspirators contributed to our melting pot of exploration. They wanted, as much as myself, to create something, make their mark, do the impossible, surprise ourselves by showing that cooperation and mutual respect could yield something remarkable, or noticeable at least.

But what a challenge, could we, in the course of a few weeks, create a meaningful something? I think we could and we did, the result is here. We choose to create a book, with cyberspace as a subject and ethics and health as a focus, but as the project got underway, it became a roller-coaster of insights, adventures and even mysterious interventions, a story in itself.

The initial focus was on understanding how cyberspace and people interrelate, what developments and future people could foresee or expect, so we started out on a sociological compass with a list of questions, sampling the opinion of those at hand as a starting point. But then things happened that were so mysterious and so much at an crash-course with that rational objective, that the project and the experience started to merge. Consciousness and the magical knocked on our door, quite literally and we were suddenly facing the extra-dimensional, in ourselves, in the people around us, in a specific object. It was like a reminder that the ultimate questions of reality and existence, of resonance and identity cannot be evaded a while thinking about what cyberspace means for the individual, the collective and the earth.

The group, apart from myself, consisted of an extremely bright young 17 year old creative 'sensitive', a 22 year old Islamic medical student, and for part of the project, a 25 year old Chinese girl, studying in Paris. Anjes Kriyana was the protective godmother of the project, taking care of the human side of things.

The Benin Bronze incident (see appendix) that happened seemed very different from the original project, but did fit in the consciousness and group awareness processes happening between us as a small group and in connection with the people, places and institutions we met and approached. Because of this rather mysterious

event during the first days, consciousness and the otherworld became part of the process. We were reminded that beyond rational thinking there are more things in heaven and earth, as Shakespeare made clear in Hamlet's words to Horatio. Due to what happened with the Benin Bronze we were kind of forced to look a bit into what could be called the magical, irrational side of cyberspace. Ignoring that would have made this project as lifeless and in a way irrelevant as most scientific work, for we humans are not living by ratio alone, we are part of a wider reality, where Gods, magic, beauty, morality, justice and consciousness reside.

Working together at a high pace, meeting an enormous variety of people at sometimes very intense events, but also because the internal mix of opinions and background proved so productive and stimulating, that the goal of producing a book has been achieved relatively easily.

We started out with a list of questions, a quick-start approach to get things going. It turned out to be less of a statistical tool, but more a starting point and guideline for interviewing people about their views. But this was not a one-way process, the interviewed people started discussing things among them and the ensuing debates led to more understanding and in a way, respect for different views. For that much is clear, there is no general opinion about what cyberspace will bring us, there are fears and hopes, but all of us are grappling with the uncertainties, even as most people see cyberspace as a defining trend.

The tangible result of the process, this book, is isn't so much a totally new and complete view on cyberspace, much older material from my archives was used and reworked. The filter of the young and fresh, the internal discussions has given it new vigour and vitality. There are also a number of more personal views, about subjects and views of the respective project members.

The result, I hope, is more than just a compilation of perspectives. it's a statement about co-operation, about aiming high and yet be humbled by the reality of life and inspired by the joy of just working together.

Luc Sala, August 2014

2 XANDER'S VIEW

As a prelude to the project, Xander wrote down what issues he thought would be important:

For society to move forward it's paramount that more technology is developed: every large social movement has been with a technological advancement, such as the industrial revolution. Unlike the past few centuries, our generation relies on technology and computers to survive and I fear that soon (over the next 100 years) we will be unable to think for ourselves as computers will complete every task for us. This process has arguably started already: today we see robotics in households cleaning and AI developments moving faster than ever before. I believe that for society to move forwards in the right way we must also move backward in a way. Yes we must step forward technologically, however we must not forget how to be independent and know how to live without technology.

Computers have already eliminated the need for books with the Kindle, so who is to say that within the next 50 years we will not need to learn anything as computers will enable us to do so?

How much intelligence should we give AI (artificial intelligence)? By allowing computers to be as/more intelligent than us we run the risk of not being needed any more. Computers run logically, not morally (unless programmed to do so). Logic may dictate that certain actions for a robot to undertake are the correct ones, however humans have an innate sense of morality and empathy that means that we might not act upon the logic we have, but that doesn't mean that the action is 'wrong' I believe that we have a limited amount of options when it comes to AI. We need to programme morality and empathy into robots or we need to limit the power and intelligence that computers have.

Virtual reality is also a topic. With the advancements of the Oculus Rift VR headset we are not far away from re-creating reality, graphics and in game engines are becoming so realistic soon it will be hard to tell the difference between reality and virtual reality. This

naturally brings up the question, ‘is the world around us real or is it just virtual?’ Films like *The Matrix* and *Surrogates* have shown us a glimpse of a future for technology and humanity that is very plausible. Not only does virtual reality bring up this ethical dilemma, but it also brings up a conflict in our social lives. Total submersion in video games will mean that we won’t be aware of the world around us, paying attention to things that aren’t real instead of things that are real.

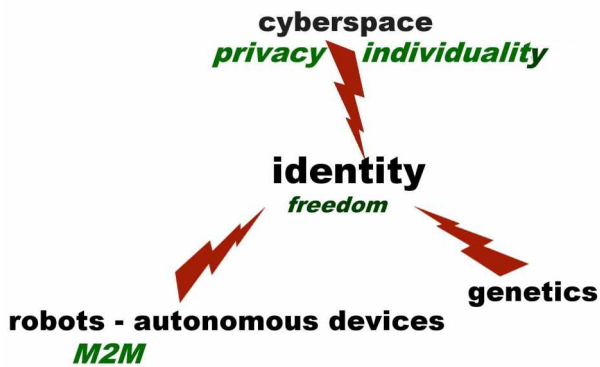
Films are not the only form of entertainment that have given us concepts to think about, video games such as *Assassins’ Creed*, which uses a device called the Animus to relive your ancestors memories, and *Watch Dogs* which shows us a very realistic idea of cyber criminals and the power of a computer and even a mobile device. The more of our world that we allow to be populated by machines the more it’s vulnerable to hacking, leaving our personal data at risk of hackers, which actually is happening now.

The technology that we have today was seen years ago as impossible and science fiction, so who is to say that the things we see as impossible or just fiction won’t be created in the future? Things like teleportation are not too far off into the horizon. However, ethical problems arise with this technology. Through conceptual design of teleportation devices we have discovered that when you decompose the human body atomically and reassemble those particles to another location, those particles are not exactly the same. So not only are you technically killing the individual and , ‘giving birth’ to them again, you are also creating a completely new person, as the individual that walked into the teleportation device isn’t scientifically the man who walks out.

I am also interested in the effect of video games on morality and ethical situations. The main user base of video games are people under the age of 18, which is the age range that has the largest ability to take in information and learn new things. Games like *Call of Duty* and *Battlefield* have not only been accused of desensiti-

sing the youth to violence and killing, but have also shown to persuade young people to join the armed forces. Some would say that there is nothing ethically wrong with this, however I believe that war is unnecessary, though sometimes can be appropriate. But it all comes back to killing another human being, which throughout culture and religion is seen as wrong. I have indeed played these games and I quite enjoy them, however due to my upbringing I can differentiate from reality and these games and I believe that a lot of people my age cannot, which can result in bad consequences.

I am especially interested in journalism and how the press can effect the general population. I would like to propose that I write a research article on one of the topics I have spoken about, or indeed a collaborative article of multiple ideas and people. But I am not only interested in writing an article, I am also interested in creating a musical composition for a video game or something else, and creating a podcast in which people discuss ethical dilemmas within technology, entertainment and video games.



Technology attacking our sense of identity

Who are we, amidst a world where the roots of our existence are being challenged by technology beyond the traditional confines of the material, ethics and identity.

3 THE QUESTIONS AND THE SURVEY

The project started with writing up a number of questions about how people would see cyberspace and the internet and what effect they think it will have on their lives.

We all have some notion about what the internet and cyberspace mean in our lives, but are rarely asked to put this in words and respond to direct questions. We discuss things like privacy, on how kids spend so much time texting away, twittering and face-book-ing, how bad this could be for concentration, but how conscious are we really about what the connections the internet provides to others and the access to what resides in cyberspace content-wise and as services really mean to us. Even if asked to answer about our personal experiences, we tend to answer for what we think is the collective, the general. In a 2010 survey by John Brockman of the Edge concerning how the internet has changed one's thinking, answered by some 151 of the most prominent thinkers and writers of our time, many of them responded by outlining what and how they thought the internet had changed the thinking of others.

So at the start of the project a list was made with questions to people about how they felt about how the internet and cyberspace had changed their lives. Making this list was an exercise in cyberspace consciousness in itself. What is relevant, what hits the core? It's easy to make a list of hundred of questions, but practical considerations limit it to some 20. Also how many people would answer honestly to questions about their sex-life, porn watching habits, gambling or e-dating or illegal downloads? And that's just the start of a list of the hidden uses of the internet.

The conclusion of much talking and jotting down suggestions, changing things around was the following list, with an introduction of the project for the people participating in the survey:

CYBERSPACE – QUESTIONNAIRE

- Do you receive more good or bad news by way of the internet?
- Have you ever tried to self-medicate or heal yourself using the internet's information?
- How has social media affected your emotions?
- How has social media affected your thinking?
- How has social media affected the tempo of your lifestyle?
- Do you feel you can spot false: fishing attempt?
- False websites leading and misleading to take advantage (malware, fraud)
- Has the internet ever made your life harder/better?
- How much time do you spend on the internet daily/monthly?
- What's the longest time you've gone without connectivity to the internet? Did you choose this?
- Do you miss the physical touch?
- Do you feel empowered by the information on the internet that can be accessed?
- How do you feel the internet views your religion?
- Have you ever used internet dating? What are the good things? What are the bad things?
- Why does the internet make people instinctively sexual? Decency Barriers?
- Do you feel safer in life with a.) Mobile Phone
b.) The Internet
- Would you survive if you were cut off from all technology?
- Is technology limiting social interactions?
- Do we have a split identity/personality when using the internet?

- Do you feel that your work is being threatened by the internet?
i.e. The internet knowing more than you
- Have you ever attained an injury while using the internet?
(RSI, astigmatism, pain...)
- Do you think you would live longer because of the Internet?
- Has the Internet improved your sex life?

And then the name, the gender, age, religion was noted and whether they use Twitter, Facebook, Skype, SnapChat and the tool/device they normally use to get access to the internet.

THE PROJECT BRIEF

The Myster Summer campus project is about how cyberspace and the Internet influence our lives, with a focus on Sociology, Philosophy, Ethics and Health. The purpose is to produce a small study using material from interviews and research, and in the process become sensitive to the issues around the Internet and cyberspace. This is invading our lives, our careers and our future and we think it is important to know what people think and feel, because it is us that will be creating the future!

We try to determine what this digital world does to us humans and part of the project is to question a number of people concerning their experiences, expectations and feelings about what things like mobile communications, social media and the access to the world wide web mean to them. Not what they think it means to others, but quite specifically how their life has changed, how they expect that the internet will influence their career, life, relationships and health.

To do this, we have formulated a few questions, but this also serves as a starting point in asking you a bit more about what you do, how you feel about things like privacy, and how life is changing because of all these digital miracles.

4 INTERPRETATION OF THE SURVEY

The set of questions was made in an afternoon before the party started, so maybe wasn't the optimal tool to gauge the opinions and feelings about cyberspace. Many questions could have been rephrased, were not very clear or used words not directly understood or ambiguous, but this is how things start, learning by doing.

The questionnaire as such was not so much intended to gain specific answers and statistical data, but to serve as a starting point for probing into what sentiments, feelings, expectations were around, concerning the cyberspace issues.

In this chapter we do follow the questions, but many issues deserved a more thorough explanation and insight.

Although the sample size was limited, the variety was quite important: their age ranged from 14 years 78 years, they were from four different continents and very different background in work and religions. Not only did they participate in the survey, but sometimes heated discussions emerged and insights were shared. Having Islamic scholars, a dreaded New York singer, Sufi musicians, Western Anthropologist and even a Jewish psychiatrist throw around quotes, poems, songs and references, this Qur'an Soura against that Biblical quote, was nearly a theatrical experience by itself.

The twenty-two questions did not ask for plain yes-or-no answers, but led to more in depth contemplations and often discussions. Although everybody understands the internet, the separation between carrier (the physical internet) and content (cyberspace) wasn't initially clear to all.

First of all, we need to mention that more than 90% of the interviewees use social media, like Facebook, and have access to the internet from their PC, pad and/or mobile phone.

Question 1: Do you receive more good or bad news by way of the internet?

Most people say that they get good news, and some of them think that is one of the reasons they keep using it. However, bad news is what attracts a lot of people, as this gives them an ego boost. By

seeing that others lives aren't as happy as their own, they become happier about themselves. This is an aspect of media that won't likely change, we will always try, as humans, to make our lives seem better than others

Question 2: Have you ever tried to self-medicate or heal yourself using the internet's information?

Many go to Dr.Google before going to the doctor. Many people have been asked Internet for help, to heal themselves or relatives. They have been looking for their symptoms, and if they had a disease they know they would learn a lot about it before going to a doctor. Naturally, this can become a problem for the actual doctors, as they may become something that we don't need as we have forums and websites to do the same job. Even surgery is being taken over by robotics, so it's only a matter of time before an expert system is introduced.

Question 3A: -How has social media affected your emotions?

The emotions of the interviewees have mostly been affected in a positive way. They believe that social media, by allowing more connectivity to friends and family, and allowing more insights to their lives, has made them happier and more comfortable with life.

Question 3B: How has social media affected your thinking?

They try to keep a distance between the information they get and their thinking. To prevent themselves from being manipulated by the media, and to avoid propaganda, they manage to use several websites, so they could take a critical look to the information they get, trying to find the truth. In addition to that, a few use Twitter to get the information without any intermediate, and compare it to a truth filter.

Question 3C How has social media affected the tempo of your lifestyle?

They complain about how fast the time goes when they are on the internet. They lose control over it. Nevertheless, they are aware that this tool is speeding up the tempo of their lifestyle. Somet-

hing that may take an hour to look for in the physical world only takes seconds on the internet, this fast paced information retrieval can be applied to many other scenarios. Many people say that after surfing the web, they feel that the physical world feels very slow and boring, with nothing to do. This could be an important issue to tackle in the future.

Question 4 & 5: Do you feel you can spot false information like fishing attempts? False websites leading and misleading to take advantage (malware, fraud)?

They are pretty sure they are smarter, and can avoid them. However, a few people would feel safer with a firewall and proper warning software. Some, however, feel that the con-artists and cyber-criminals do such a good job of hiding the intent of the website that it's hard to tell the difference between a legitimate website and a website that can harm you.

Question 6: Has the internet ever made your life harder/better?

They consider their life as being more exciting, more interesting, and easier because of the internet. With modern booking systems people can travel the world with just a click of a button, people can also virtually travel to any desired location with Google-Maps and StreetView, this, integrated with virtual headsets could change the meaning of travel and tourism.

Question 7: How much time do you spend on the internet daily/monthly?

The usage of the internet ranges from 1.5h per day to 8h per day if the person has to use it for their job. The teenagers usually spend up to 4h per day chatting, on Facebook

Question 8: What's the longest time you've gone without connectivity to the internet? Did you choose this?

Mostly, they want to have access all the time. When without it, it wasn't their choice but a necessity, because they were for example, travelling. Being without it lasted from two days to one month, and people feel that this was annoying and they will remember it. This comes back to dependency on being connected to the world and the internet, and spurs the question, will we be able to fully function as a society without connectivity?

Question 9: Do you miss the physical touch?

Technology takes away many physical objects, replacing them with virtual and digital counterparts, like the book becomes an eBook, no longer a physical object in your hands. The majority of people miss touching and feeling things. The older ones assume that the younger generation appreciates the physicality of objects less. Part of this is that they got used to replacing things fairly quickly, because of new models, advancement of technology. No more repair, just buy a new one. New things usually can do more, combine more functions, have more 'value' than the separate 'old' things like a radio, a cassette player or a book.

An example showing that nowadays kids expect a different physical interface is that a three year old girl thinks books are iPads, and tries to turn the pages by swiping her finger across the surface. This means they have a different sense of what touch means, not that they have less common sense.

The physical contact in meeting people has changed, as the majority of meetings and interaction is done via cyberspace. This has a very large effect on the community, with less and less physical interaction people will become unable to fully function in social situations that require real physical intimacy/interactions.

Question 10: Do you feel empowered by the information on the internet that can be accessed?

Usually they do. They suppose their life is more interesting because of this enormous amount of information. They do realize however, that not all is useful and that you have to look for 'your' information, the stuff that is relevant.

Question 11: How do you feel the internet views your religion?

Not many people have a specific religion, but most assume it depends on the way you find your information. It depends on the source. The relationship between the internet and religion, the more religious interviewees noted, are as complex as the relationship between globalisation and religion. No easy answers, one can find confirmation and skepticism in all corners, and both fundamentalists and materialists use the internet to promote their ideas.

Question 12: Have you ever used internet dating? What are the good things? What are the bad things?

A good 40% of the respondents admit that they have used internet dating one way or another, but they have only made superficial friends. Still, they know people who got married thanks to this new contact tool. The danger they see is that people only highlight what they want to show; there are mostly positive things in the self-descriptions. Detecting a liar or poser is harder in cyberspace, when you only have words and maybe a somewhat improved or embellished image on a screen, than in real life, when you meet this person. However, the positive aspect of it could be that it might help minorities, gay people, disabled persons or people living in conservative countries where interactions between genders are limited, to eventually find their soul mate or at least broaden their social circle.

Question 13: Why does the internet make people instinctively sexual? Decency Barriers?

Becoming more animalistic, less shy or chaste is what one assumes happens when interacting with screens between them. The decency barriers are less because people feel safe and secure behind a computer. Their lust and hormone driven behavior won't have any real consequence, as it's virtual. Sex, vulgar language or just obnoxious remarks come out easily, and there isn't the body language feedback of the other, especially if the connection isn't two-way in real-time.

Question 14: Do you feel safer in life with

- a) Mobile phone
- b) The internet

They believe they feel safer, especially with their phone, and some of them regret that, as they feel weaker. The reason of this feeling of security is that they believe they would never get lost, or left alone, if they carry their device.

Question 15: Would you survive if you were cut off from all technology?

For adults it is obvious that they don't need the technology to live. In opposition to that, young people assume they could not survive

a long time. The technology is an integral part of their life. They were born with and would die without it.

Question 16: Is technology limiting social interactions?

The social interactions are facilitated by social media, but they are most of the time superficial, so their quality is limited.

Question 17: Do we have a split identity/personality when using the?

They believe they are the same person, and that if it happens without internet, it would also happen on it, in order to, for example, boost their ego.

Question 18: Do you feel that your work is being threatened by the internet? i.e. The internet knowing more than you.

To protect your work from the internet, you have to be very good at something, you have to be an expert, or, the work should require creativity, skill, or be handmade. Indeed these are the only things internet can not supply.

Question 19: Have you ever attained an injury while using the internet? (RSI, astigmatism, pain, obesity)

One third of the interviewees suffered from a device related injury, like astigmatism, or pain in their right wrist joint (RSI).

Question 20: Do you think you would live longer because of the internet?

30% of these people believe they would because some services are faster. Moreover, one person has a heart disease and he hopes he could find on the internet, as the amount of information about health is huge, a good cardiologist to help him improve his life.

Question 21: Has the internet improved your sex life?

We thought about asking this question quite late, so just a few answered. They were mature and didn't see that it could have changed this part of their life. However, porn websites are in North Africa, Europe and America, in the top 20 websites visited. Is the effect positive or negative? We do not know, but we can

suppose that the image it gives, to young people in particular, has some effects. This question however was not answered outright by most of the people, as this is a sensitive area, the question should maybe have been put somewhat different.

5 PRIVACY

Talking about the internet, the issue of privacy comes up very quickly. Some say they don't worry, they have nothing to hide. Others are really concerned about what others not only know about you, but what they can do with that information. Some think they can outsmart the system by hiding behind avatars, masks and false identities, some see opportunities in the whole privacy issue, it has become an industry after all.

Older people seem more concerned about it than the younger generations, who are already used to sharing all kinds of detail by way of social media anyway, their CV, photos and backgrounds are online on the many forums anyway. They may be concerned about people stealing their money, but that the NSA or a clever school-mate reads their mail isn't a great concern to them.

Privacy is both an ethical and a very practical material problem. The material side of it, the threat to one's bank account, the possibility of being the victim of a cyber attack, losing one's data, is by now well known. One is increasingly becoming aware that identity theft is terrible, that your passwords and account or card information can be used to take your money, that your credit rating (with serious consequences) is based on assessments yourself can never see, that your medical records can be used in court cases or by insurance firms, and that your past will follow you as a digital shadow forever.

No right to privacy anymore

The laws are still there, privacy is a human right, but the watchdogs that were created are powerless, against the criminals, the big portals and against the governments that snoop as they please. Our identity is up for grabs, privacy, for many, is a thing of the past, even if this has severe negative consequences for our well being and for progress.

"We have a right to your data, because we make your life better and more comfortable, we protect you from useless data"

is the message the likes of Google spread.

Not only do governments snoop at our lives, criminal elements succeed in stealing passwords etc. by the billions, and have thus access to our personal data. Commercial entities like Google and Facebook do business with what they can extract from us, directly by knowing hard data like addresses etc. but also indirectly by creating profiles based on what we do on the internet, our surfing habits, words we use, snooping around in whatever they can find about us.

There were and will be, under the pretext of more security, serious attacks on our freedom and liberties, the 'brave new world' isn't far away, big brother comes as many little brothers, each justified in a limited perspective, but together eliminating our freedom to be who we want to be. The default power of the new superpowers like Facebook or Google to change the rules, formats, rights and profiling methods without consent of their mass audience constitutes cyber-slavery. We, the users are both customer and producer of our own data, by means of commercial circuits that acquire, process and market data about who we are, feeding the lot back to us with targeted advertising and hypnotic manipulation of our information streams.

Digital identities beyond our reach

Things are moving fast, our digital identities take over from ourselves, we have to add a digital self to our line of subjective selves, even as we have little control over it. Our digital self isn't free, it is made up of bits and bytes we provided willingly and unwillingly. These are turned in profiles and search filters we cannot alter or even perceive, but we do delegate our (re)search options, influence on our credit status, our job opportunities and our social life. We think social networks and search engines are "open" and public, but in reality they are only really public to those who have backdoor access.

Our identity in cyberspace, or even identities, define us more and more. We are, in the eyes of the banks, the government and our friends, increasingly becoming our Facebook page, our credit card record, etc. In other words, what Google and Facebook make of me is what I am in cyberspace and increasingly in the real world. Our outreach in cyberspace (to others and to the mass of

data) will generate and define what comes to us, the feed is the outcome of the search. Our pull (what we do, search, buy) results in a push (what is sent to us as advertisements, search results) and this in a cycling process, we are becoming the prisoner of our digital identity.

Is there an escape, can we ignore this and just live off line? Maybe, but you have to be on the internet, otherwise you are out of the game, a cognitive dissonance message constantly heralded by government, industry and science.

There is a parallel with the way the Catholic Church monopolised and homogenised the information flow to the faithful in the Middle Ages, using ritual and limiting access to texts. They were the master of cognitive dissonance techniques, introducing not only sin and inadequacy in the minds of the faithful, but also offering a way out by confession and devotion. These days we see new churches arising or at least institutions using similar techniques. Using Facebook and Google is slowly becoming a ritual, our email chores replacing the Agnihotra or Angelus prayer of old. How long will it take before a new Luther stands up and declares it empty and advocates a new religious stance of “back to reality”?

People like Jaron Lanier are pointing in that direction, telling us to take back our rights to our own information. You are not a gadget, the title of his 2011 book, points at the fact that we ourselves have become marketable. He sees the internet influencing virtually every aspect of our lives, how digital design is shaping society, for better and for worse, and offers provocative alternatives like that it would be better if we were paid for the information we now give away for free.

Freedom in the Cyberspace sea

The notion that freedom is the essential task of the state (B. de Spinoza) was and is an important observation. It has, however, been replaced by the paradigm of angst: the state is the terror machine, the force that protects the status quo by way of seeding and breeding anxiety and fear, promising fake liberation if one conforms. Cyberspace has, certainly with the all pervading social media, replaced the heavens and the afterlife as a source of meaning these days, but who is there to safeguard our freedom? There really is no state or sovereign there, so what about freedom, do we leave that

to the likes of Google, NSA and the self-appointed digital supervisors beyond our control? Increased digital supervision will also foster more resentment against cyberspace as the new heavens.

The ethical part of privacy issues is about the question whether we need privacy in our lives. The balance between freedom and security has been tilted because the government assures us that more security can only be guaranteed by less privacy, less civil rights and total transparency of what everybody does or is. This is a false argument, both security and privacy/freedom are necessary for human to function and grow, and decision concerning these are to be made in context of the goals and interest of all the stakeholders. Giving the police or security forces unlimited power leads to totalitarian situations, giving the individual total freedom is a luxury few can handle.

Tired

Many people are tired of the constant bombardment with negative security messages, both in the public domain from the press, but also in their own mailbox. They are fed up with crazy emails, hidden fishing attempts, the coercion schemes that threaten to take over your computer, the pressure and anxiety connected to emails from unknown sources pretending to be the bank, the government, the police, your friends. Many have had serious problems with viruses, malware or were victim of smaller or bigger scams.

So we all are aware, cautious, but this is a burden on our cyberspace behaviour, there is always the threat of a dangerous download, a virus or inadvertently giving away important information. Don't mention on your Facebook page that you are on holidays, the thieves are reading this too. Don't trust anybody, don't respond to emails starting with xyz, don't befriend strangers, don't use this or that service, because they sell all your information to third party companies for a good price. You are just a number and have no intrinsic value to the corporate world, you supply them with your money and information without getting much back in return.

In other chapters we will come back to this and deal with issues like identity, profiles and personality in cyberspace.

6 SECURITY & CYBERWAR

Among the threats cyberspace poses, the invasion of privacy may be ranks first, but the security is certainly a big issue. Almost all people are aware of the threats of malware, fishing and cyber-terrorism. They know their mailbox is inundated with false message, promises and the newspapers and websites they read are full of news about stolen passwords. Many people realise that cyberspace is going to be the next battlefield. The place where fights between nations, culture or between interest groups, religions or just the good and the bad guys are happening.

This worry is very real, cyberwar is a reality, enough incidents happened to make this clear. The world is arming itself in cyberspace, for offence or defence, and we only learn about it when things go wrong and nations start accusing each other of cyber-espionage and attacks on institutions, banks and infrastructure. No systems are safe, even the most secure environments are constantly attacked. The cyber-criminals never sleep. Cyberwar and anti-cyberterrorism departments, army divisions and secret service organisations have been set up, openly or covert and now and then it becomes clear they are active.

There are other threats to security: bugs, malware, or just stupid human mistakes. The Heart-bleed bug of 2014 was a stupid mistake, but woke the ICT-world up to the potential devastating results of such an oversight.

Hacking groups such as Anonymous, Chaos Computer Club, The Level Seven crew, LulzSec and NCPH have made it abundantly clear how vulnerable we are on the internet and through cyberspace. Many of these groups have slogans which are used to antagonise governments and companies, for example, LulzSec's slogan is

"Laughing at your security since 2011."

The group works with exposing security weaknesses and flaws, and their targets have included Fox.com, an X-Factor database, Sony, the CIA, and the FBI. They are said to have caused billions of dollars in damages.

Anonymous' slogan, "We are Anonymous. We are Legion. We do not forgive. We do not forget. Expect us," They were also protes-

ting UK extradition policies, tracking down cyber-criminals (such as “Internet predator” Chris Forcand), and taking down child porn sites hidden in the depths of the worldwide web. They have threatened Mexican drug cartel group Los Zetas, attacked the Pentagon, threatened to take down Facebook, and waged war on Scientology.

Cyber-Warfare can be separated into four groups, Civilian versus Civilian, Civilian versus. State, State versus. Civilian and State versus State. However, Civilian versus State can be far more dangerous than some of the petty annoyances that Anonymous may engage in, for example, Operation Cast Lead, which involved Israeli vs. Arabic Hackers and caused massive damage in the local infrastructure.

State versus State can also be very dangerous, during the Libya crisis the U.S. were discussing using cyber-warfare to cripple the Libyan infrastructure. The most modernised countries are the ones at highest risk, such as the U.S., UK, China and the European Continent. Many believe that for security to be more effective, offensive advancements necessitate defensive advancements. Cyber-warfare is on the rise and it isn’t slowing down, Over the last 5 years there has been a 650% increase in security breaches, according to the ‘USGAO Report to Congressional Committees’.

“My primary goal of hacking was the intellectual curiosity, the seduction of adventure.”

Kevin Mitnick, a famous hacker who became a security expert.



7 THE YOUNG GENERATION

The younger people are more used to things like pads, mobiles, the internet and use all kinds of social media to communicate. We were lucky to talk to two young girls, aged 14, from the fast track of a gymnasium, who were not only using the technology but could intelligently interpret their use and the impact of it.

Most interestingly, they were somewhat concerned about how much time they were wasting, saying that they spend so much time with their social media they could use otherwise. They felt being a victim of the tools. They also noted that people easily could hide behind their screens, pretending to be someone else. They see cyberspace and the social media as a mirror of their lives, but a manipulated one, only showing the positive sides. Maybe they see this as they do use it to hide themselves too, as many young kids now have multiple accounts with the social networks, ostensibly to increase the efficiency but maybe also to have multiple identities.

Positively, they see the good news reaching them via social media and email and appreciate the effect it has on their mood. They think, and here they differ from what most other and older people in the survey think, that social media make social interactions easier. They prefer to be online or connected all the time; the 4 weeks holiday time they just spend without wifi was not to their liking. They care less about the physical, but they like staying in touch and even feel they are more free in interactions, because they don't see the other. The negative here is that internet communication can be more rude: messages are sometimes very mean.

They measure the quality of what they do or even their pictures against the reaction in social media, how many comments or how many likes they get. This indicates a high level of peer pressure and a tendency to confirm, being loved and accepted means getting internet support, likes, Facebook friends etc.

Now this pattern of interaction may be related to their age, girls that age are very self-conscious. Showing themselves to others, especially the boys, isn't what makes them tick at this age. As these

are very bright girls, also using the social media to show off their wits rather than their looks might be a factor.

Given their age, sexuality and cyberspace wasn't on their agenda yet, although making contact with the peer-group seemed important.

They are using the internet for more egocentric purposes too, to find out things and sometimes use YouTube videos to learn about something, how to do things. In this sense they feel the internet makes their life easier, as they have access to so much more, and this includes also medical information.

They are dependent on the technology, and although they accept they can live without it, they wouldn't survive very long.

The time they spend on internet activities is, and this feeling they share with nearly everybody in the survey, somewhat outside their control. Once online, time flies, or time limits are forgotten, it usually takes more time and one gets lost in the sea of data. Even if one searches for something specific, the distractions are so many, the new interesting links and diversions so many, another video so attractive, that one loses track of the original purpose.

Their attitude versus life is fairly practical, things like rituals don't interest them at all, they would rather sit together and surf or text away. They regard things like ritual or praying as irrational, something older people can do, but nothing for them.

8 TEMPO, URGENCY, THE SPEED ASPECT OF CYBERSPACE

The internet offers a strange paradox, it speeds things up, but at the same time when surfing or chatting, we forget about time.

Many people, also in the survey, complain about the psychological pressure of the internet. It's demanding, it scavenges our free time, one has to look at emails or tweets and there is a constant demand for our attention.

This is often not real, most messages are not very urgent, but we don't want to run the risk of missing that one important message. The FOMO (fear of missing out) has replaced many of our material fears; we don't worry so much about getting lost or not having food or shelter. But not to be aware of this party or that trend, we will not risk that, so we check our Facebook pages constantly.

Many feel they become a victim of something outside of them, a system that demands that you are online, that you read your mail, that you respond to tweets and Skype requests. The moment you turn on your computer, you enter a spiral, a maelstrom that draws you in, you lose free will and control over what you do. The distractions are so many, the interesting websites and videos so many, it's hard to separate oneself from this plethora of stimulation.

The actual purpose of a search gets often lost in the ocean of interesting information that you obviously don't need, but maybe, maybe the next click will bring you the promised land, the secret map of Oz, the missing piece of your life's puzzle.

Being without the internet is possible, but most people don't want to be without, they even plan their holidays in such a way as to be connected. They will scan for places where there is free wifi, pay more at a Starbucks or go to a Burger King. People feel like amputated being without the internet, a similar sentiment to what happened with the mobile phone. They even remember the times they were without access, like traumatic events. For the younger ones it's more of a problem than for those not so used to ubiquitous access.

Why do we keep clicking? It's definitely an addiction for most of us, and we even try to excuse ourselves, we find rational reasons why we have to go on, surfing, chatting, and skypeing. We don't want to loose any opportunity, or are we just bored with life and is this the great escape?

A costly escape, for it costs so much time, compared to the days we did snail mail and were bombarded with junk mail, we are now communicating from behind this screen all the time. We don't turn on the radio, we don't go out to buy a newspaper, we just log on!

Speed, speedier, fast

it's noted that some cities live faster, New York is where everything is in overdrive compared to some rustic village in the countryside. These days we have internet to wake us up, get us going, connect us to where the action is. You can choose to stay home, but your friends post these pictures from that party, this festival or the event you really should not have missed.

The speed of life is increasing with internet at hand, some even think the speed of thinking goes up because of our multitasking. The helping hands of cyberspace are so close, just ask pressing questions at this forum, consult a FAQ, post it at your Facebook page. The sad reality is that with al this comfort technology, we feel pressed and stressed by what is supposed to help us fight stress. Our agenda, our to-do-list, is subconsciously nagging us, forcing us to spend time on housekeeping, checking, being alert all the time.

Older people don't feel this pressure, but notice it in the younger generations and are worried about the long term effects. The studies and research to see what effect the multitasking and tempo-pressure on kids has on productivity, seem to justify their worries. Multitasking doesn't make up for what we loose in concentration and focus in the regular tasks at school or work. For 'normal' or should we say traditional work jobs and even educational tasks like memorising things, our focus of attention, the attention span and concentration do play an important role. More focus, more depth, better results. That multitasking kids are less

apt at this is often seen as supporting the view that all this technology will lead to doom and gloom.

However, in a world where standard tasks are taken over by machines and computer systems, is there a need for concentration and focus? Maybe the freewheeling mode is better suited to live happily in the new cyber-society that is emerging and where maybe work, meaning and recreation will have a different meaning.



What mask do we wear in cyberspace, what identity do we show and where, what do we hide?

9 HEALTH (LINDA)

The questions about how internet could influence our lifespan and how it can be used to self-medicate led to many discussions about health an internet. One mentioned personal worries about RSI, radiation, but also the feeling of empowerment, being able to find information about diseases and treatments. One knows that monitoring our health by way of new sensors and remote (tele-)medicine is on the way, but there is little actual experience yet.

People realise less, that the technology drastically will influence medical practice, the way care and health service and the insurance for it's organised and what privacy has to do with it. One generally assumes that is efficiency that drives such trends, blaming the medical profession and the management layers for the rising costs.

The physical personal

There are practical health issues connected with using equipment like PC's and mobile devices. Although it's the mind that travels in cyberspace, we must not forget that when we use one of our devices to get internet access (like a pc, phone or tablet), it's our body which allows us to go there. So when we are connected, our brain and all of our body is mobilised. The effects of this on our health, whether it's physical or mental, last much more than the time spent online. The consequences expand beyond that time and can sometimes be irreversible.

Each part of us is affected when we use our computer or phone, we use our mind, our senses but also our muscles, we sit, move our fingers, strain our eyes. A well-known negative effect of using computers is RSI (repetitive strain injury). This is often the result of spending many hours in the same position, using only a few muscles to move the mouse. This leads to problems in specific places like the carpal tunnel syndrome, caused by the compression of a nerve in the wrist. The main symptom is pain in the wrist, often extending to the arm, and several interviewees suffered from it.

RSI is stress related and other factors play a role too. Luc who wrote a book about RSI some years ago, says that the wrong food and acidity of the body are a major factor in RSI incidence, and

these again are related to stress. Obesity, ADHD, RSI in his view are more the result than the cause of many of our health problems. We eat (too much or the wrong kind) to fight stress, anxiety, social alienation, social isolation.

There are methods like physiatry (physical medicine and rehabilitation) involving physiologist, and anti-inflammatory drugs to deal with RSI, this chronic pain, eventually even operation, but it's a nasty affliction.

RSI can quite easily become debilitating and irreversible. Prevention is essential, and there are technical means like using a wrist rest, but looking at the stress factors, and this includes emotional stress, is the most important. It was long considered an occupational disease. Our neck and our back (the lumbar region in particular) suffer too. The solution is in changing our position to a good one that relieves the tensions in our muscles and the pressure on our joints (and having an ergonomic chair and adapting the position of the screen etc..)

RSI became a serious concern with the ubiquity of computers in offices, but today, with everybody texting and using keyboards everywhere it isn't confined anymore to the world of work. Experts are warning us that due to the time spent using a computer in online gaming, there is a considerable rise in RSI among youngsters. To keep looking at a screen at a fixed distance for hours tires eye muscles, causes strain in our whole organism and it can also contribute to astigmatism or can lead to migraine headaches.

To travel to far away cyberspace place we do not need to move much, and this implies spending less time exercising, and eating a lot more. Moreover, the tempo speeds up, when we are connected, playing games, or chatting, or jumping from one page to the other, attracted by all the stimulations. We have tendency to easily loose control over it. Time flies. So many services are accessible at our fingertips, with just a few clicks. The physical movement, standing up, going out to shop or pay our bills, or even walking a few steps to get our mail, is not required anymore. So being sedentary and stressed is acknowledged as increasing the risk of obesity and being a factor of cardiovascular diseases.

To mitigate this statement, nowadays, the touch technology and better control devices that the original mouse are more wrist friendly, people have a tendency to use other devices and other user interfaces, and less need of the mouse.

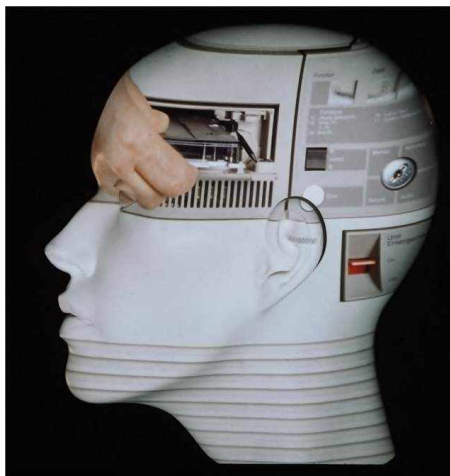
Stress however is still around, because of work, because we are always reachable and alert, because of the tempo of cyberspace interaction, and may cause physical complaints in less specific places.

Qwerty Tummy

Which one is dirtier: your toilet seat, your keyboard, your remote or your mobile phone? The computer keyboard and the cell phone turn out to be more than five times dirtier than your toilet seat (daily-mail.co.uk), and they can easily host very nasty bacteria, such as staphylococcus aureus and enter-o-bacteria. The germs found, like E.coli, can cause serious food poisoning, such as gastroenteritis: infectious diarrhoea.

The brains are changing

What about the brain and the synapse connections? Our brain isn't an inflexible organ, it is changing, physically and functionally adapting to circumstances and external conditions. Certain jobs lead to specific development, certain parts of the brain develop more than others. Because of brain plasticity (now neuro-plasticity is accepted as a biological quality) we can no longer assume this organ is a stable organ, that only degenerates as we grow older. Neurologists now accept that our brain never stops changing and adapting to its environment.



Are our brains a material (meat) computer or is there more?

Especially the still developing brain of children and teenagers has a high degree of malleability, is affected easily by how it's used. The young ones are most likely to be affected by the use of the internet and suffer both the negative consequences of internet stress and benefit from learning how to deal with what is offered in games, contacts and required in multitasking and dexterity (like in texting).

There is concern about how heavy internet use, data and sensory overload and externalisation of the facts of our lives, has consequences for our memory and the way we think and focus.

This has been clearly noticed by the journalist Nicholas Carr, author of *The Swallows: What the internet is doing to our brain* a book that was a finalist for the 2011 Pulitzer prize. He realised that his attention, his ability to focus, has been scattered, just like the information presented online is fragmented. As a matter of fact, nowadays, with the internet, we get a considerable quantity of information without any kind of restriction and as fast as you can move you index finger to click on a link.

So while accessing information is easier, focusing becomes harder because our attention is constantly interrupted, our focus distorted. We flutter around: from checking mails, to reading and answering tweets, looking for the last news, checking these like a kind of obsessive ritual and finally going back to the original work for a couple of minutes only before checking on again social media to get the last updates. It all leads to a shattered, discontinued behaviour.

This is how many feel our focus, our depth of thinking, our attention, sensitivity for essential information and purpose are dissolved in this ocean of distractive data, in cyberspace.

At the brain level, this behaviour does not allow the information to be processed and stored with the right associations (necessary for adequate retrieval) in long term memory. The short term memory, its anteroom, is by nature limited and now bombarded and harassed by a constant flood of data-stimulation.

Multitasking is possible, but it's a compromise. it's just like reading a book while playing chess. You cannot be effective, neither

in one activity nor in the other. So the only logical strategy to work effectively, some say, would be to shut down everything but the main job at hand, to avoid multitasking. Learning requires focusing, in interiorizing effective ways to deal with situations.

Social effects

Being able to do so many things from home, and communicating virtually with people means less real (physical) social contacts and networking. Dr. Aric Sigman (interviewed on BBC News), affirms that this has biological effects. He says that research suggests that it has an

‘impact on the way genes work, it upsets immune responses, hormone levels, the function of arteries, and influences mental performance.’

In other words, online networking instead of meeting real people could harm our health. Such statements are of course not absolute, but we all feel that being a total ‘nerd’ isn’t a healthy thing. The isolation and alienating effects of internet use should be compensated by physical exercise, real contacts and connection with people, nature, the senses.

Recent research by Stavanger University has shown, that reading an old fashioned paper book offer better retention than reading from a Kindle (the best eBook alternative), people remember more. This fits in with recent understanding of the body-mind coupling mechanisms.

Embodied Cognition

Mind and body are not separate, when we think this resonates with the senses and the body. What we sense influences what we think. For instance our visual input, the way we see is related to how we move, to distances, safety zones. In animals, with a different need and way of moving around, the visual system works differently: they see different colours and the speed with which visual information is processed varies.

Embodied cognition means that the body influences the mind. The cognitive linguist George Lakoff, one of the key figures to study embodiment, doesn’t believe that the mind is physically separated from the body. He is not a dualist. “Metaphor we live by” is a book he wrote. He gives many examples, to help understand this idea, like:

“We understand anger metaphorically in term of heat pressure and loss of physical control because when we are angry, our physiology changes, e.g. skin temperature increases, heart beat rises, and physical control becomes more difficult”.

The unreality of perception (who knows for sure others perceive the same colours) becomes a reality that pushes people to copy, to imitate what they see. After a Formula 1 car race on TV we drive a little more adventurous and it also happens for instance with online gaming. One tends to copy what we see and do on the screen and more so if there is some physical involvement. Most of the time, these games are violent and this affects people's behaviour in the real life. What we see and store in our mind as a kind of reality is retrieved and used in other situations. Hence violence, extreme sex, etc. on the screen isn't a very positive thing.

Tele-medicine and e-Health

Consulting a doctor or therapist by means of skype or chat is becoming a routine now, and saves time and money.

An important issue about personal health is that today, many people play doctor or at least inform themselves. They sometimes consult Dr.Google before going to the doctor. They ask questions on forums, look for a diagnosis related to their symptoms. Once they know their disease (or think so) they find so much information on the internet that they will often know more about it than their doctor. Informing oneself about health problems doesn't harm, but playing doctor can cause serious problems. Self medicating through the internet, ordering even prescription drugs online, and not analysing critically when reading about it, in particular in forums, is risky as we are not usually able to sort and use the data in context and may overlook indicators a trained doctor would pick up.

However, even though the technology cannot replace the medical examination, the doctor's hand, it is obviously providing access to medical knowledge for many, and without the costs.

Thanks to telemedicine projects, advising doctors in remote areas and easily making available the current scientific knowledge is possible. For instance, the internet is connecting specialist globally, like in the Trans Eurasia Information Network (TEIN). This is

operational since 2005, reduces the digital divide between these two continents and allows their collaboration. Thanks to remote consultations of Australian experts patients in Vietnam can receive surgery, and moreover, many students can be trained via e-learning.

Spreading panic – Internet speeds up health panic

The feedback or real time links internet offers have positive effects, but also pose dangers. As accessing data is becoming easier, it goes faster across the borders, it can cause panic. The 24th outbreak of Ebola, in March 2014, as first reported in Guinea by the WHO (World Health Organisation) has turned into a flood of alarming news in all media. When it comes to this dangerous and highly contagious, virus induced disease, panic can lead to frightening social consequences, discrimination and worse. Lapsing into panic distorts reason.

“It leads to the risky decision to move a highly contagious person and introduce him to an uncontaminated environment” (Manjala Nyabla, for AlJazeera).

As an example, in Nigeria people thought Liberians, even those who were already living there, were part of a conspiracy to bring Ebola to Lagos. So, we do not need panic, caused by public misinformation and ignorance, but true information. However, there is no truth-indicator in our search engines (yet).

Monitor me, life logging

New technology offers the possibility to monitor one's health in real time and with online alarms and intervention. This can go to far, the lifebloggers with smartbands and sensors all over can become obsessed and vulnerable to panic attack, but for



We enhance our senses and awareness with artificial means, like Google Glass augmented reality. There are mostly used to store images, life logging

many it brings more security and ease of mind.

The boom of health related apps (detecting how we breath, the quality of our sleep, how we exercise and evaluating the quality of our food) and gadgets is a true medical revolution that promises us to live longer and better, helping us to know more about our physiology in life. Some doctors are even prescribing apps just like they would prescribe medical treatment or pills (NHS England).

It does work. Some people, after downloading a beverage calculator, managed to cut down their alcohol consumption. Some apps can also find for you your nearest hospital, specialist, medical resources.

Several examples show that thanks to these new devices, detecting diseases at an early stage can be easier. The sooner you find out about it, the better you can heal it, at least for non-terminal afflictions. (For terminal diseases, there is much discussion about this, not knowing helps to maintain quality of life and some claim it is better than knowing all and being part of the medical mill)

So, just like many interviewees in the survey believe it, the technology, the internet, can help us live longer. Concerning this subject, Dr. Kevin Fong produced a very interesting documentary for BBC Horizon – “Monitor Me”- where he explains how monitoring our life and health is possible to a large extend today and is becoming part of our daily life.

Long life is a costly deal for society. Indeed, with a longer life expectancy and lower birth rate, our society is ageing. If living partly in the cyberspace mode prolongs our life, it would mean that expenses in insurance and pensions would rise even more, which could, for instance, lead to pension fund problems and higher retirement age. So, longer living would not automatically mean more resting time or enjoying being retired.

Psychological health

The use of internet has effects on our mind too. Stress, addiction to games, watching porno, telesex or chatting, feeling pushed to obsessive routines, impotence and loss of libido, social isolation, attention deficit problems... the list grows longer all the time.

Internet addiction disorder

This is a problem so acute that it's considered as a mental disorder in the DMS5 by the American Psychiatric Association (the Diagnostic and Statistical Manual of Mental Disorders), in the 2013 edition. It has a huge impact on adolescent behaviour, their psychological equilibrium and their development, as their brain is more malleable than an adult brain, but this is evident that this 'disease', this disorder, can affect people of all ages.

This addiction covers a whole list of impulse control problem, like *'Cyber Relationship Addiction, Net Compulsions such as gambling, stock trading, shopping addiction, compulsive use of online auction sites such as eBay, or compulsive online gaming'* (K. Ramdhoney).

Internet gaming

For instance, people can be addicted to online gaming, and our Chinese friend, Olivia, wrote in her article (see 'Chinese view on Cyberspace: Entering the Cyber Age') that to cure this scourge, military style camps have been built. There, 'webjunkies', who could play for more than 40 straight hours, are sent, and in some instances the training methods are cruel.

The reason why online gaming can seriously harm children and adolescent is that as they are young and quite inexperienced in real life, they do not have any hindsight or reference model to be able to judge the morality of what they see on their screen, which can be quite realistic and violent. So, they have a tendency to trivialize the violence. Indeed, even if many games have age restriction (forbidden to kids under 16 or 18), picking up a game by minors is easy and not really controlled by the authorities like alcohol or tobacco. Games like Call of Duty, Grand Theft Auto, etc. where weapons, prostitution, killing, stealing, destroying are main themes, are accused of desensitising and even hypnotising the players, conditioning them to imitate what they watch and the character they embody in the game. Once they start playing, they stay for hours on their computers, and loose control over time. It convinces them, at a subconscious level, that violence in an appropriate and useful way of solving problems. It has a direct effect on their behaviour in real life, on the way they deal with situations and people.

They adopt an aggressive behavior like ODD (Oppositional Defiant Disorder).

Eating disorder

The internet, but in fact all modern media using beautiful, thin models, is stimulating ED, eating disorders like bulimia and anorexia. In the past people suffering from it used to feel isolated and were more like sporadic cases, but now, on Cyberspace, because of forums and websites like pro-ana, they find support, not to cure their affliction, but to go on with it. They are encouraging these young people. They feel part of a community, and share their experience, advices, which make them fall deeper into their problems.

Social interaction and depression

Several studies indicate that in some cases the excessive use of social media and the physical social isolation that goes with it affects health and balance. The child psychologist Karishma.S.Ramdhonjee writes in his study “Psychological Impact of Internet usage on Children/Adolescents”:

“The sense of satisfaction that comes along the internet indulgences feeds a negative cycle where more time spent online means less real social contact and less physical activity, increasing the vulnerability to psychological disorders. Hence, overuse of internet can genuinely restrain teenagers experiences in life, their academic performance, social, psychological and physical wellbeing”

Cyberspace thus, concerning health, offers both positive and negative options and should be entered with some caution. We should not forget that we also have a body. While being connected to cyberspace, we have to remember to connect to our body and respect it.

10 APPS: THE SWAMP OF APPLICATIONS

Apps or applications are what we use on our smartphones, the small pieces of software that connect us to services and parts of cyberspace but the concept is spreading and applies now to nearly all our interactions with cyberspace data and cloud service. It's a fashion of sorts, a way to establish your company, your brand, your newspaper, your service. There are now so many apps we get lost in what the app-shops offer and some people even start to shy away from them. Looking through one's list of apps, the ones we have singled out as important or entertaining, we increasingly see a jungle that has grown so fast it's hard to see the trees from the forest.

Apps are an interesting new kid on the block, but distributed processing, dumb terminals, thin clients, central databases, mainframes, agents, bots and Software as a Service have been around for a long time, and so has cloud computing.

Apps did bring all this together, the mobile (digital) device giving the needed push to accelerate it, and by now, apps are infiltrating our world-view like rodents, multiplying and sneaking in everywhere. The "app in the browser" trend, allowing an app to be started and used from within the browser environment and thus on all platforms and devices will widen the scope of the app even more.

Most normal activities, like shopping, buying-and-selling, content-access, navigation, dating, payments, medical monitoring, art and even military actions now have or will become apps.

Participating in cyber-wars via malware is already app-oriented, soon you'll be able to be a for-hire soldier guiding tanks or drone-planes in real-life wars thousands of miles away. Augmented reality is the new keyword, but is the lack of real contact between the cyber-soldier guiding unmanned aircraft bombing targets in Mali, Afghanistan or Libya a step forward or backward in evolution?

Are we inundated by ever more apps, more possibilities, more comfort promises or will apps grow towards more usefulness? This is a question that has to do with on the one hand the tendency to combine everything in one device, in one interface, in one app, while on the other hand we need to separate, segregate and divide

the overwhelming all to concentrate on specifics. This is the old Swiss Army Knife question, and obviously actual users make their own choices. Quite a few of the people in the survey had a rather simple mobile telephone, no data, just a tool to call or text without the worries of data bundles, roaming costs etc.

Apps are supposed to be ways of customising the access to what we call information, but in fact this information often is no more than a massive mountain of digital noise. Most apps are handy: you can get practical and often location based indication of what is happening, what to do. A great way to get the distraction that fits you anytime, anywhere, you can have your life and experiences fit the “fashionable” model of the day.

It looks as if apps aim at more contact, more connection, but we know they somehow often provide just empty data. What looks like individuation or customising is in fact nothing but compliance; you will find what you (or your search engine, that is nothing but a common denominator or agglutinator) are looking for, not what you really need. It also often lacks true novelty, it's news rehashed and manipulated.

We are in the hands of the machine. The Google-isation of search, i.e. of tacitly limiting our search to what the system accepts and allows, and by way of geo-localisation and personalisation serving you the more specific, is like looking for the lost keys there where the lamp's light is shining, as in the Sufi tale.

Apps are, in their present form, and in the context of the quasi-freedom mobile technology provides just quest-killers, they take away the adventure of finding out for yourself. Mobile connectivity, the always on-always connected-always quasi-safe sedation and numbing of the underlying fears, is an anti-depressant that flattens our experience of reality. It focuses us on the good, white, obedient one of Plato's twin horses in the *Phaedrus*, and denies the wild, black, creative one, that wants to go its own way. Jaron Lanier's serious warning against Digital Maoism (i.e., the omnipresent access to free and publicly created information like in Wikipedia will foster the mediocre and status-quo codification and canonisation of knowledge) should be paid due attention. The “bad” horse of Plato is necessary to have progress, to prevent

the stagnation we have noticed in societies that tried to limit individuality in order to promote the collective like the communist ones. Criminal behavior is in that sense often entrepreneurship crossing the line and philosophically necessary for progress.

Form over content, easy of use over usability

It isn't by accident, that it was Apple that made apps the significant trend of data-processing in recent years; it always has been a company that valued the form (the appearance, the mask) — in contrast to an older ICT-giant like IBM, where content was more the focus. Apple was and is different, it appealed to the 'cultural creatives', the individualists, and has led them into the new land of the western frontier, into mobile digital Autarkia. Providing applications to personalise that content, they made the app the new snake oil of the Cyber-exploitation movement, the neo-capitalistic, neo-individualistic ego-trip business.

Apple exploited the Us-Them divide paradigm brilliantly, although there are ethical questions related to that approach. By offering a shiny, fashionable, friendly and noticeable "superiority environment" to those in need of covering their inferiority feelings, it has had a phenomenal success.

However, since the Third Reich we know that this approach is also the hallmark of the fascist mindset, and it has less than favourable side-effects toward those not willing to jump on the bandwagon. By now, having an iPhone or iPad on you makes you a badge-carrying member of the digital party, the bitten-off Apple a clever subliminal hypnotic symbol referring to the Tree of Knowledge in Paradise.

Beyond the directly practical

Will Internet use, with the help of apps and AI, grow more away from the unknown, the "unseen" and the irrational or will it open up to that side of human nature too?

It would be nice if apps gave you what you really need, but a digital hand on your shoulder, a stimulating remark or a kind smile is yet beyond the touch-interface of our pads. Maybe robots or cyborgs will be better at this, loaded with stimulation and appeasing apps.

The complexity of our emotional (and spiritual) needs isn't mirrored in the search and archiving methodology of the present internet, even as it's evolving fast toward multimedia metadata and AI (Artificial Intelligence) techniques to help you find what you search for. Alas all this within the commercial confines of what the search engine really aims at, making money out of your input.

Will the new generation of *digerati* (the elite of the online community) develop new senses, habits, capacities or tools to get what they need out of the data mountain. Statistical techniques to mine big data are not the only path. Will they resort to tools not unlike what the Tarot, the I-Ching or age-old Magic have offered us? There are signs that this is happening; cyber-paganism does use the internet for rituals, the cyber-coven is an easy meeting place for virtual rituals and by way of massive virtual cyberevents one tries collectively to influence peace, the earth, the weather and what not.

There are not many apps for this kind of activism and otherworld access in cyberspace, but they will undoubtedly come. Churches use apps to address the parish, get the money in, and why not organize online praying circles. Psychiatrists and therapists are already using online sessions, but why not have cyberpriests doing confession online, cybershamans doing your bidding in the otherworld, cyber-seers offering their services online.

Is there a path toward the ultimate app, the meta-app that satisfies not only our cognitive, intellectual needs, desire for beauty (art) and our emotional/physical ones (dating-eating-sports) but also our needs for finding meaning and purpose?

It will take a while, but the psychotherapeutical, maybe the ritual apps, and maybe even the meta-apps that will give us or help us develop magic power, will be (or have been?) developed.

The horizon

The rise of the app in this respect is quite a step, as apps are like the secret master key in cyberspace, handy, fast, comfortable, our passport to cyberhappiness! Should we welcome this development or just see it as another step toward a materialist, atomised, reductionist elimination of true connectedness, a rationalisation of in-

formation, and thus a far cry from the integration of the consciousness dimension in our lives?

This all calls for a philosophic assessment: where are we heading? Where is this new technology going, is the app as the key and door to cyberspace just another practical digital tool like the laser or the chip, or can we discern an impact that surpasses that of the invention of the knife, the wheel, alphabet, space travel and atomic bomb and will lead us to new forms of cooperation, communication and happiness? Like those technologies have given us paradigms, symbols and archetypical images (the atomic mushroom cloud, the earth seen from outer space) the question is what symbol will indicate the new possibilities of the internet? A smiley or something like the sign warning for nuclear radiation?



THE LEADER OF THE LUDITES
Rage against the Machine
Nedd Ludd
May 1812, Walker & Knight

11 WHAT ABOUT WORK?

What will the people do, if there is no work? Will they be gaming and chatting, Facebooking with people they will never meet, going to the gym with Google Glasses to watch super hi-res 3D entertainment, using 3D food printers for new recipes, or having remote sex via iSex devices?

Some, like connectivity expert Jaap van Till, believe new formats of interconnectivity will emerge, where volunteers, the ruling class and entrepreneurs work together to create a brave new world of games, apps, entertainment and challenging pastimes, and will find new and innovative ways to “work”. But at the meantime, work and employment opportunities are eroded at an amazing pace. Not only are whole sectors automated or elevated to cloud services, but the rise of the self-employed free-lancer has atomised the demand for workers. People are hired for their specialisation, and only for that and as short as possible.

The rise of bots, robotics and autonomous devices

A robot which does the vacuuming of our rooms or mows the grass is no news, but the rise of the autonomous device is just starting. The ‘internet of things’ connecting all devices with an IP-address (IPv6 now) offers ample opportunities to design and employ devices that not only perform certain tasks, but also monitor themselves, deal with energy (automatic recharge) and potential malfunctioning, becoming more and more autonomous.

This trend goes way beyond the physical tasks. Many tasks and routines in our PC or Pad are already more or less autonomous, they will look for upgrades, do self-tests and look for solution on the internet. At the network level there are many bots doing all kind of jobs, the search engine update practices are going on all the time, they send small software packages around the internet to look for new sites and updates. The malware bots, moving round to find weak spots in other systems, are well known and on many systems we have them as unwelcome and dangerous inhabitants. Cookies infect our systems constantly, these are in a way also autonomous devices, no human intervention is needed anymore.

This trend of automating all and everything will go on, and will eat away at both menial and professional work opportunities. Or should we, at some level, stop this and forbid further automation and robotisation?

Utopia and Dystopia

Science fiction writers have written up interesting views of future societies, but many of these tend to show a less than desirable future, most paint distinct dystopian scenarios. Many books like Huxley's and movies like Mad Max have shown what could happen.

There are interesting suggestions about what people could do to fight boredom. Aldous Huxley's escape drug Soma (in *Island*) as a kind of happiness drug might be a solution, and electronic drugs and virtual or augmented reality are one avenue to pursue here, but do we want to live a fake life like in the movie "the Matrix"?

Miraculous new technologies or methods will emerge, but how to retain a sense of meaning and happiness in a world with less and less work? The divide, the gap between the ones with work (probably the smarter ones and even their contribution will be atomised, limited to their expertise) and those dependent on benefits or a pension will deepen.

"Bread and games", the Roman way to keep the plebs happy, only go so far. The technological development we can foresee isn't likely to offer a purposeful life, meaning and individuation for all. More likely it will bring poverty, homelessness, depression, suicide or revolt.

This is the real question facing an interconnected world: where will the digital rat race bring us? It's a sociological, psychological and maybe ethical and theological question that needs to be answered!!

Here the ethical question concerning progress arises. Are we moving forward, is what we call progress really helping us, or should we go back to days without much individuality and more social interconnectedness? Self consciousness and progress are related, the individual and individuality has brought us the technological,

artistic en scientific progress, but is also slowly destroying our habitat.

It's kind of ironic, that cyberspace in the short term will support individuality but in the wider perspective is long term entropic, eating away at differences (cultural multi-diversity) in a move towards globalisation. The cyberspace transparency looks great, but comes down to spreading the rational, materialistic Western worldview to the farthest corners of the world, destroying the differences and eventually killing individuality. It sounds a bit weird, but the true direction of cyberspace is the death of the differences, a rather socialist perspective.

The reality of (materialistic and not holistic) progress has other effects, more computers and robotics will eliminate jobs. We can all predict driver-less logistics, farmer-less agriculture, robot soldiers and watchmen, automated care, but what do we see as a future for the people, the normal folks out of a job, maybe out of a regular income? Will we go for fun and games, gamification, travel, self-realisation workshops, yoga, drugs, massive pilgrimages, or will boredom and easy euthanasia take over.

Maybe the boredom has other effects, maybe it will weaken our resistance to diseases, there are still serious threats around like the Ebola virus. And what about common sense and some deliberation, hype created by the fast news, tweets or Facebook messages can easily cause panic and over-the top reactions.

As happened before, some (invented or created) new war might be a solution too and why not call every hacker or (wiki-)leaker a terrorist, and keep us all busy finding them. The McCarthy approach, is there a hacker (jihadist, freethinker) under or in your bed ?

The signs are there, more digital services, more internet of things, more apps, more remotely controlled robots and autonomous bots, more bandwidth will no doubt mean less manual and administrative labour, less work. The vista about what this tangent could and probably will lead to, is less enchanting.

Work has been a major factor in a meaningful existence for a long time, a life without it requires serious consideration of the consequences. Here the movement of the neo-Luddites, protesting against irresponsible use of technology comes into play. The

Luddites were 19th-century English textile artisans who actively protested against and attacked labor-saving machinery from 1811 to 1817.

Neo-luddites, deep ecologists, anti-globalists and the Occupy movement share a common concern about what technology does to the earth and its occupants. They are worried about the long term effects, and have a point. Think about like the long term damage of the Fukushima Daiichi nuclear disaster.

The Gaia-aware are not the only ones worried. According to more materialistic trend-watchers like ICT-market research firm Gartner the elimination of work for many will lead to growing discontent and the possibility of neo-Luddite upheavals in the 2020 time frame.

Grey and green

To be fair, another factor needs to be considered here, offering mid-term job opportunities but also threatening stability of the financial system. It has to do with the age-pyramid, but also with the root of our savings and banking system, which is the need to save for later. The Western world is ageing, not enough children are born to carry the burden of the elderly both in the West and in parts of Asia, notably in China.

Grey grows and there isn't enough green to take care of them. An ageing, but in some countries powerful pensioned (retirement) generation will require young people with jobs and income to both care and pay for them. In the West some of the baby-boomer generation took some care, individually or by collective means, to save and invest, but in many countries the working people are burdened with unfunded pay-as-you-go pension schemes.

Saved money has been a major factor in speculating and investing in stocks and bonds, some experts claim 80% of all investments (individual and of funds) are pension-related. This has created an inflated value of stocks and investment vehicles, as the need to invest has created an illusionary value, not based on underlying real values. It has become a balloon, a bubble that will burst sometimes, but will refill as the pension funds need a harbour.

The real problem is that there is no way a realistic, real world sustainable return on investment can come from financial constructions or speculation. It can only be come from (future) savings on energy, raw materials and labour. Investments in more digital miracles and ICT will save money, but mostly they mean less work and oligopolistic power structures.

What to do if there is no work

We maybe can look at how societies of , with limited need to gather food and few enemies, would deal with much free time? Indigenous people in many cultures didn't have to work very hard, conditions weren't always so negative. Some had lots of free time, lots of easy resources and wide open spaces to explore.

The Australian Aboriginals liked to go walkabout, but mostly wandered in their ritualised and very pre-digital dreamtime world, an extra-dimensional construct (reality) with some resemblance to what we now call cyberspace. It may pay to look at how they and other indigenous people dealt with a life with less survival issues, less work-pressure and more time to think, act, dance, relate, pray and why not, do rituals.

Ritual was what kept people in those older cultures busy, sometimes up to 70% of their time went into dealing with ritual acts. Rituals offer not only psychological and social benefits, they connect us to what is out there, the extra-dimensional otherworld. This has kept humans busy for a long time before there were machines, computers and materialistic rationality. The importance of studying ritual and what it stands for and offers is thus not merely an academic hobby, it might be a doorway to provide meaning and direction for generations to come, also in the cyberspace context

12 THE FUTURE OF CYBERSPACE

We can assume that technology will advance even more and that a future will develop with more robotics and autonomous devices, more embedded computer power, more internet of things and with more cloud technology. Cyberspace will become increasingly important, not only for communication, but for all aspects of life, especially as a means to keep us occupied, entertained, healthy and happy if not enslaved. The technology grows upon us, by better services and human communication, but the internet of things and autonomous but connected devices are on the rise. Machine to machine (M2M) interactions like V2V (vehicle to vehicle) communication between cars to increase security and fight congestion are forced upon us (in the USA by law now) and help us, but at the same time take away the freedom to steer one's own car.

Talking to people about what they expect from society or themselves becoming more digitised and internet connected, the opinions vary. Some believe things will mellow out, others fear an empty future or hope for a more comfortable and connected life. When probing a bit deeper, very few didn't express concern about things like privacy, the power of the new 'big brothers' and how security could be safeguarded given the ongoing attacks on the internet.

Understanding the entropic nature of cyberspace

One of the surprising observations was that many people did see the danger of transparency, as in eventually leading to loss of diversity, to the demise of the individual. They did see that the increasing globalisation may have some initial benefits, but in the long run will wipe out minority cultures, languages, customs and the richness of diversity. a new economy of a few experts and many out of work is feared, but accepted as the outcome of ever more communication and access. They express this as worry about the digital divide, as seeing the end of normal working conditions, as the end of retail as we knew it, as the rise of the third world, as a rationalisation of commerce, in whatever words they use there seems to be a growing understanding of what is happening at the larger scale. The concept of entropy as the homogenising force in nature isn't understood by all, but the wiping out of differences, with ini-

tially beneficial effects but in the long run lack of diversity and individuality is perceived by quite a few of the people we talked to.

After expressing the more common concerns about privacy, security, etc. there is concern about long term effects, and one looks at the younger generation to see and feel how they deal with all the new stuff. Is there a positive outlook, will the kids grow up happily with all their toys, tools and virtual circles, or are their hidden dangers lurking? It feels as if the digital revolution is slowly making people realize that we are living in an increasingly fake world, masking our true needs and intentions behind digital devices, tools and services.

There are the positivists, hoping for a brighter and better future, but very few don't see the negative possibilities, for themselves and society at large. Many see the advantages of being able to express themselves, get education, influence their lives with the help of digital technology. Nobody would like to give up the comfort, feeling of security and communication possibilities of their mobile phone or computer, but there are serious concerns about the consequences of this all.

What will the future bring? To look into possible scenarios we will follow some of Luc's writing with new comments and ideas gained from what we learned from the interviews.

It will not take long, before robots, embedded circuitry or automated devices will have taken over most menial work, not only in manufacturing, but in logistics, care, agriculture and even in teaching and medical care machines can take over a lot of human work.

The end of the office work(er), as prof. Jaap van Till remarked in his interview with us, is in sight. The people now still comfortable in their jobs in banks, insurance companies or the public services are beginning to realize, he says, that there will be no such work for their children. We will automate all repetitive tasks, use artificial intelligence to create expert systems, so why do we need all those administrative helpers, accountants, lawyers, specialists on the square meter of their office desk? No need for mediocre

knowledge, we will put that in the system, accessible for all to use (automatic in many cases) and except maybe a few top experts there will be no such work. No need for repetitious or administrative work, the computer will take care of it. In mobility and logistics the technology is pointing at taking away ever more work, driverless cars are a reality and in the military already the drones are replacing human pilots.

There is the idea that human jobs, caretaking, medical, therapy will remain, but even there robotics, automated systems, life logging devices, health monitoring and diagnostics, computerised medicine and robot surgery will eat away at possibilities for meaningful work (or should we say occupation).

We need change agents

What probably will remain is the demand for entrepreneurial talent, for commercial and social purposes. There is a future for people willing to take risks, to venture into new fields, the ones able to look outside of the box. In research and in technology, but also in social entrepreneurship, business development, games, exploring the possibilities of cyberspace even more deeply; there lies a potential meaningful future for the individual with ambition.

The question is, how do we become entrepreneurs, change agents? Are they born or can we develop entrepreneurial qualities? How do we turn our need to be recognized, respected, be an individual into an attitude to question the status quo, look for opportunities to manifest, change, profit. Will 'normal' education really yield independent thinkers, creative geniuses or scientific innovators? The present approach is ever more limiting the creativity of kids and forcing them to conform to peer-pressure and what we think is 'decent'. Will the numbing of digital 'always on, always secure' connectedness really yield a new class of entrepreneurs, of change agents, of what epigeneticist Bruce Lipton called the butterfly gen innovators?

The globalisation and homogenisation of daily life also applies to the educational system, we send kids to school at an ever younger age, to be modelled and moulded into brave netizens, kept busy with iPads and smartwear, more attached to the comic channel than to their parents, constantly bombarded with commercials

and drilled to follow the fashionable trends. Not everybody agrees with this, schools without computers are becoming fashionable.

Some expect that there will be a lot of work in installing and maintaining all those automated systems. This is true for some time, we will need such professionals, and there are career opportunities, but then we will undoubtedly develop maintenance systems, repair robots etc. In the ICT-industry we went through this cycle; where is now the work for the systems-managers and network-specialist of a decade ago? The newer system made them redundant, we solved the problems by installing newer and better solutions. Of course new problems arose, and now ICT specialist deal with the cloud, security issues and such. But how long before even that will be solved and automated?

There will always be need for the top experts, and probably a hierarchy of sorts will remain, just think about the way how the Confucian system of civil servants in old 'Mandarin' China worked. We will need some system of education or selection to find the true talented one, either intellectually or in practical professions. But here genetics and advanced psychology may offer solutions we may not like. Eugenetic manipulation and selection of new-borns may lead to generations of bright, good looking kids, but what if all are supermen, still competing for fewer jobs?

New contact modes, the shift from vertical to horizontal user interfaces

One of the important developments has been the emergence of new contact modes and interface options. Computergames, especially multiplayer online games, MOOC's (massive online courses, lectures and educational projects), flash mobs, the whole idea of online conferences and videoconferences, these are new mo-



des to communicate and work together. One of the most fundamental shifts has been that we now relate to each other more horizontally or as Clay Shirky calls it, more lateral than central. The new interface technology brings a new dimension of connectivity and interface modalities to the user with touch, feel, move sensors. A three-dimensional workspace emerges with far more intuitive appeal than the vertical and authoritative screen we have associated with information work for a few decades.

The move from vertical to horizontal workspaces as exemplified by the pad on the coffeetable has an enormous effect on the organisational models, it brings peer level (sitting around a pad) versus the hierarchy of the vertical. Companies are now being invaded by the likes of the iPad and have to adapt to this BYOD (bring your own device) trend, far beyond the technical level. Expert knowledge, status based on secrecy and access is a thing of the past, everybody can or will know everything.

Computer games breed new forms of expression.

Gamification, using the greed of people and the need to compete, to lure them into participation or buying isn't new. Our parents did also buy lottery tickets and collected bonus vouchers and coupons, but these days it's becoming a major trend. It's rather opportunistic, smartly using human psychology to create fan-groups, followers, likers and of course buyers, but the results count. Having a game associated with your brand, used as an attractor for your site or shop, as a way to reach the general public is now common practice. Game-theory, once a mathematical oddity, is now part of the marketing curriculum.

Humans are game players, by nature, it's our normal way of learning. Playing means learning to deal with limits, rules, constraints, the reactions of others, anticipating their moves. The rules of the game we then encounter in ritual, in the law (which emerged from ritual), in business, in society. No game, no pain, no gain. Playing games is also learning to take risks, become independent and yet honor the social.

In a world where meaningful work will evaporate, gaming may be the thing to keep us occupied. Games are, but they always were, also like a medium, a way to interact, to communicate with others. We give and take, attack or defend in games, exchanging messages.

In playing chess our moves are like a language, symbolic but consequential.

Marshall McLuhan talked about media as extensions of the senses, but what about overload? Can we escape the hypnotic internet and mass media barrage with soaps, sports, porno? Some people are becoming aware of this and there is the suggestion of media-free time. Why not have a day every week without telecommunication, a wifi-free location or a day out of time like the ancient Mayas celebrated?

Social networks, religion and cyberspace

We have new ways of communicating, but is the Skype, Facebook, Twitter and chat-culture fundamentally different from old-time physical communication? We used to go to church, sing, pray, do rituals, before there was radio, television or MP3. Many people still honour the old ways, but cyberspace isn't the favorite way to address the otherworld. Maybe it is, but not many see these new media and networks as ways to connect to the otherworld.

New media of course have resulted in somewhat different ways of participation in older ritual forms. Watching a religious service on television is now quite common and there are prayer circles and massive cyber-events or cyber-circles where people share an intention, but does this lead to new religious denominations?

What is of interest here is how our traditional and fairly basic needs to connect to the other (spiritual) world would influence, in cyberspace, the ceremonial of introduction, stratification and caste that we see in "normal" social networks.

Elsewhere in this book the notion of a new religious trend, seeing information as the basic root of the universe is described.

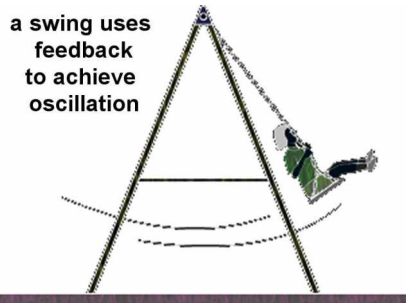
Speedy and (un)healthy

We are speeding up, accelerating the number of contacts we have, with more people at more times and this has all kinds of effects on how we live and function. Not all are positive, many people report Facebook and internet addiction, the increased feedback leads to more stress, less contemplation and probably somatic problems, our body has to cope with all this multitasking, always-on,

the acceleration of life and thinking. A separate chapter deals with this.

Feedback

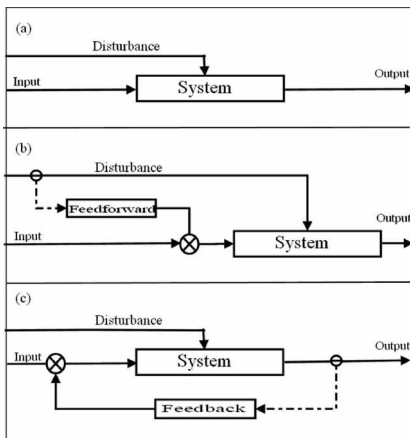
Transparency, access to all and everything sounds good, but in cybernetics (the science of control systems) some limitations of immediate transparency are indicated. Control mechanism like feedback and feedforward are very important in technology, biology and society. One of the characteristics of feedback (measuring and then looping that back into the system) is that if there is no attenuation (damping) in a feedback loop the system starts to oscillate and may become unstable. This can have dangerous consequences, but is also useful, for this oscillation or resonance may result in well defined oscillations and frequencies. A swing is a well known example of oscillation.



In society, the lack of attenuation and the speed of feedback will lead to extreme responses, because the people may panic and act irrational, just fast responding and dealing with what they see, hear or are given to believe.

The news about what happens in far away countries which used to reach us in months only, would then be attenuated and mitigated, but now, with the internet, we get it nearly immediately. The response, and we see this in crisis situations, can become extreme, the general public may get into a frantic mode, panicking.

This is one of the often overlooked disadvantages of modern communication, so fast and with so little attenuation,

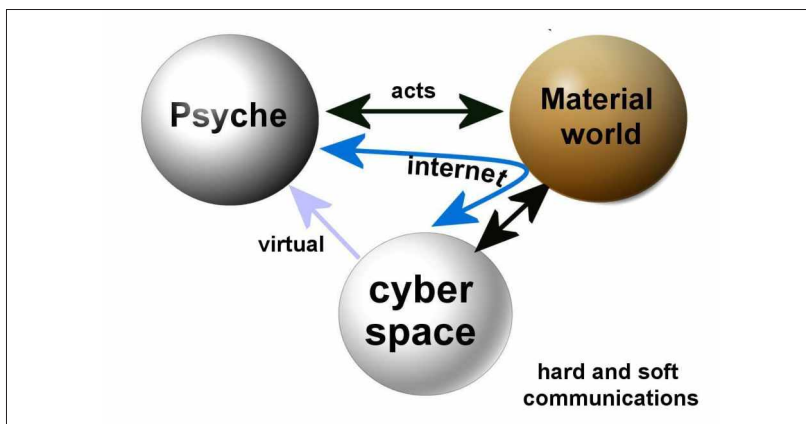


**Control mechanisms
in cybernetics**

that things get out of hand faster.

Cyber Natives

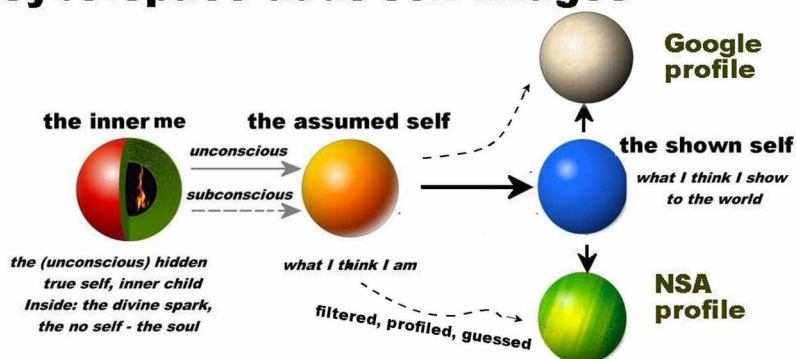
Small kids are more at home in the world of pads, screens and touch-interfaces than the older generation, still using keyboards and mouse. Many small kids will try to wipe over television screens, expecting some response. No doubt the future generations of our living room screens will respond to this, probably to gestures in general by way of 3D cameras. So are we raising a generation of digitally able people, being at ease in their virtual world of non-physical tele-contacts, favourites, apps and cloud archives of their pictures, movies, work and history than in normal daily spacetime? The word 'Cyber Natives' is used to describe the ones really immersed in this new reality, where things are and happen that may or may not have any relevance for the physical. But who are they? Are they the personalities they have in the daily physical world, are they the avatars or imaginary selves they like to be or experiment with, or do they develop a whole new identity, adapted to cyberspace constraints and customs?



More selves, more profiles

By playing computer games, using social media, like Facebook, but also by using Google or Google service (and the same goes for Microsoft, Amazon or Apple) we are adding self images and profiles, sometimes intentionally like when creating a game avatar,

Cyberspace adds self-images



but often not realizing some service is actually creating a cyber profile of us.

Are you what you are or want to be, on the screens and in the statistics about you? Hardly, but how would you know? Privacy has become a major concern for some, but dissolves ever more.

Maybe we think we represent ourselves in an honest way and those cyber-profiles are a more or less true representation, assuming we are our avatar or the avatar we intend to be. In reality our cyber-identity or profile is much more than what we see on our personal pages or in the game-world. The meta-data accumulated in our track-history, in our purchases, websearches and much more has created an extensive profile of us, somewhere in databases we know nothing of. Most of the time we cannot even access this profile, check it or change it, it's the result of algorithms accessing data from our past.

This cyber-me or cyber-self exists in the cloud, somewhere out there in big data land. It's owned by Google or Facebook, they can and do use it to sell individual or aggregated data to marketing companies. Also the NSA or other government agencies scan the same data and maybe a lot more, your location data, telephone calls and what not without informing you. And that your financial data and passwords are big business for criminals is obvious.

These profiles are fed back to you, they influence what you see or are allowed to see, they become a mirror, your virtual world is re-

flecting what you put in, you are looking at your digital shadow or footprint. Who are we then? Slowly we mix our traditional selves (assumed and shown) or ego-images with what exists in the cloud. This process goes mostly unnoticed, but we start to become the pictures, videos and data that exists out there. For many people, memories are related to what is there, as we are accustomed to assume it's the truth, we can forget about remembering in our head.

We tend to think we remember things from memory, which we only learned from websites. More and more we identify with this cloud profile and cyber-image. When we have learned something by using a search engine we tend to classify this later as something we have known all along.

We externalize our memories and mementos, place them in the cloud where they become property of or at least accessible by organizations outside our control or knowledge. Our assumed identity, anyway the result of interaction with the other, becomes blurred because the other is no longer identifiable, less human, more algorithmic and more materialistic.

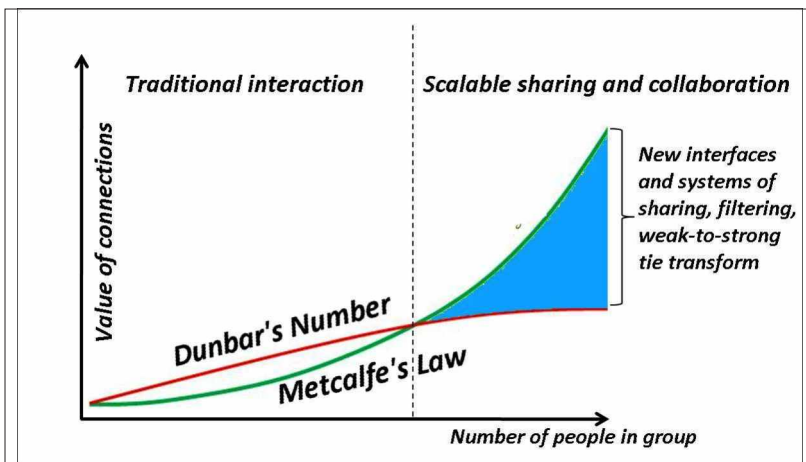
What are we worth in Cyberspace?

Our cyber identity has value and is a commercial asset, but we are usually not the ones who benefit. We ourselves and our behaviour and preferences have become merchandise, something with a market value. Our identity has become a commodity, we give it away freely by participating in social networks and by using all kinds of services that monitor our behaviour. We face our own cyber-identity in the way the “big data” companies and agencies manipulate what we are offered in advertising, search results and entertainment options.

Jaron Lanier is one of the cyber-philosophers who noted we are becoming a gadget, merchandise in the hands of the big data enterprises. He suggests a different model, where companies pay for using your personal data, but this seems a bit utopian. He is right in pointing at the flaws of the present data ownership models, but will Google and Facebook really start paying for your personal data and profile any time soon?

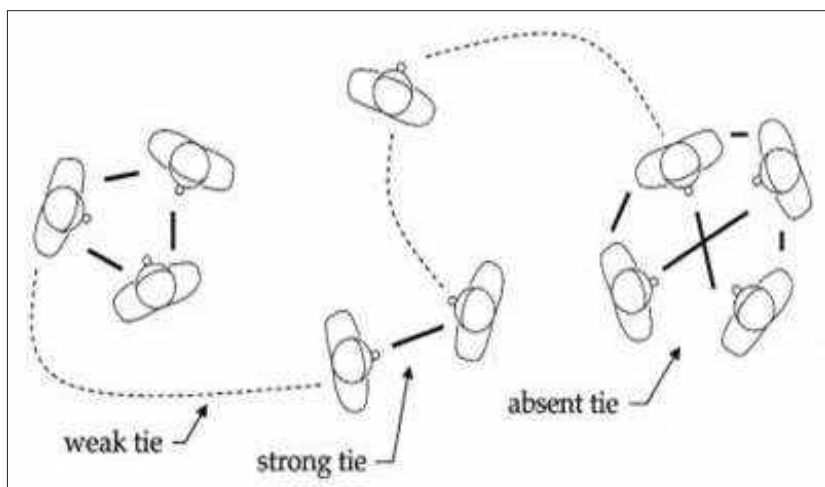
Is more (links, nodes, participants, bandwidth) better?

There is the dream of the network believers and technology faithful, that more connections will bring more benefits. This is expressed in Metcalfe's Law (more nodes, more value). This looks great on paper, but does true value or happiness increase with more Facebook friends and what about singularities or adverse effects, at what point does the noise generated by the network itself starts to outweigh the benefits? The human factor, how do the limitations of our mind and physical capabilities to reach out and maintain meaningful relations limit the potential of a network. Here R. Dunbar's number comes into view, he found out that in animals and humans there is a limit to the number of contacts we can maintain, in normal life this is around 150, but in cyberspace also other



mechanisms play a role.

In mathematical sociology, interpersonal ties (links) are defined as information-carrying connections between people following distinct patterns of interaction (Anatol Rapoport 1957). Interpersonal ties (links) come in three varieties: strong, weak, or absent. Especially concerning cyberspace contacts and links, the possibility to divide contacts in weak and strong means we can upgrade from weak to strong more easily, and this would explain why people can have many Facebook friends, and upgrade if a need arises. Seemingly superficial contacts are not to be ignored, they connect

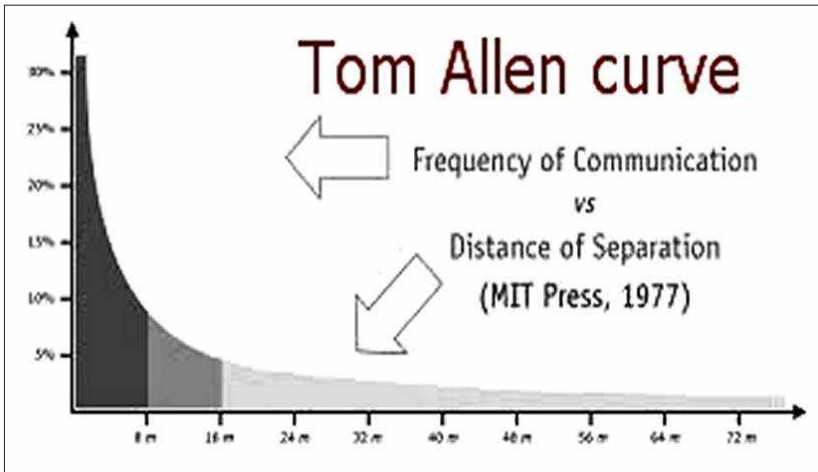


one to different fields and worlds. The weak cyberspace ties (Morten Hansen) can be more easily upgraded to strong ties than traditional contacts. We are however in need of better ways and interfaces to facilitate such transform.

We find ways to deal with all our contacts. Some people have more Facebook, WhatsApp or Twitter accounts, one for the small intimate friends, another for a wider circle. This tendency to stratify or separate contacts or contact-worlds is growing, we are separating into sets of friends, family, business, etc. contacts, often with a different contact profile. The latest software in smartphones is facilitating this, but more developments in this direction can be expected.

Different contact worlds maybe require different reaction pattern, pictures, greetings, digital signatures and references to different databases and cloud services. A business environment differs from a family setting, what is shared here can be separated from what is necessary there. The problem is that in our mind we find it harder to separate sets of people than in our smartphone.

More virtual contacts are not always leading to better results, noise and useless chatter interferes. The need for (some) physical contact to keep the connection going is mentioned often. Here the Allen Curve also points at limitations of network value. it's a



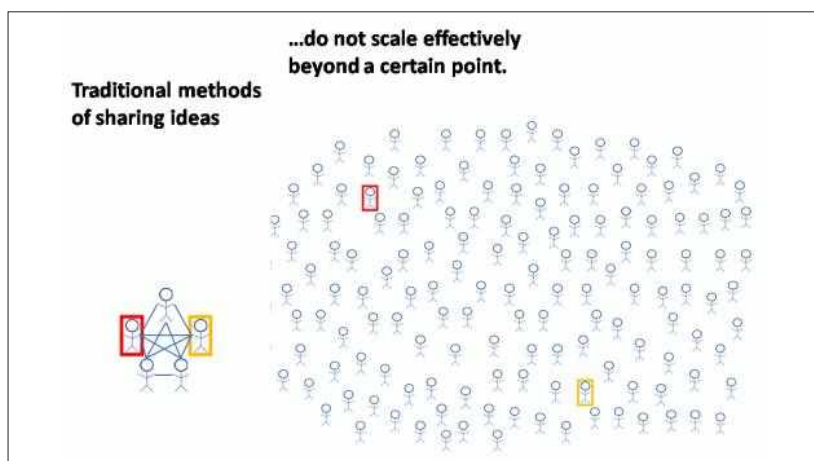
notion developed by Tom Allen, indicating that there is a decay in the use of all communication media with distance. The cross-over of media, the use of different media and omnimedia trends in advertising might suggest our basic mode of communication has changed, but Tom Allen argued that psychologically we do not keep separate sets of people. The more often we see someone face-to-face, the more likely it's we will meet them through other media and at other places.

It feels that more digital connectivity breeds more superficiality, more unreal contacts and more loneliness, rather than more depth and collectivity. Social media can be very asocial and even anti-social!

Identity

The transparency of the internet is another step toward exchanging an inner identity (and authority) for external (including virtual internet presence) manifestation. We externalize ourself or selves more and more, our memory (pictures, text, profiles, life history) is on hard discs, stored, in the cloud, not in our hearts and minds. The concept of identity, identity change, playing with identity, changing masks or avatars, is one of the aspects of cyberspace that makes it interesting.

We can use the internet, the cloud, social media to play with identity, change identity, hide identity, we can be anybody we want to be, assume any avatar personality. Externalising our inner thoughts



and feelings is a process we can see in the evolutionary development of expression, ritual, speech, songs, writing, art and media. Self consciousness in that sense is an externalising process, tearing apart our wholeness, looking no longer at a holistic self image but at parts and aspects of what we think we are. We are conscious of our masks, our assumed selves and less in touch with what we truly are.

Home is where the heart is, but the heart is more and more outside, our memories, individual history and persona are out there, in the cloud and thus in the hands of Google, Facebook and the invisible powers of the internet. We are becoming the prisoners of that image, identify ourselves with what is out there and it isn't us. In many respects this a dangerous path, with effects for our well being and our connectedness to the "real" all which are as yet uncharted or ignored even as we frantically wave the flag of progress.

The internet has made the identity crisis of notably the West visible, as individuals not only put their whole life and social sphere there, but tend to exchange their identity with the virtual one created there. Who am I but my Facebook page, who does the government or Google or a blind cyber date contact think or deduct I am, even beyond what they have as facts in the databases and on their screen?

My identity is externalized, out there, out of control and we can ask ourselves what this means in the long term for things like happiness and feeling real. Living the fake life, with fake friends, fake contacts and fake activities, isn't this the next stage in subjectivity, illusion, becoming the mask, adapting to what we think we should be. We could ask whether Freud would have added a cyber-ego to his id-ego-superego model if he had lived now?

Profiling, the digital shadow

An issue that has much to do with our identity is the shrinking privacy we have concerning our messages, our phone conversations, our location and assorted cyberspace activities. Companies, but also governments are building enormous databases with whatever they can find out about us. Then they use (secret) filtering and profiling techniques to figure out who we are, what we intend to do and how we can be influenced (to buy, to travel, to sign up or to engage in activities, including subversive or dangerous ones). For most practical purposes, our cyber-identity and digital shadow is now what we are, and this is a dangerous thing.

We become our Facebook profile, we are the prisoners of our past, our freedom to change (or make mistakes) is limited. This is psychologically like a straightjacket. Now most of us already live a mask, the ego structure we developed to deal with parents and upbringing, but now this mask becomes a separate reality in cyberspace. Changing it's nearly impossible, as we don't know what data are used, where they are stored and what profiling techniques are used. We only notice that we receive certain kinds of ads and spam, that our search engine generates different links or that we are refused credit, a mortgage or visa to travel abroad.

Is the chat-race having other effects too?

What is of interest here is how our traditional and fairly basic needs to connect to the other (spiritual) world would influence, in cyberspace, the ceremonial of introduction, stratification and caste that we see in "normal" social networks. Our interaction in digital social media looks functional, but it's clear we are influenced by all kinds of deeper motives like FOMO (Fear Of Missing Out), the need to belong and the need to be different (an individual) and be recognized.

Are we also expecting some magical outcome from participating in the 24/7 always-on craze, texting everywhere, anxious not to miss out? Do we feel that this nearly obsessive devotion to what in most cases is little more than a tribal group and their dealings and musings makes us more likely to receive the happiness, honors, respect and love we seek? Or are we just imitating, like in much now empty ritual in traditional religion, what we believe works.

In practical terms, does belonging to a network makes $1 + 1$ more than 2 (this is what network engineers have claimed all along). Is there hidden efficacy in our habitual, already somewhat ritualized, participation in social media? Some say there is, that sharing seemingly superficial details does create a deeper connectedness. And of course there is the status aspect, not joining LinkedIn or Facebook is a statement too.

The status of cyber-netizens (we are all aliens in virtuality) or cyber natives depends on how many Facebook friends they have, how many Twitter followers, how their blog or personal website ranks etc. Those are the chevrons of cyberspace. Like in any meritocracy there are subtle limitations, too many Facebook friends isn't considered cool.

Also our status might be limited to the group of friend's friends (the digitribe). We are, by the secret algorithms of the platforms, limited in our exposure to whom or what falls outside our "profiled" identity. John Perry Barlow's:

"You will only find on the Internet what you are looking for, not what you need"

has slowly evolved (or degraded) to what the platform allows you to see. This also has to do with confirmation bias, we are biased to information which affirms our prior beliefs, really thinking or searching "out of the box" has, alas, become unscientific and unacademic.

Pagerank censored subsets of reality

So we are kind of cut off from the total, imprisoned by an environment we have created ourselves by all those nearly automatic acts and routines we feed to the cyberplatforms. Personalization

and customisation is a double-edged sword, it serves us more efficient what we need, but gives us only a very limited slice.

To acquire (digital) identity and status in the modern world, one has to perform (digitally) in such a way, that chevrons (likes) are awarded both by people in the private as well as the more public sphere. The two tend to become one, the number of readers of your blog, of YouTube views matters, not who they are.

We used to having real friends and now we are part of a like-economy with subscribers, sharers, likers, befriended and followers, they all become Facebook equals, we have flattened our social world

as Zadie Smith characterised this trend. And as 'autocomplete' and geolocation in Google servers (most of us don't know or use the /ncr option) only display what Google deems relevant, globality is an illusion too. Goodbye to complex relationships, the great transparency of an entropic greyness and middle class simplicity wins, Wikipedia rules. Conform or unfriend!

But here comes the problem, we want to be special too, individual, noted for our contribution, respected for being different. Michel Foucault, in a way obsessed with what ourself is and what technologies one can use on the self, gives as the purpose of "The art of living" to be like no one else. Much of what we do in social media is, beyond the belonging, really about getting respect, identity, being different. This requires a strange split as one has to have both a social (conforming performance and behaviour) and a deviant, original stance. This split isn't unique to cyberspace presence, already Plato points (in the Phaedrus) at the tedious task of the psyche to control both the tame and the wild horse, the social and the creative side in us.

In psychological terms one can see this as the social, adapted (mask) personality and the free, childlike inner self where originality and intuition reside. To be a noted cyber-netizen both are ne-



cessary, but the question arises whether the freedom, flexibility and democratic access of cyberspace helps people to show more of their inner child originality, of their true self.

In normal society, education, work, school we already are forced to give up most of that inner self, we become the (fake) egos that know (hopefully) to deal with that world, but is cyberspace immersion making this worse or not?

Coyote Mind and Flash Mobs

There is, deep in the human psyche, a source of innovation and surprise, of wonder and obstinacy. We see it in the joker of the card game, in the trickster energy sometimes called coyote mind, in the way humour works. Using that energy however is usually limited to ritualized situations, like on the stage, in jokes, in playing the fool. A stand-up comedian can say and do things not otherwise accepted, the comedy show on television can criticize the political establishment.

Modern media and notably the ubiquity of camera and the communication possibilities of internet devices like smartphones has already led to new forms of expression, like the flash mob. These are unexpected, unannounced, semi-spontaneous performances or happenings, sometimes by professional musicians, theatre people or PR people (smart mobs), in public places. A group of people assemble suddenly, perform an unusual and surprising act for a brief time, then quickly disperse.

This can be seen as a practical joke, but essentially it's a manifestation of trickster energy, coyote mind manifested. The notion of such coyote, disturbing actions is known in many traditions, it adds an element of chaos, of imperfection. Don't assume anything is perfect, allow for imperfection and thereby bow to the divine perfection. In some cultures specific mistakes in for instance buildings are an expression of this sentiment, don't assume being perfect.

The general idea of the flash mobs resembles the happenings, sit-ins etc. of the sixties, but they are faster, unexpected and modern media coverage by the public and media distribution gives it

a new vigour. The first flash mob was organized by Bill Wasik, senior editor of Harper's Magazine in 2003 in Manhattan.

The participants use places like a big railway station, a large market, a public place and locations where a lot of people are around. The performers are initially not recognizable as such. When the performance starts, it usually is with only a few people, and then the surprised audience, the passers-by, turn toward them. Then more and more performers join, from different corners or they use staircases or different levels in the building to add their part. The surprise and often the message of the musical piece or performance makes for growing enthusiasm, the flash mob becomes a highly emotional and moving performance. The group mind skyrockets, there is effervescence, the interaction between audience and performers can be enormous.

As there are always people with cameras, such flash mob performances will hit Youtube in minutes and the message will quickly reach the world. This turns out to work very well when there is a deeper message, a magical intention.

The magical energy of such events can be impressive. Seemingly silly acts can have an enormous effect, on the media, the police and the general audience and achieve clear jumps in awareness. As such, they are rituals, with a psychological, a social and a magical effect.

Meaning and ethics

Things like an extended and faster digital infrastructure isn't only a positive force on our way toward a future, it forces us to rethink what humanity stands for, what meaning we can find in existence, in creating and in play.

Cyberspace as the sea of meaning or rather of the hope for meaning is an interesting image, but places too much value on what all these data will bring us. Meaning is a difficult concept and has many levels, the needs model of Maslow is also a hierarchy of meaning. Cyberspace is more like a sea of data and connections, with parties at the shore or on the high sea looking for profit, power and indeed meaning and entertainment. Then who are the fishers, the sharks, the deep sea miners and the Greenpeace activists, and who pollutes this sea with malware, profiles and privacy attacks?

Where are the law of this open space? Hugo Grotius and his Law of the Open and Free Sea (*Mare Liberum*) notions might apply, but historically this was something written mostly in the interest of the Dutch merchants. The open sea usually was quickly appropriated as soon as there was some profit to be made like fishing or oil. Power, not reason or ethics rule the waves, and the same goes for cyberspace. There is no good theory about cyberspace rights, mostly things are handled by contract and only the extreme overflow like child pornography and security issues is a concern for the worldly authorities. Copyright issues are dealt with referring to contracts, regulations and conventions centuries out of date.

What is lacking in our cyberspace worldview is ethics, laws, rituals and structure beyond what Google, Facebook, Amazon, NSA etc. force upon us. But how to find this new morality, is it a rational thing like a kind of Social Contract, a Kantian Categorical Imperative or do we wait for the Cyber-Gods to send us the new Ten Commandments?

No easy answers here and no clear principles, we are entering a new realm of extended and (maybe) amplified brainpower and of virtual consciousness, and need to find new answers. Maybe we have to look at why we have created this, or did it just happen as an emergent necessity? The deep purpose of it's maybe beyond efficiency, but then what is the purpose and direction of life? Understanding the game of life and our role in it we used to leave to the mystics and saints as we only know that it moves in strange directions and forever changes. But where are the cybermystics, certainly the likes of Snowden or Assange don't qualify. Or should we buy into the notion that we will soon transfer our humanness to a cloud presence and digital identity, to live forever in Ray Kurzweil's Artificial Intelligence Paradise.

13 THE END OF THE PHYSICAL INTERACTION? (LINDA)

Things are changing in the way people interact. We still shake hands, maybe hug, but mostly we use our mobile now, we meet virtually. People increasingly do not look at each other, do not touch anymore, or smile to each other. Just sit in a bus, look up from your phone, and look around you. What do you see? Heads down, spirits in another dimension: The Cyberspace. And this is only increasing, nowadays you can skype from everywhere, and share what you see with your Google Glasses.

Indeed, the trend is clearly noticeable in some developing countries. Take the example of Morocco, where I live. As I commuted by train for years, I could see the change. Only three years ago, access to the internet on mobile phone was not as common and democratised as it's today. Then it was relatively expensive, and limited, then 3G was not available, let alone 4G . Before all this mobile access, you could, for example, while traveling by train, make eye contact with your neighbour, share some jokes or smiles, start a conversation, borrow their newspaper...

Today, these Heads Downs are away from each other, separated in an isolated sphere. Physical reality does not interest them anymore. They are usually young and young adults. The older generations are different: they are still present, here and now; they do not know how to use all of the internet, cyberspace is still not familiar.

Now this is a bit different from the interaction between people in more Western societies like in Paris. There, even before the advent of the Internet, social contacts in public places were pretty limited, to the extent that people had their eyes fixed on their books and ears blocked by headphones. For them the mobile is just an object replacing another, as a way to hide.

So can we conclude from this that technological development has led to more individualisation, to physical isolation from the other, creating a little ego-cell amidst the people around?

Ambient awareness

However, even if they are not aware of their environment, they have an ‘ambient awareness’. This is the name social scientists have for this sort of incessant online contact. The Canadian journalist Clive Thompson wrote:

“It is very much like being physically near someone and picking up on his mood through the little things he does — body language, sighs, stray comments — out of the corner of your eye” (Brave New World of Digital Intimacy, NYT).

This new kind of awareness that creates a new kind of interaction online is offered by Facebook or Twitter... On these tools people post frequently tiny updates of what they are doing, what they are eating, where they are going... They share, with the world, in a few characters, short and frequent and less carefully considered details about their private life. What’s the aim of this? This could be seen as a modern narcissism, in which these microbloggers, in particular young people, are in need for social recognition.

Milan Kundera says in his book ‘Immortality’ that

“La solitude: douce absence de regards” -Solitude: sweet absence of looks-.

Solitude means here that people would need the others to be self conscious. They need the others as a mirror. All they wish for is to stand out in the crowd, to be known and recognised in Cyberspace. These details, the receiver, as the days go, get so many updates that he begins to feel the rhythm of his ‘friends’ or family members. Each little update, insignificant on its own, draws little by little a picture in an ‘invisible dimension’, cyberspace, ‘floating over everyday life’.

Clive Thompson states that this has never been possible before, because before no friend would bother to call you up and detail the sandwich he or she has been eating, how the woman sitting next to him or her in the bus looks like. He also believes that the ‘little Ping-Pong messages feel even more intimate than a phone call’.

This idea comes from the Japanese sociologist Mizuko Ito who first noticed that, for example, lovers living in different cities

would spend hours sending texts back and forth with mobile phones like ‘enjoying an ice cream’, ‘watching TV while lying on the couch’. With the internet, it’s exactly the kind of tiny updates people publish with these new CoPresence tools, like Facebook or Twitter, Whatsapp etc.

But is that really what knowing someone is? Just getting more digital information about his life? Are we limited to our acts and idea? Is language limited to words? What about the body language, the environment? Many questions, few answers, but personally, I doubt we can know someone by just virtual interaction. I do not agree with the notion that following people for a day or for a month creates intimacy, more social awareness. For sure, it helps working the problem of social isolation, but for me, there is a huge (considerable) difference between Social Awareness and Online Awareness.

The second one cannot replace the first one, or be considered of equal value. Being more knowledgeable about details of someone’s life does not open the door to someone’s inmost self for others. Therefore, I feel intimacy and cyberspace are not compatible: they are from different worlds.

So, we can ask ourselves : To what kind of relationships leads this Online Awareness? Having hundreds of friends on Facebook could make someone feel less alone, helping him fight the growing social isolation and individualism, the solitude, which is a social phenomenon of this last century, it’s like entering a vicious circle.

The other danger would be to amplify these weak ties (links) to become a whole new class of relationships: parasocial relationships. Danah Boyd, a fellow at Harvard’s Berkman Center for Internet and Society who has studied social media for 10 years, published a paper arguing that awareness tools like News Feed might be creating this new kind of relationships.

He writes: *“They can observe you, but it’s not the same as knowing you.”*

So, observing people, following them, is different from knowing them. As you only know about these people you have befriended on social media platforms that what they have decided to share with you, quite often just the positive data, it’s quite easy to idealize



Is Online Awareness equal to Social Awareness or are we surfing alone?

se them. The mental picture you create from these messages and updates you got is different from the reality, because it is deeply incomplete.

According to Luc, one of the problems with all this identity and personality probing is that we, as humans, in most cases already have multiple masks (sub-personalities) and what we do in cyberspace only add complexity and more masks and profiles to that image. So analysing our cyberspace presence at a specific forum with a specific purpose would only yield information about parts of us, the whole would remain hidden. This could be solved by even more complex models in the profiling software of the likes of Google, but as this isn't (yet) part of accepted psychology this will take a while.

There are indications that we are more isolated, even as we are more connected. People interact less physically. They interact indirectly via this infrastructure, the platform of internet carrying

Cyberspace. Whether you want to buy shoes, book a flight, get insurance, enroll at university, these days you just have to click on links, type a few words, all without moving physically. No need to go to a shop, meet a saleswoman, a branch manager, a secretary, you can do it from the comfort of your fingertips.

The disappearance of the need to physically interact goes even further, in the sense that you can access services and content from wherever and even turn it around and become the one providing the service, advice, etc. Indeed, with average telepresence means (telepresence robot, skype) you can project and distribute your image, your ideas, your world changing project without having to move. You can for example join conferences in person, give lectures at a university, be the star of a network, all from home.

MOOC

I see many advantages in telepresence, in care, in medicine at a distance, in workgroups and in teams. One of the situations that illustrate this is a sick high school student who has to stay in a hospital for several months. He (or she) may attend and participate in his classes, through a system transmitting his face and his voice, he can be telepresent. With regard to education, another positive point can be highlighted: the availability of MOOCs (massive open online course). Such MOOCs are becoming popular as an alternative to normal in-person class education, and can be followed from anywhere by anyone, without any physical restrictions of time and space. These newer educational platforms create a community between students and professors of universities from all around the world providing unlimited access to relevant courses. Connecting resources in such a way is very valuable for an individual, but also for society at large, there are no transport costs and the knowledge is shared more effectively.

Universities used to limit access to their archives and to such shareable resources, but are opening them up more and more. Virtual Universities, especially in countries with less infrastructure like in Uganda, are now beginning to emerge.

Such schemes form a new system of institutions in cyberspace. They are no longer very physical, for the material and the services reside in the cloud or on accessible computer somewhere, but are open and (in many cases) free or not expensive. 'Circle of know-

ledge processing' not only in education but in dealing with all kinds of problems can be formed, whereby the individual participates in a social environment. The individual is the starting (and ending) point of such connectivism.

Less physical interaction and I see this as a trend resulting from internet use, has disadvantages and advantages. I have, as a student and in my social life, seen the benefits, but being in a public place with everybody just busy with their little screens still makes me wonder, is digital life really making us happier?



Virtual Reality, a powerful tool, but also a path to further alienation, further escape from reality.

14 COMMUNITY, URBAN TRIBES AND FEELING REAL

Exploring online communities and discussion forums in cyberspace is exciting, and social networks are a main topic for many discussing cyberspace. But during the project we also visited some old-time 'live' communities and festivals, like the alternative Amsterdam squat-community Ruigoord. This place is, already for 40



years, a focal point for alternative, artistic and creative freedom projects. We happened to visit Ruigoord at their annual Landjuweel festival, where we also went to gauge how these

people were thinking about cyberspace and do our survey. The atmosphere at this festival can best be described as a sixties kind of scene, a hippie world where the time stood still at 1967, the summer of love. A similar crowd, with kids and older people, dancing, playing, having fun, and what was noticeable: very few phones around. Experience was what mattered, not sharing that with Facebook friends elsewhere.



Ruigoord Landjuweel

This was not the kind of now popular music-dance festivals with mostly 16-30 year olds, but offered a broad program of various activities, workshops and music, with as attendants a cross-generational mix of all walks of life. Much nicer than the mega-events with a limited age-group and comparable to another festival we visited, the Park Festival in Venlo, but that already was much more a public event. A good age mix seems to help keep the peace, parents don't want their children confronted with drunk or obnoxious people on to something.

Ruigoord is a very tribal scene. What was interesting was to see the variety, the diversity in people, music, dresses, merchandise and how people interacted. This is a relatively small festival with maybe 2000 people in total and a core of regulars of maybe 500 people, the tribe. Many are camping, tents all over the place, but all in a very friendly and permissive atmosphere, with a high tolerance. That marijuana, legal in Amsterdam, was used widely was clear, but caused very little problems, some people looking a bit hazy maybe, but there is no aggression or violence as with alcohol and speedy drugs.



Tribal awareness is high, one feels connected to a common culture, not so much to a common goal. Being there is what matters, sharing, meeting, enjoying each other's company, but not necessarily having a common goal beyond that.

New social media like Facebook and Google give the impression that the cyberspace generation is more connected and social than before. Communication is faster, often instantaneous, it knows no boundaries and you have "friends" all over the world. Howe-

ver, how does this relate the tribal connections we had in the old days, in the sixties and in urban tribes like the Ruigoord community. There, physical contact and 'feeling' each other is still important, the internet is used for some communication, but being there on a beautiful sunny day one realises that feeling and touching is a very human need. Live music, being able not only to dance but to communicate with the musicians, exchange a joint or joining in the drumming makes for great fun and feeling good.

Tribal communities like this one have always existed, based on common goals, common enemies, common resources. The urban tribes of today offer, and this is very clear in the case of Ruigoord, a way out from the rat-race, an alternative way of being and sharing. Society needs such places and communities, as a security valve for sentiments and drives that no longer fit the 'civil' models. Art, creativity, but also more negative impulses find expression and a safe haven. Hells Angels are as much an urban tribe as these flower-power post-hippies.



The sentiments that bring them together are not the rational motives or ideals of the cyber-generation, even as they use internet to organise their meetings and all have mobile phones. There is a usually distinct difference with the tribes in cyberspace, the groups, forums, panels that use the internet to connect, due to the lack of the physical. It feels that the tolerance on many forums is less, the communication is more edgy.

Sometimes, like in the case of the Burning Man tribe in the USA, cyberspace and real events go hand in hand, and the physical and



Burning Man in the USA is an annual physical festival with a lot of synergetic cyberspace activity during the year.

virtual communities overlap. There, the main event in September with more than 50.000 people in a desert camp is accompanied by synergetic cyberspace activities and discussion all through the year.

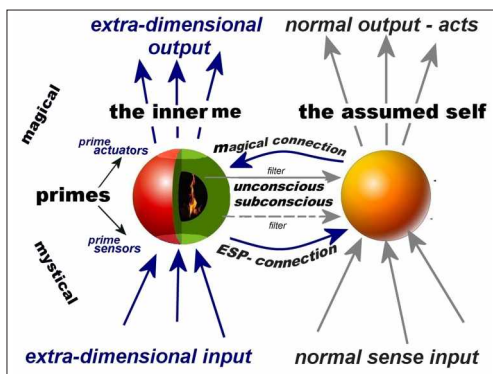
Feeling the connectedness

Luc believes (and has explained this in his book about ritual) that tribal awareness is part of what he calls our primal sensitivity. It has to do with intuitive senses (he calls them primes) for the otherworldly that are hidden in the subconscious. It's through those exchange mechanisms that we can

touch the extradimensional where beauty, intent, balance and such reside. The primes allow us to reach beyond the normal limitations of time and space.

The information from these primal senses, often thwarted and filtered as it reaches our daily consciousness, influence our lives far more than the rational reality of the normal senses. Our likes and dislikes, our do's and don'ts are driven by these primes, in fact much more than by our normal space-time bound senses. These meta-senses, Luc states, are essential in tribal relationships, where a common past experience and a common direction or goal, amidst an environment that is perceived as dangerous or hostile, unite the tribe. Togetherness, tolerance, and a shared vision are the building blocks of a tribe.

In the past rituals, festivals, in general common platforms to meet, feel good and address the otherworld were the cement of a



tribal community. The purpose of a ritual isn't limited to one dimension. There is a psychological, a social and a magical dimension (and purpose) in a ritual. Growing and learning but also just having fun is important, as is making contact with the group, tribe or religion.

It creates group mind but also establishes hierarchy and law (the rules) but then the magical, the contact with the otherworld is often the true foundation of ritual.

This isn't an exclusively human thing, animals have rituals, and ritual precedes language, myth and religion. And exactly because there are thus non-rational or non-cognitive exchanges in ritual, we have to look for what role the other, irrational senses (primes) like feeling the mood, the energy, beauty, morality, kinship etc. play in tribal bonding.

Tribalism in cyberspace

Is what we look for in social media not this feeling of belonging, this unity beyond words or imagery that we feel, deep inside, and enjoy? The new media offers, like other tools and media, the possibility for contact and communication, they are certainly becoming extensions of our senses, the way M. McLuhan described media. Whether the new tools in cyberspace also are extensions of the meta-senses, essential to tribal bonding and group energy, is not yet clear.

For the moment, most of social media is too superficial. Twittering away is often more of an escape than a real outreach, a mask that's easy and uncommitted, but there is always potential to upgrade it to meaningful messages.

Looking at how nice and nurturing such a festival as that of Rui-goord can be beyond the obvious availability of space, music, food etc. is what could help us understand the cyberspace community. The challenge we have, being part of urban tribes and groups, is to

use the new media and contact potential there to nurture and develop the feeling of belonging that we are all longing for. Not by participating in stupid junk communication, but by energising our contributions online (emails etc.). That brings maybe back the magic, the intangible that we deny in science, but in fact rule our lives, as humans, as family, as a tribe and as part of the resonating consciousness we all call reality.

Tribal collaboration movements (like Ruigoord) are in a sense both atavistic and prophetic. The past, sitting round a fire and drumming, and the future, a vision of peaceful togetherness, are present. It's an event out of time. We, together, feel a connection, maybe even an urge to manifest and express beyond the mediocre. That festive and uplifting mood isn't perceivable in cyberspace yet, but then maybe a new generation will be able to find ways to use the technology and resources there to a similar effect.

The great Cyberspace Woodstock experience is maybe just around the corner?

15 CYBERSPACE AND THE MIND (XANDER)

Can the internet as a rather new interconnected medium be used to influence the mind of individual user and the human group mind? Could cyberspace, as a virtual supermind, be used to manipulate the thought waves of humans, direct us as a group towards new vistas?



Or, the other way around, could an individual or a group influence cyberspace? This for many feels like ascribing magical qualities or at least some kind of self-consciousness to cyberspace, but there are experiments that show that there are measurable effects.

The Global Consciousness Project (by Dean Radin) already indicates that certain emotional states of larger groups of people have an effect on random number generators (set up to measure such effects) and thus on computers. Events like 9/11 markedly influenced the outcome of such devices.

We all know the synchronicity of the telephone, we often call as if requested by another party. Could this synchronicity also play a role in the internet and cyberspace? That there are people who have a bad or very good effect on computers has been observed by many people, so could there be a way to use this, one way or another? In the 1990s there were experiments in Germany to see if some people could corrupt computers, make them malfunction, the Chaos Computer Club of Hamburg and notably the famous hacker Wau Holland knew about this, but little has been heard about it since. The idea then was that quantum processes, and semiconductor technology is a quantum process, would be susceptible to mind over matter influences.

Many believe we live in a world of connected minds, where there is a psychic connection between people, either called EPS, telepathic

or spiritual resonance. But has this been used, by governments or groups to make us change our mind, behave differently? The more esoteric literature and the conspiracy folks certainly believe this, there are many claims about special technology used by the Russian and Americans to control our minds, hypnotise us, Haarp us (High Frequency Active Auroral Research Program (*HAARP*) or use other secret means for mind and notably crowd control.

Individuality, being different

Internet access feels like the ultimate freedom, one can create whatever in cyberspace, express oneself in new and original ways. Reality however shows that nearly all Facebook pages, YouTube videos and such follow very common patterns, we like to show our pets, our holidays, our happy faces and hide the negativity. Our freedom to change and to be different as a cyber-personality is severely hampered because of the overarching transparency, the lack of secrecy and privacy. This has psychological effects. Spiritual growth and maturity involves letting go of our ego, but when your email and cybercommunications ceaseless fortify the ego, changing becomes harder.

We are already prisoner of our personality, but one of the dangers of cyberspace is that it limits our freedom to change and break away from our mask or masks. In plain terms, social media are solidifiers of one's psychological status quo, they limit growth and change, may even keep us immature and spiritually childlike.

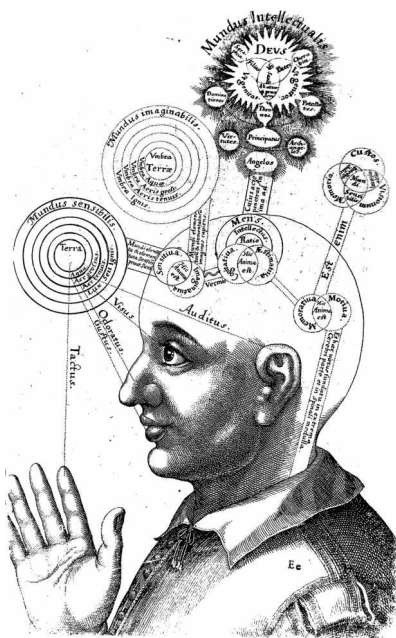
The good news here is that profiling isn't yet very well developed, even with massive amounts of data it's very hard to pinpoint one's personality and the understanding of how our psyche and behaviour works is limited. Science has not yet come up with a sophisticated profiling method that predicts what you think and how you act. But this might change, I think the tools to develop better typing and profiling are not far off.

For the moment organisations like the NSA and security forces don't really know how to use their mountains of data, even the latest math methods yields only limited results. So they use fear tactics as a way to prevent trouble. Most of what we experience at airports is just a way to frighten us into manageable behaviour.

Group Mind

The idea of a group mind being influenced by some means is in general not so outlandish, from the notions of the Confucian Chinese with their Li and rituals to control the masses to the bread and games days of the Romans till today's crowd control approaches, the governments and religions have always tried to influence or even manipulate the people. The psychology and technology of controlling mass-events is probably well developed beyond what the general populace suspects. We don't have to go to notions of magical manipulation to recognise how the general public is fed information to do certain things, with commercial or other purposes. There is enough research on group mind control, the Stanford Prison experiment by Phil. Zimbardo comes to mind, to know that people are very easily incited to act in certain ways, against their inner conscience.

Remains the question how cyberspace is used in this respect. Facebook has been caught experimenting at a large scale with the emotions of their users. They were manipulating data to see if for instance the willingness to respond or even buy could be triggered. Governments control the flow of information, limiting access or manipulation content is quite common, corporations have special departments gauging Twitter and Facebook traffic and counteracting negative streams. Social media are becoming a



Robert Fudd 1619

Observing how our mind is subject to all kind of energies and influences isn't new, as this drawing from 1619 illustrates.

way to control group and individual minds, but this also applies to those with more sinister intentions. Jihadist and fundamentalist organisations are also able to use the internet to influence people, with very threatening results.

The terrorist thought virus - Cyber-Terrorists

As privacy turns out to be an illusion, the NSA and other organisations and countries have listened in to whatever we did, there is growing concern about profiling. Profiling means that based on data concerning a person or organisation one constructs a profile that indicates future actions. This can be done in a commercial context, but also for security reasons, the excuse is that one wants to identify potential problems.

Any terrorist with some brains could develop new ways to hijack planes or create bombs that would go undetected. I believe one tries to deter the people that are susceptible to what I call thought-viruses. The now mostly feared 'Lone Wolf syndrome', think about the Boston Marathon Bombing April 15, 2013, is such a thought virus. Individuals that turn into terrorist without belonging to a group, but for some reason decide to act. These are the wild cards, the ones that are hard to detect but can cause serious problems,

Suicide attacks and self-immolation are very common now, but were unheard of in the West before Jan Palach, a Czech student, set himself on fire on January 16, 1969 as a political protest.

Understanding group mind phenomena, resonance mechanisms including mirror neurone processes, and these are encountered if not created in ritual, would help to understand and deal with such thought viruses.

An explanation for this behaviour could be that some kind of aberrant thought virus takes hold of the minds of those receptive to this and influences their thought patterns to act upon a trigger or direction. This is most dangerous because it can not be stopped, before the act the recipient may not even know they will be doing it, rendering all efforts of anti-terrorism useless. This type of hypnotic or mind-influencing terrorism is nothing new, go-

vernments and terrorist organisations have been doing these type of experiments for years.

This takes us back to cyberspace and the mind, more importantly mind-control. But how can we protect ourselves? Well first we must know the distinction between mental control and brainwashing. I believe that in brainwashing the victim knows that the aggressor is an enemy. For example, prisoners of war know that the person doing the brainwashing and torture is an enemy and often they understand that remaining alive depends on changing their belief system. They are coerced, often with physical force, into doing things they would not normally do. However, when the victim escapes from the influence of the enemy, the effects of the brainwashing frequently disappear.

Mind control is more subtle and sophisticated because the person doing the manipulations is often considered a friend or a teacher or a company with the best products and intentions, so the victim (customer) isn't actually trying to defend themselves. In fact, he or she may be a willing participant, and believing that the manipulator has their best interests at mind. They often provide private information willingly, which is then used against them, to continue the mind control.

If someone was to harness this power of mind-control and use it in entertainment vessels such as YouTube, I believe that the results would be extraordinary. Its not uncommon to use movies as a form of control, illusionist Derren Brown showed this in his show on mind-control, he used a single frame in a movie containing a number to influence peoples sub conscience, thus making them make decisions based on his methods of control.

I think that however promising this could be, it's an issue that we must address. Subliminal messages were once widely used in advertising and films to influence our consumption of products, but were banned there. Cyberspace however is free and wild in this respect, but what if those subliminal messages were to make us act, buy, turn against each other or certain groups, races etc. against the law or common sense.

Those responsible would not be prosecuted because they are not the individuals acting/ breaking the law. Or have residence outside normal jurisdiction.

I believe that there should be a law put against mind-control and subliminal messages, and this should be enforced strictly.



The German Philosopher Peter Sloterdijk sees us as living in spheres and bubbles, interacting with the world and others. How large or small is a cyberspace social bubble?

16 THE DIGITAL MOVEMENT OF MUSIC (XANDER)

Being a composer of my own music, the question of copyrights is something which concerns me. I am making music and have even succeeded in being paid for my work as a composer. But then, is there a future in this, or should I just consider the joy of creation something original that some other people also enjoy my only reward. There is an ethical question here, as this is where the collective interest and the personal interest seem to collide. Of course having free music is nice, music can improve our lives, but can society accept that by not compensating the author and/or performer the incentive to create new music will slowly disappear and performers will have to look for other sources of income? This of course not only goes for music, but for all creative efforts; it concerns one of the basic issues in this book, the seemingly unbridgeable tension between the collective and the individual. Being different on a medium, that eventually will erase all differences because of its entropic transparency is a challenge but for the time being an opportunity that concerns the rather mundane aspect of compensation. Cyberspace and illegal download of music have grown up together, but of course the theft of what is generally called intellectual property is as old as individuality. Music industry piracy originated in the 1920s when radio stations first began airing records. Even though the radio stations had bought the records the frequency of plays was not recorded so the artists themselves wouldn't receive additional payments for the transmission of their music.

Over the years the various rights societies had legislations passed to ensure that stations made an accurate recording of their airplay and paid a licence fee which fairly distributed among the rights-owners. While this was not a perfect solution, people accepted it, after all, it was better than nothing. Vinyl, the next stage in recording music, was incredibly hard to copy, and even with the blank tape (on those reel recorders of old) as a means to copy the music industry was still unaffected as the sound quality of using a blank tape to copy was terrible. However, following this was the cassette tape. Which was easier to copy music thanks to develop-

ments in technology but sound quality was still compromised and it took a long time to copy a single tape. This meant that piracy was relatively small and unpopular due to the quality, but then in 1982 the CD was born. Originally CDs were read only so they couldn't be copied however technology moved faster than the legality of the piracy system and soon the CDs being produced could be copied to any computer with the correct software and then burnt a blank CD. This was a major blow to the music industry, record companies and artists realized early on that the majority of the income would be from concerts rather than sales as the atmosphere of a gig could not be copied. This biggest challenge to the music industry was the invention of the MP-3 file.

MP-3: the digital step-up

The invention of the MP3 file by the Fraunhofer-Gesellschaft which had begun in 1987 only came to life between 1996 and 1999. MP-3 meant that people could search and upload to the internet for their desired music and download it for free, and as the earlier internet was like the 'wild west' in comparison to now, tracking piracy became very difficult. It also led to the invention of music sharing facilities online both legal and illegal such as iTunes and LimeWire. It meant that people no longer had to leave the home to have access to all the music they desired, it was instantaneous, readily available, and more accessible to people all over the globe. Over the space of 9 years, from 1999 to 2008, the revenue generated from music sales has almost halved in the last ten years and it seems that this is a trend that is set to continue. The R.I.A.A. (Recording Industry Association of America) estimates that global music piracy causes \$12.5 billion of economic losses every year. This is a mix of job losses, tax losses and income losses. This showed that the livelihoods of the artists, writers and record labels were being threatened. Music piracy also effects up and coming musicians as they receive little or no money for anything they produce and they generally resort to giving their music away for free until they gain enough recognition to benefit in any manner from selling it.

Technology is moving so fast that it's impossible to police all of the music industry and the internet. The DRM schemes, intended

to make copying harder, work only for a limited time. Nothing seems adequate in preventing the large losses that are incurred through music piracy. Record companies are prosecuting individuals but it's slow process with very few beneficial results. In America, religion is being used as a factor to try and discourage people from pirating music, phrases such as "Would Jesus pirate music?" are common to try and discourage people from pirating on moral grounds. Naturally, this method of discouragement is met with shrugged shoulders and mocking laughs from those who don't regard religion a part of their lives or to have any effect on the music industry and piracy. Eventually artists started to give the people what they wanted and released their music online, some albums were even released for free so the artist could get some popularity.

This especially occurred in the electronic genre music, where all the music would be made on the computer using synthesisers and programs to create the art. We must note that this doesn't make it have any less musical quality than music played on real instruments. Much like the change from letters to E-Mails, industries are changing and people must start to understand



that this is inevitable. The music industry has adapted and notably Apple iTunes made a big difference. Allowing an easy and not outrageously expensive way to download music has changed the face of the industry, even as copying is still quite common. But also the business model of the artists has changed, more money is now made from concerts and tours than from the sales of recorded music.

Personally I think that music piracy isn't all that bad, forget the legality of it. I feel many artists nowadays have lost their way and forgotten why they started writing music. It's not about the money, it's about fun, creativity, sharing. It's about touching people

with your sound, changing lives and giving inspiration. If you forget that and focus on the money, the music loses its integrity. However, a new age of music has already started, many artists are releasing albums and singles for free. Especially in the electronic music genre, all the artists make their money from the concerts because of the buzz created at this type of event. On the other hand, I can appreciate why charging for music has its benefits, but only for commissioned compositions not for self-inspired works. Commissioned compositions are created for someone who hires you so it makes perfect sense to charge for that. Self-inspired music however is about you and only you. I believe we shouldn't put a price on our own music.

This is however a hot topic in cyberspace, in copyright law and in marketing. Giving away content, as a teaser or preview to grab attention, build momentum and audience awareness is an old trick, but became like a religion in the early internet days. Get an audience was the idea, we will think about monetising later and empires like Facebook and Google were rooted in this principle. Making people pay the old fashioned way for service or content, by getting their money, has been replaced by forcing (paid) content like advertising on them. We are exchanging personal data with some value for services and content from marketeers or what essentially be called data-mining firms like Google and Facebook.

Would it be an option for a budding musician, writer or filmmaker to pay an early adopter audience to sample their productions, in the hope to find appreciation, fame and later income? Deferring gratification by just changing the role-pattern we are used to? And how then to prevent some smart-ass kid to write a little code that would thwart that process?

Copyright issues are a hot item, and as Luc has remarked our legal system isn't really suitable for our present-day use of digital content, despite micro-payments and digital rights management (DRM) techniques. Legally there is no difference between just browsing (clicking) and obtaining some content for later use (clipping).

17 JAAP VAN TILL: VEHICLE OF PROGRESS

People who were actually involved in the design and implementation of the internet and network technology, like prof. emer. Jaap van Till, are somewhat more optimistic about what networks will bring to us. They have not only witnessed the progress, but were part of the development.



Jaap van Till

Van Till strongly believes in further development of the internet, he sees its growth as something similar to the growth of a living thing. More nodes, better network connections will make the whole thing more useful. In his view, cyberspace (as an extension of life really) is not a thermodynamically closed system and therefore doesn't obey the rules of entropy. It evolves like a living entity, growing and offering new opportunities, overcoming obstacles. He does see that there is the danger of entropic homogenisation, of losing diversity and identity, but points at the possibilities to counteract this trend.

Collective anonymity

One of the problems of cyberspace is that we need to stand out in the crowd, to be different, special, respected. Yet our identity is annihilated by the collectiveness. We disappear in the sea of mediocrity. This is a threat to morality: to be special we are willing to do silly or stupid things like to fry our cat in microwave to reach a large YouTube audience. People seek extreme ways to attract attention.

To what extent can we say that cyberspace is a vehicle of progress? According to Jaap Van Till, the power of cyberspace is that this infrastructure brings people together, defying all limitations of space and time, and allowing for more in depth discussions across the globe.

These discussions, or in other words, these connections between people with different views, looking at the same thing, can create a collective image. Nevertheless, this collective intelligence or web of knowledge is limited by the institution that dominates us: the

government and its core group of 'controlaholics'. The emergent behaviour today is to create a type of hierarchy, but this doesn't work very well. In such a pattern, there always would be a few people leading the majority, and making (allowing) others to see only what themselves can see. This type of behaviour can be seen throughout society, not just on the internet and in cyberspace, but also in institutions such as government and education. There the minority influences the majority and manipulates their views and insights to suit their own. If we look at what newspapers bring as news, it usually only confirms people's views. This can create a problem. it's the problem of individuality in the world, as only individuals can change the world, not sheep or mere followers.

For him he tries to escape this trend, and has become a Twitter addict as this medium allows getting direct information without intermediaries and avoiding propaganda. He sees it, in addition to other media, as a truth filter, the personal touch, gauging real responses rather than borrowed ones. He also has a second, anonymous Twitter account to deal with sensitive issues, also to protect himself and twitter-partners.

Progress isn't served by the mediocre, by following the known, the familiar. Co-operating in cyberspace could be the solution to ensure progress. Working together, forming teams. They should connect enough people, with maybe contradictory opinions, which would help to form a collective view to see depth, to see more. Van Till's example is the radio-telescope, more individual points form a mesh to see more, get more definition.

The most important idea here is that these teams should be with people having diverse views and skills. The opposing views, the juxtaposition is what encourages progress. Information that contradicts one's views is usually the most useful. It helps to enlarge your horizon, and question your ideas, as a way to come up with the best solution. Young people should be stimulated to look for the real challenges. Becoming a member of a group or tribe or even of more tribes, beyond the limits and boundaries of the past. it's important to become a link between constructive tribes, a bridge that matters

We should listen to the others, be curious, apply empathy and open up. In addition to that, to create the best Peer to Peer (P2P) society, we should form (cyberspace) teams without any personal leadership, and get rid of the fear and the fascism exploiting that fear. So we should have courage instead of fear and consider disobedience versus dictatorship.

To listen to them, the others, we need to connect with them. This new dimension, Cyberspace, allows these interactions.

To create a 'New Renaissance', a collective intelligence, we need to rethink the way we interact. Jaap van Till states his **Principle of Maximum Well-Connectedness** as:

"Connect and cooperate with the most extraordinary, the BEST – the maximally different and unexpected; because the Vitality of an Entity depends on the Quality of its external Relations; which can make it part of something bigger; a P2P Ensemble with shared unique contributions in scope and scale".



Fish schooling: (Moofushi Kansu)

He points at how the movement of a more interconnected society could resemble that of fish in a school, of birds swarming: they operate together, in a coordinated way, often in order to escape predators. It seems that they see more than the individual fish and act accordingly, the whole offers something extra and that without a hierarchy.

Ideally, the model which could be drawn is that of migrating birds. When they travel, they do not collide as they are aware of each other's movements and can predict their own movement because of this. This is for a specific goal, without this ability they would not be able to migrate to a warmer climate during the winter. They manage to form a collective body: like a set of different tissues (cells) that performs a specific function in the body.

So new patterns, at a higher level of maybe unconscious coordination, could help humans, via cyberspace, to benefit from each other.

Cyberspace allows to broaden our horizon by transcending physical limits.

Doctor Google

We increasingly do not seek ‘physical’ advice anymore, these days people first consult Dr. Google concerning their health, computer functioning or other problems. The problem is we do not know how true or valid all this is, one of the reasons van Till uses more personal media (Twitter) to check things and get a feeling about the validity of information.

However, transcending the limits of traditional expertise and learning, using cyberspace as the new repository of knowledge involves a risk: many people will end up jobless. This concerns in particular jobs in offices, he sees the end of the (administrative, paper form-related) office worker. Gradually, artificial intelligence and the combined expertise of cyberspace is replacing the human mind. Just as some centuries ago, with the industrial revolution, the machine gradually replaced man’s hand. This is quite a challenge, for the educational system, for society, but certainly for the individual and the young person looking for a career.

Today, in this new age of technology, the only way to keep your job is to be an expert. You have to be very good at something. It could be anything, but you have to prove that you are offering something more valuable and different than what the assumed supremacy of the internet can bring.

Cyberspace is not smart, is not creative, is not talented, does not initiate, is not physically there, so there are the opportunities for a person to find a career and meaning and usefulness in life. Look for the challenges, look for the differences, don’t look for what we have in common. ‘Connect with the Best’ is what Jaap van Till in a way preaches.

Contact info Jaap van Till, <http://theconnectivist.wordpress.com>

18 CHINESE VIEW ON CYBERSPACE: ENTERING THE CYBER AGE (OLIVIA)

Born at the end of the 1980s in a small town in the agricultural region in the centre of China, my contact with cyberspace came rather late compared to those living in first tier cities like Beijing or Shanghai. I did not have much access or use of the Internet until I finished high school at 18 years old. We had a computer at home before that but it was not connected to the internet.

There were some computer classes in high school teaching us how to use email and search engines like Baidu and Google. I still have a clear memory of that. Once I panicked during one class when we were asked to write an analysis of the pros and cons of the different search engine as I had no experience with them. Some classmates with more experience helped me by telling me that with Baidu you got more advertisements etc. That was around 2004 and at that time the penetration rate of the internet in China was only 6.7% (July 2004 CNNIC, compared to 44.41% last year (June 2013 CNNIC).

At that time, attitude towards the internet in my town (which is a second tier city in China) is comparable to that of alcohol in the western countries. The internet, was seen as somewhat addictive to teenagers, access should be restricted until the teenagers finish high school.

To access the internet people would need to go to a “WANG BA” (literally “Internet Bar”, but no alcohol nor food is usually served”.) and those internet bars should be accessible only for adults (18 years old.)

But in reality these places were often full of teenagers playing online games, by that time most of the adults in my town had not yet realised the usefulness of the internet. From time to time, in those Internet Bars dramatic scenes took place when parents entered the door with anger and anxiety, searching for their children.

Nowadays, the internet bar has almost disappeared due to the rising of internet penetration but then addiction to the internet was still regarded as a serious problem for teenagers. Military style

camps are organised to cure those “web junkies” from their “psychological disorder”. Those camps have drawn attention of both Chinese and Western media because of the often seemingly cruel training. I believe however that the rate of Internet addiction in China among teenagers isn’t alarmingly high, looking at the rate of students getting a high school degree and university degree.

The academic pressure for high school students in China is extremely high and it’s understandable that some students use the internet as a way of escape. But the internet as such isn’t the source of the problem.

The post 80’s (<http://en.wikipedia.org/wiki/Post-80s>) generation, like me, are aware of the strong influence of the internet on our lives and generally feel lucky we did not grow up with smart phones and tablet computers like the Post 00’s that came after us. Yet we did not experience the difficulties in getting ourselves adapted to the digital age as the generations before us.

There are of course these further questions. 18 year old is surely too late, but should we still set an age limit for the access to the virtual reality of cyberspace? At which age a child can start to distinguish the virtual world from the reality?

Chinese on Social Networks

Almost every social network website or mobile app has a Chinese equivalent. Sometimes the Chinese equivalent has been developed to include or combine even more functions. For the moment, the No.1 social network and app in China is Wechat, which combines the function of WhatsApp, Facebook and Skype. It offers messenger, video chat and a personal page for status update and picture sharing, plus mini mobile games along with many other functions are integrated into one app.

Comparing the content shared on social networks, and based on what I have seen during my study at a business school in Paris, the Chinese are more willing to share personal information and feelings on social networks. Not only good news and photos of holiday travels are shared, statuses are also updated after a hard day at work or when suffering from a health problem.

When I was in university in China (2007 – 2011), writing “diary style” weblogs about one’s life on RenRen, the Chinese Facebook, was popular. I can see few of them now. There was also this trend for a student couple to build a shared page “Qinglu Kongjian” on RenRen, which was literally “Lovers’ Space” in Chinese. This function allows lovers to post status and photos as a log and souvenir of their relationship.

The close and tight relation between people in the Chinese society with the long history of agricultural society is reflected in their behaviour on the Internet. In cyberspace, it is still like in the old Chinese village, everyone knows what’s happening with everyone.

Human Flesh Search, a Chinese internet phenomenon

Human Flesh Search engine is the Chinese term for the phenomenon of distributed researching using the internet media such as blogs and forums, similar to doxing (document tracing). The practice is used for identifying and exposing individuals, public servants and government corruption as a form of public humiliation, a way to break the internet censorship in the People’s Republic of China or just to satisfy people’s curiosity about celebrities. We can easily disguise ourselves in the virtual world, but the Human Flesh Search engine reminds us that the Internet is still a village.

In 2006, netizens (active digital citizens) on Tanya forum identified an Internet celebrity named “Duyao” (poison) as a high-level government official by collaborated research using blogs and forums.

The human flesh research of another Chinese internet celebrity Guo Meimei has resulted in a bigger scandal and



Source: The Omnivore

doubts. Guo has raised attention on Sina Weibo (Chinese twitter) by proclaiming herself as a manager of the Chinese Red Cross and displaying pictures of luxury handbags and cars. This has raised doubts about China Red Cross. The human flesh research revealed that Meimei's wealth came from a married Shenzhen businessman name Wang Jun. Wang's business was a recognised fundraising partner of the China Red Cross.

In some other cases, some celebrities suffer from the human flesh research as on forums like Tianya. it's possible that the name and profession of their parents and their family address are exposed by some anti-fans. This often happens to stars who got famous because of TV reality shows in which the fierce competition among participants often creates a large number of anti-fans.

Even as Human Flesh Research can be helpful in disclosing problems like corruption, it also seems intimidating. Sometimes, an innocent person can be mistakenly identified as a suspect. The personal telephone number and home address are often published on the Internet so the target of the research will receive harassing phone calls and even threatening letters.

Convenience and efficiency are the advantage of information sharing in cyberspace, it's a powerful tool that however can cause immense damage when not properly used.

In the future

I believe that the internet can cause serious damage to human communication. Beautiful calligraphy and delicate vocabulary of the letter-writing age has already been replaced by SMS languages and then the "like button" on Facebook. The new mobile app "Yo" of which the only function is sending other people "Yo", which has raised 1.5 million this year, proves that we are one step closer to the dystopian scene that the human communication is simplified to sending "beep" "beep" sound to each other.

A virtual life and the virtual paradise

I believe that there are things that are irreplaceable of living in the real world. I don't think that the day would come that every human would upload his memory to live an eternal life in a "virtual

paradise” and keep his body somewhere else so he no longer will have needs for food, nor will he suffer from diseases.

Though it could be beneficial to the whole of human beings if we could have kept those great minds like Einstein with us by creating a virtual paradise. In this case, whose soul or mind should have the right to enter the virtual paradise would raise a new moral and ethical question.

In terms of the future of the human being, I believe that environmental issues and wars are more dangerous and threatening than the possible negative influence of cyberspace. In my opinion, the future generations would control the use of the internet and protect the reality from the virtual world when the negative effect of Internet is manifested. To what extent the virtual can replace the material world is yet to be seen.



The world gets smaller and smaller, video-telephony like Skype links us across the globe

19 THE LINK TO CONSCIOUSNESS

The project started as a kind of exploration of possible futures. The sources of such scenario's were to be found in the literature, the utopias, dystopias, the movies, and the daily barrage of news about broken password files, WikiLeaks and security issues, the discussions in forums on the internet. Our root material was the survey and what Luc already had written about it. He has been a computer-industry journalist, entrepreneur and writer for more than thirty years, and using his material, updating it, adding recent insights and new development seemed like a logical way to get the project going.

However, as soon as we started to discuss things about cyberspace at a fundamental level, very basic questions came up. What does cyberspace do to our thinking, will computers or networks evolve toward creative, intelligent thinking, is there the possibility they will become conscious, and then what is consciousness? Not an easy question, as it concerns the barrier between mind and matter, and obviously even the most advanced neuroscience is as yet unable to indicate what consciousness is, how it works, and at best can point at what happens in the brain when changes in consciousness happen. This is, however, not more than the electric and chemical reflection of what happens. No thought has ever been captured!

Cyberspace is such a major jump in our mode of relating to the world and to each other and we can see how this is only going to be more, deeper, faster and more outside human intervention or control, so where do we stand? Are we just watching a new level of consciousness evolve, will a singularity (a shift of unknown proportions and direction) happen as people like Ray Kurzweil predict or will science & technology solve all our problems, including global warming?

Even as we might be inclined to steer clear of these issues and questions, the Benin Bronze incident (see appendix) was like a strong reminder, that cyberspace isn't only a technological phenomenon, but one that has to do with culture, religion, belief systems and the magical. Now at first we didn't really see the connection, but then the insight came that what we were asking from pe-

ople and in fact the real purpose of the project was not about cyberspace per se, but about the consciousness about cyberspace. What do we think or feel about cyberspace is essentially our awareness of what cyberspace means to us, how it affects us, in a rather personal way.

The opinions of the so-called experts and trend-watchers about the potential future and impact of cyberspace only become real information, if they resonate with what we feel and sense. In other words, our notions of cyberspace reflect our consciousness about who and what we are in this world.

20 THE MAGICAL DIMENSION

We can look at the rational, the causality of the normal world to gauge what cyberspace could become and mean. And yet, there is more, irrational effects, strange phenomena. We all know that some of us get more, better, faster results out of computers than others, and isn't this an indication that mind over matter works in cyberspace too, that cyber magic is there?

We can go a step further. As the digital realm is closer to the quantum-level and thus to the magic of manifestation, maybe there are even more magical effects in cyberspace. There are experiments that point in that direction, using random number generators and such. In the chapter about the Mind (15) some of this was already mentioned. Mind over matter in semiconductor devices might be easier than teleporting, bending spoons or elevating objects, but we have not heard much about specific experiments to achieve such sorcery.

Materialism only goes so far. Understanding the deep realities, reaching the gnosis that encompasses the real and the virtual, all the dimensions, is what life is all about, at least for those that venture beyond the purely material.

We have used technology to explore and discuss the magical before, writing letters, books and now emails to discuss and interiorise this. What is the next step? Maybe a device that plugs into our brain directly, integrated artificial memory, or is Ray Kurzweil right and will we be computers or software apps ourselves soon.

Don't underestimate the need of people for meaning, for contacting the unseen. Most conversations in life are not about facts, but about things like love, God, meaning, intuition and beauty, the irrational of things.

We will maybe get bored with the data-oriented apps, the filters, aggregators, agents that take over the adventuring, the psychological rewarding process of trying, failing and learning. We still need to experience in the real world in order to grow and develop. But that doesn't mean we will or could not have magical apps, tools to help visualise, spells, digital auguries, random generators intended to render a connection to the unseen, the future, the sub-

conscious. Far beyond the I-Ching and similar practices one can now find on the internet looms the ultimate future digital conscious engine. A device or app not only interpreting the present, extending the past trends, following telltale signs and extended scenarios in a mechanical way, but really connect us to the magic and divine connection, that Plato ascribed to prophets.

Artificiality and fake, now so prevalent in the social networks, as it is not yielding the happiness results we expect and seek, will maybe give way to a new interest in the other, the unknown dimensions beyond and within.

There is a magical tradition. Understanding the connections between the seen and the unseen worlds, knowing and using what the old mages called correspondences, it is in all the old books like the Vedas and the practices of Alchemist. Isn't this pointing at the challenge ahead, the exploring of the otherworld by cyberspace means.

People like Lynne McTaggart and movies like "The Secret" are showing us that "intention" is at least part of the mind over matter issue, and this idea is now resonating with the "cultural creatives" and new spiritual movements who look beyond the obvious and material. They look for something different, something inspiring, trustworthy, contact with the unseen maybe. Maybe they don't want a "cool" computer, they want it to be their friend, companion, guide and confidant, stimulating and sometimes confronting, ultimately the pocket-guru if not their cyber-lover.

This sounds like far out projection, but it's how media and tools in general have evolved. All media have found esoteric uses. As a means of communication and access medium to what is known, written, said or imaged about this broad concept, computers are a great tool. They seem limited to the very "hard" digital, but just as the stones of a church establish a safe and sacred place where one can address the otherworldly, now we see applications that go beyond the purely digital realm and make the computer into a sacred object of some sort.

The concept of the computer or smart phone as a magical tool, comparable to the wand of the sorcerer, seems a bit weird. But observe how much psychological attachment the average user has to these new magical possessions, they are holy and revered, don't touch my iPad!

If we see the apps as the oil that fluidises digital connectivity and pervades our social lives, how long before it crosses the borders of the tangible? No doubt with a lot of snake-oil or quasi wizardry, but the initial outlines of an info-theistic trend can already be traced. The church of the digital is emerging!

Infotheism

The need to find meaning of cyberspace and in cyberspace has also to be seen in the wider context of externalisation of our identity, a phenomenon the psychedelic anthropologist and ethnopharmacologist Terence McKenna so aptly described. From the first cave paintings, language and myth via



Cyber-alchemy is not (yet) a mainstream notion

virtual reality to today's virtual identity in the cloud, we are projecting the image of who we are or would like to be or fear to be, beyond ourselves. We leave the body (and our internal memory) to become a virtual mind, in practical terms our memory is now a bunch of data in the cloud we access as needed. Not even our own as we have given away the right to the likes of Facebook or made it public in many forms (copyleft rather than copyright). Even worse, we are "profiled" and stored in unknown archives of agencies and corporations.

Our mask and personality in cyberspace are more unreal and perverted than the mask(s) Freud called our ego, we are developing a

semi-public cyberego that, like our ego, holds us imprisoned in a subset of reality (or the dataspace we consider reality). We are a hostage to our Facebook image and Google profile, the true identity theft isn't that we lose our bank accounts, but we become estranged from our core, our soul.

Here the true question arises. Is cyberspace a true information medium, giving better access to what we need as it operates in the extra-dimensional space (the otherworld) or does it make us grow away from our magical access to that other world, that resides deep in us, hidden behind the ego and masks and accessible through ritual.

It feels that some of us have indeed found a way to use the internet as a means to go beyond the mask, even beyond the cyber-mask and allow the wild, untamed and creative horse in the Platonic sense to roam the vistas of cyber-magic, focus attention rather than disperse it as Bernard Stiegler says it, but they run the risk of becoming the priests of a new religion.

"Info-theism" is where we see information as experienced through the all-embracing internet, the warm and seemingly personal environment that seems to know who we are and what we need, the clever profiling makes us feel at home, as the new deity. There is, in all cultures, a conscious effort to explain reality (in physical terms) as based on the current meta-dimensional framework or paradigm; in our day and age this means seeing information is what connects everything. From God to Love to Quantum entanglement to Consciousness, and why not Information, as the root of reality.

Will the spiritual or magical app arrive?

Are apps the next step in this tech-gnosis development, offering us 'tech memes' equal to the genes and memes (units carrying cultural ideas, symbols) that anchor our lives? Will there be apps to throw spells, make us invisible, rich, happy, wise? Is there a map toward the ultimate app, the Meta-App, that satisfies not only our cognitive, intellectual needs and our emotional/physical ones but also our needs for finding meaning and purpose?

Such a cyber-magical app, the use of it will be a cyber-ritual in itself, will probably be a combination of many apps and maybe lead

to yet another and new paradigm, more powerful than the Conscious Computer dreams of Ray Kurzweil. It has the potential to bridge the now separate worlds of religion/belief and science, using psychological understanding and AI modeling, but we have to watch out for its dangerous counterpart.

The Big Brother surveillance, control mechanisms and tendencies loom in the back. Tools always have two sides, and the dark one is easily overlooked.

Revival of the magical: New Magic

Modern technology has also given new life to old traditions and many esoteric views have become more or less common knowledge. Access to material about these traditions is easy (in most countries) and new forms and experiments with old techniques in modern clothes have emerged.

Technology, the New Physics, New Magic, Biofeedback and the development of ancient techniques like dowsing into modern forms like Radionics are part of what can be described as the New Magic. Beyond the actual use as a communication medium, especially the internet has been a boon to the contacts between the magically inclined, there are many new forms of magic related to Cyberspace, from web-shrines for the deceased and all kinds of deities to group e-rituals.

There is as yet not a good model (beyond facsimile similarity) linking these new forms of magical action to the older models and modes. Magical numbers, magical quadrants, cyber-alchemy, not much can be found in new incarnations. There is obviously the comfort and accessibility cyberspace provides for those using the old ways. The general idea that magic is the real but esoteric, hidden technology of power, has not yet resulted in platforms like 'Magebook' or 'Covenweb' for the mainstream user. Accepting that the real power lies in the higher dimensions and cyberspace can be used to access these is still a limited notion.

The otherworld realm has traditionally been addressed by religions, shamans, priests and the mages. It has, since the emergence of the printed book, been invaded by the lay people, and with modern media they have even more access to texts, songs, music, liturgies and source material for their own exploration.

The New Magic is more democratic, but there is the risk that mediocrity will rule, the same as with Wikipedia where participation of all has not yielded the hoped for quality improvement, but made it flat and untrustworthy.

The old traditions fit very well in the general concept and formulas of the New Magic, where quantum physics, virtuality, cyberspace and the eternal laws of harmonics, sympathy, oscillation and the creative imagination as the essence of magic come together. And as virtual divination with Tarot, runes, astrology, readings and healings via the internet are commonplace and many covens, nests, Wicca and Craft groups already use the internet for cyber-rituals, the emergence of the New Magic is already under way and in fact converging with what is there.

Combining the magical energy of people in cyberspace rituals or linking physical events via the internet connections is one of the new trends, worldwide prayer sessions or linked focus groups are supposed to generate magical energy to help change or transform things.

Cyberspace as a concept of a virtual world isn't new, media from books to television have created artificial realities, only with the advent of computer-technology the sensory impact has increased. From words to images, from images to movies, from 2D to 3D, from screens to Google Glass, and we are not yet fully there.

Technology that allows smells, tastes, more tactile experiences and better visual and auditory input will emerge, the virtual reality immersion will become even more 'real' and yet totally unreal and virtual.

The separation of real and virtual can be looked at differently. Nevill Drury, in his "Magic and Cyberspace" article summarising some of the modern trends and manifestations of magic activity in cyberspace states that :

"A distinct polarity is now emerging - requiring us to make a choice which takes us potentially in two quite different directions. And although techno-paganism seeks to embrace both of these dimensions, it seems to me that the main pathways within western magic will begin

increasingly to diverge. Increasingly, I believe, a choice will be made between Nature and the new technology."

He accepts that some practitioners will go the cyberspace way:

"The magical explorers entering these doorways will then engage ever more completely in virtual worlds, blending technological motifs with mythic archetypes to produce fusions we can only begin to envisage at the present time." but that others will turn "toward the esoteric traditions of former cultures and will choose instead to identify only with the mythic archetypes of the past - but those which have a sense of resonance and meaning for the present."

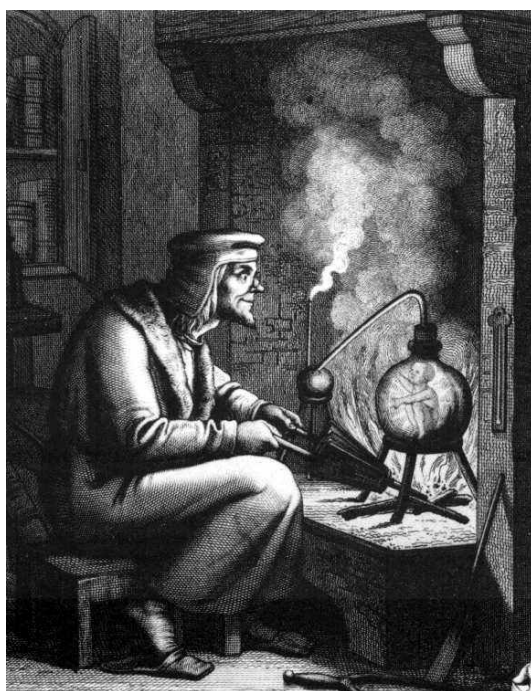
In his view the magical revival of the archaic past

"It also brings with it a thirst for authentic simplicity - for rituals which embrace the earth, sun, moon and sky as they are found in the real world, not in the virtual realms of cyberspace."

So one can look at cyberspace ritual as very different from traditional forms and that there will be people making a choice there. It is likely that for a while a certain diversion will occur, like it happened in the new age movement, where many people (with the best intentions) rejected the more modern technology and believed the old and proven methods would be enough.

However, the main thrust for the new magic will come from integration of the old and the new, of applying and using cyberspace and quantum-physics in ritual too as we learn that the real power isn't in tangible world, but lies in the other dimension, the spiritual, the magical realm.

Cyberspace, in the context of this book, offers us a potential, a new realm for spiritual endeavours, rituals, new forms of contacting the other and the otherworld. However, the great cyberspace magus model has yet to evolve or can we see the hacker, the lonesome electronic frontier explorer as the cyber-chemist looking for eternal digital life? Has a silicon brotherhood or even priesthood secretly emerged, worthy of our appreciation, beyond labelling them as digital hoods, malware criminals and wikileaksers?



Creating (preferably conscious) life is a fascination of not only the alchemist, but these days geneticists and computer scientist search for ways to make it happen.

21 THE PEOPLE OF THE PROJECT

Alexander O'Connor (1997)

I am a British school student from Hertfordshire and was invited to the project through members the Scientific-Medical Network. I have an active career in musical composition and production. I am fascinated by the irrational side of the world, I enjoy exploring the depths of the universe and all it has to offer. My areas of interest consist of mostly: Psychology, Politics, Philosophy, Physics, Magic, Leadership, anthropology, music and Art.

Linda Sbaï (1992)

I am a medical student from Rabat, Morocco and came to the project because I was a volunteer at Myster a few years ago. I am a muslim, but lived a fairly free life with lots of access to internet and such. I like practical things, using my hands and creating things.

Luc Sala (1949)

I started out as a physicist, but became a media entrepreneur, writer, filmmaker focused on the esoteric, magical and spiritual. I looks beyond the obvious and did many things in life, but lately focused on understanding the psyche and how mind matters, beyond the limitations of normal space-time.

Olivia Wang (1989)

I am a Chinese girl living in France since 3 years. I'm searching a balance between the Chinese and western values and philosophy of life. I regard myself as a citizen of the world. I am interested in Chinese medicine and Tai-Chi. I believe "Diversity is essential to happiness" (Bertrand Russell).

22 APPENDIX: THE BENIN BRONZE

In this appendix a story is told about people, about objects and about magic, but mostly about how reality is fluid. It seems to have little relevance to the rational analysis of cyberspace development elsewhere in this book. However, as it actually happened, it made those present very aware of the extra-dimensional, spiritual aspects of consciousness and how history plays out in the now. Cyberspace may be new, but humans and how they dealt with reality and how conscious they were of the rational and irrational causalities cannot be ignored.

The rational among the readership could easily discard the following story, but concentrate on what is said before about the effects and development of cyberspace. That there is another, unseen and yet influential extra-dimensional isn't part of what science accepts, but humankind has always lived with otherworld, religious views. So we decided to add the tale of the Benin bronze statue to this book.



The Benin Bronze vessel in the incident

The context was a party at a large villa (Myster) on the German/Dutch border. The party was the annual summer party weekend (August 1-3, 2014), somewhat of a tradition at the place. This year it was with the bard, singer songwriter Fantuzzi, who happened to be around and was invited to be Master of Ceremony. It was not the usual party at this time of this year in this neck of the woods, where normally beer and wurst and barbecue are the main ingredients. At this party in Myster the hippy days were honoured (Fantuzzi was at Woodstock in '69), there is a fire, music is around the circle with singing and jamming, the 45+ guests found a place in the big house or in a tent in the park-like garden.

The party coincided with the start of the Myster Summer Campus project, two young people were asking the participants about their views on the impact of cyberspace. Their month long project was to try to find out how the internet and cyberspace will impact our lives, health and morality.

It was a great party, going on for three days, with meditation, dancing, bio-danza, swimming and gathering around the fire. Fantuzzi, in his most spiritual incarnation, guided the group in his usual humble way, helping to open up to the divine, our inner self and connect with the other guests. There were songs and tales, jokes and food, and as usual at Myster, just a few beers and bottles of wine were enough, tea and water were what went around, with an occasional joint as the Dutch guest were so close to home, just about 5 miles from the border.



Detail of the Benin Bronze vessel in the incident

As most of the guests are leaving Sunday afternoon, some 13 people remained, and spend the late afternoon watching the weather turn bad, a heavy thunderstorm with pouring rain hits the space, but the tents and awning did hold out, there was no damage.

Then something very frightening happens. Some kind of energy comes out of the sky, hits the window and an object at the other side of the window pane (but did not break it), it falls on the floor with a very loud noise, and a brief moment of near panic happens. There were three of four people outside on the terrace witnessing the energy burst close by, some noticed a white light hitting the window, others

noticed an usual energy from a distance. Inside there were about five people near the place where the object was and noticed

what happened, not understanding at first why there was such a sudden noise and such an upheaval.

The bronze statue

Now it's time to describe the object concerned. it's a Benin Bronze from Africa, about 80 cm (30 inch) high, a lost wax statue that apparently functioned as a strongbox for Benin rulers. The object was obtained by Luc and Anjes at an Amsterdam Queensday sale for some 600 euro from a black woman from Paris. It probably had a higher value, but the woman for some reason did sell it to use for that price, which was given the circumstances till substantial. Her story about it that it was an original.

Made for a queen, a ruler of Benin, as a safe, a strongbox to hold valuables like jewels, incense, maybe gold. Normally, she told us, these objects were buried with the queen, but this one miraculously either surfaced or wasn't buried. Bronze is strong, but in the earth will eventually fall prey to the acids. So this object, she claimed was quite special, but original and in mint condition. As it's made in the lost wax procedure, it's obviously a unique piece. it's an intricate design, made from a number of cast pieces welded together.

Kuduo

These fine bronze vessels are also known as "kuduo" and were used in funerals or to hold valuable or important items. Some kuduo were buried with the owner, and may have been used as an urn, intended to contain the ashes of a royal. Some of them were also placed in shrine rooms.

The lost-wax technique is an old Ashanti craft from Kumasi, Ghana but similar bronze and brass subject were made in various areas around, also by the Dogon in Mali, north of the Coastal region. There are dated and maker-identified samples from the fourteenth century, the technique may have been older and may have reached the region in the days of pan-African migration due to Islamic expansion early in the second millennium in East-Africa.

Now the way the object fell into the hands of the Myster people was in a way magical, for normally such expensive objects were not sold at the Amsterdam Queensday street flea market. Having that kind of money at hand and willing to spend it was in a way ex-

ceptional, things there are sold for coins, a euro or less, mostly bric-a-brac, clothes, nothing of real high value.

So after examining the vessel more closely the idea came up the object was stolen, maybe even from a museum as the quality and the size was exceptional. It was larger and more refined than what could be found on the internet, although the details and imagery were very clearly similar tot what is available in the market and on auction sites and is photographed.

A search for a similar object or indications that such an object was ever described or found yielded no results. Quite a few recently made Benin bronzes of various forms however were offered in the 600-1000\$ prize range.

This is undoubtedly from Benin or a culture close to that, but the form isn't common, to say the least. Even in the British Museum in London, where there is a large collection of Benin Bronzes (The imperial colonial forces brought many bronzes to England in the 19th-century) none of these vessels are on display.



Detail of the Benin Bronze vessel in the incident

The story of what it was used for, as told by the black woman (not from Africa, but from Paris) did resonate with what is known about the Benin culture and the role of the queen or queen mother, who was the most important person in that society.

There was a small sticker inside with the number 2200 on it, either indicating it was at an auction or this was the retail price in a shop. This also would mean that the 600 euro paid for it was not a total bargain, probably close to what it was worth to the person who owned it

or had in the shop, as tripling the value in antiques retail isn't an uncommon practice.



An Akan (Asante) container of a similar nature, a huduo

The question of where the object came from and from what era remained somewhat mysterious. Over time assorted clairvoyants, holy people, sensitives, etc. passing through the Myster place (for workshops, visiting Luc etc.) were asked about the vessel. This included well known sensitives like Peter Aziz from the UK. The general observation was that the object was not stolen, but had very special characteristics.

It was generally acknowledged as a safe or strongbox, and the magical protection was still there. It was empty now, but when it was made and originally used, only the person who legitimately put something in there, could take it out. Some people sensed there was an entity inside the vessel, looking into it with the lid off. they sensed a person, a guard, a demon inside. There also emerged the notion, that this guardian entity was a person who sacrificed him- or herself to protect this sacred object, as a service to a higher goal, the royalty or whatever. A somewhat scary thought, and it made some people afraid of it, seeing it as a kind of voodoo thing.

The notion, that this was a kind of strongbox protected by magical powers and used to contain personal valuables of course is supported by the imagery, the proud leader on top with a horse and the other 12 human figures around it and carrying the vessel. They guard the content, indicating there is strong protection. The figures are beautifully crafted, each with a weapon, an animal, an instrument symbolising a craft or maybe a tribe, all with archetypal and proud energy.

The object was given a place of honour in the house, and has been there for some four years, admired by many visitors and part of the magical atmosphere of the villa, now called Myster, enhancing the whole mysterious flavour the house has.

It was built in 1952 by a rich German steel-baron, for his young wife, but he himself died shortly after they moved in. It was built with the best materials, at the time with much larger grounds, on a small hill that was called the Schellberg, indicating some kind of bell or watchtower stood there in old times. The general area, close to Venlo and the river Maas/Meuse, has had Celtic inhabitants since around 3000 BCE, with a strong Roman presence later. Nothing however has been built at this place for thousands of years. There were some Celtic objects found at similar hills around there and clairvoyant visitors confirmed only habitation some 5000 years ago. Since the subsoil of park-like garden of the villa has been covered with first sand and then a thick layer of garden soil, superficial digging there made no sense.

The history of the house is worth mentioning, the widow of Christian Rötzel lived there with her two sons, and they were, in the good days of de post-war German reconstruction, very rich and powerful and the boys were like jet-set playboys. But it was not all so happy. An accident or killing happened at a balcony, one of the sons was convicted and the house became known for this mysterious murder or manslaughter of a girl. It made headlines and still does, all the people in Breyell know the story, so the house has a slightly tarnished reputation. A famous German writer, Kosalik, even wrote a book about the whole situation (*Ein Mann wie ein Erdbeben*).

The project

Apart from the party there was another project coinciding, the main subject of this book. Two relatively young people, 17 year old Xander (from the UK) and 22 year old Linda (from Morocco) were at Myster as summer interns to do a project. The project was about "The Future of Cyberspace" and concerns the social, ethical and health aspects of the virtual world the internet has given us.

The party was also the start of the project and the quest at the party were asked, by way of a questionnaire form, what they thought about cyberspace, the influence of the internet on their lives and much more. This project aimed at producing some kind of tang-



Detail of the Benin Bronze vessel in the incident

ible result, a book, article or something, in the timespan of just a month.

As it happens, both young project-team members turned out to be very special and gifted people and together with Luc, the 64 year old Myster master, were working on some very essential issues. Cyberspace is our new continent, it's in the mind and yet not of the mind, it's digital and yet hardly physical.

As it turned out, the three participants, Luc, Linda, and Xander were not like a professor and pupils, but are more like peers, equals in working together in the project. The incident with the bronze made this very clear, as notably the magical and sensitive talents of Xander were suddenly exposed. He did immediately see the impact on the group, the link to the history of the object and how the incident related to the individuals involved in it.

The party and the incident

So the event preceding the mysterious Benin Bronze incident was the Annual Myster Summer Party. Luc Sala, of Amsterdam fame as a television producer, entrepreneur and the New-Edge/Mondo 2000 movement, invited his friends to join him for a weekend of song, dance and togetherness, using the garden for camping, a small fire and playing. An indoor swimming pool, massage tables, a very extensive library, archery and other activities, such weekend were considered great and special events.

This year some 40 guests plus some neighbours showed up, many already at Friday and there were some beautiful and very spiritual moments, singing around the fire. Fantuzzi is a fantastic entertainer and ritualist, has a great repertoire of his own songs and knows how to build up the energy. The music, around the fire, went on till the early hours and there was a totally relaxed atmosphere. The

house is very open to such events, there are many rooms and possibilities, either to talk privately or share in more general discussions, meditations, etc.

This was a great weekend with lots of very deep, intimate contacts and what were felt as revelations. Quite a few of the guests were at crossroads in their life, and the party provided the platform to contemplate their options. The participants were coming from such diverse continents and backgrounds, the discussions were so varied and deep, it was indeed a small but global encounter. Jews, Sufi's, Muslims, followers of Osho, but also spiritually inclined people with different backgrounds. Some heated discussions were going on, some quite scholarly. The recent event with a Malay plane shot down in Ukraine and Gaza strip fighting supplied ample oil for fiery debate.

The Sunday evening

Late Sunday afternoon most of the guests had left, the remaining thirteen people were kind of relaxing in an after-party atmosphere. The weather changed and there was thunder and pouring rain, but it was watched from a safe and dry terrace and people were like mellowing out, it had been a great weekend with friends and kindred souls.

Some people were sitting outside, Xander and Linda and Nicola close by in front of the window, others at some distance on the terrace, some inside, in the room with the statue, which was standing in the windowsill. Luc, in a provocative mood, was talking with Eleonora concerning a HDS (Human Design) astrological chart. The outcome was not exactly what Eleonora would have liked to see and she got upset. She kind of emotionally cried out: "what do I do with this, do you want me to kill myself with a knife?" and she made movements with her hand like killing herself.

This seems to have been the trigger for what then happened, the words or the movement, quite loaded with emotion and a tad of despair. It could have been like a secret code, or something resonating with the vessel and it's guardian.

Then the incident happens, the energy hits, there is a strong sound, some light or energy coming from outside and the statue falls over, rubble on the floor, nuts and other smaller objects also

on the floor, also Luc fallen and sitting on the floor, flabbergasted for a moment. People come in, a kind of panic breaks out. What does this mean, what is going on? Some people witnessed the event from close by and experienced the energy coming in (from outside, hitting the glass and then the statue) but didn't know what to do.

Luc, who was closest to the statue, it kind of fell over him, urged the people coming closer to stay away and not touch anything, he sensed something of great importance had happened. He was sitting on the floor, as he fell off his chair and stayed there to contemplate what happened. Something serious did happen, that was clear, as some of the people outside saw some light effect, a white glow and something hitting the window pane with a big sound, heard by everyone. Vitesha was one of them, she also noticed some white light.

After a few minutes Xander and Anjes, the most sensitive among the small group, together with Luc decided that this warranted some kind of council. The other people assembled at the terrace, where a small fire was burning and were talking together. The three 'sensitives' (Luc, Anjes and Xander, we) then sat around the statue, still on the floor and tried to guess what happened. A ritual environment was created, a sacred space with a candle and some implements that seemed to fit, like some real gold nuggets and some African symbols.

We agreed here was something exceptional, far more important than an object accidentally falling to the floor. There were no marks on the inside of the window pane, and at least five people had seen something coming from the outside. Xander noticed that we were thirteen, just the number of people on the vessel, and looking around, started to identify the group as resonating with the ones on the vessel. One on top, three at the bottom, eight around.

This sparked more insights, as we all felt the energy of what happened and started to feel the presence of the object, but also our relationship with it. Luc went out to the group and explained that what happened probably had to do with an ancient ritual long ago where everybody present was involved. It was obvious that Eleonora had played a role in it, then and here, but she didn't really

want to face this and tried to go upstairs. Anjes grabbed her and told her to stop playing games, this was serious beyond trying to get attention, the usual behaviour pattern of Eleonora. She joined the outside group and received some emotional support, being placed between the more stable ones there.

We then asked Linda, who was the fierce warrior on top, to guide the group on the terrace in a meditation and prayer. Although not a very normal request, she started to pray (in Arabic) and the group joined in and a very 'holy' and intense session followed. Everybody shared the feeling that this was important and contributed their energy and focus. Later they described this as a 'real' ritual, as an event that made them feel together and realise how their combined intention and attention made a difference.

The council

In the meantime the three of us, Xander, Anjes and Luc, were sitting on the floor, next to the statue and tried, like a small war council, to understand or 'receive' what happened and the relevance of it for the present. Such strange things don't happen by accident, there must be a connection, resonating through time and space, between something related to the vessel and the people or energy present.

We felt that something had been released from the vessel, being freed from a prison or magical bond, and was still around. As before many had noticed that a kind of guard was inside or around the vessel, protecting it, it seemed that some outside energy or entity had come to free it.

Obviously Eleonora had called in some very special energy, in this case something that hit whatever was in or around the Benin bronze vessel and helped it escape. This was not intentionally, her dramatic capabilities had an unconscious side, she was able to cause or call strange effects. Two days later a somewhat similar energy exchange happened confirming that she indeed was the one who could or would involuntarily call out otherworld energies.

By using specific words or gestures, probably in what she said about killing, had brought forward the energy that freed the captured spirit. Before we had assumed that this spirit, once a living



Detail of the Benin Bronze vessel

human, was there voluntarily, but now it was clear it was more like a forced imprisonment of someone who was sacrificed to ensure the integrity of the contents of the vessel. This may seem irrational, but we know that killing servants and slaves at burial sites was quite common in many cultures. We might have had the idea that these were to accompany and serve the deceased in the afterlife, like is usually assumed in the case of the dead accompanying high ranking Pharaonic mummies. But maybe there was another reason, maybe they were killed to protect the integrity of the place and the

corpse?

So the spirit of the trapped one had been freed, but why amidst a group of thirteen? Xander had sensed we were all represented in the small human figures on and around the vessel, so we must have been present at the time when the original sacrificing or should we call it dedication and charging of the vessel happened. Then Eleonora probably was the one who did the actual sacrificial killing, the others were present but didn't make their hands dirty. Linda, the girl from Morocco, was the one on top, kind of presiding over the event.

So what happened at that time, what were the circumstances, why was this vessel not, like similar ones, buried when the queen or queen-mother died, why was it so special? The design is fairly unique, functionally there are links with vessels in cultures from the same region, but how could this one survive in such a good condition, obviously never buried. If it was made anew in the twentieth century, it would have been made as a copy of existing vessels, but none are found, not on the internet nor in museums like the Louvre and British Museum.



the Benin Bronze vessel

We can only speculate about when the vessel was originally made, the art is clearly similar to that of the early Benin/Edo empire, but the function is similar to what we know from cultures around the region, from the Ivory, Gold and Slave coasts. It feels its origins are more West than present day Nigeria, more towards Ghana.

The time it was made, some of us feel, was around the end of the twelfth century, the beginning of what is called the The Little Ice Age. it's a period between about 1300 and 1870 during which Europe and North America were subjected to much colder winters than during the 20th century and this must have had an effect on Africa too. That time frame marks large migrations of people, like the Dogons who moved to Mali around 1500. The Edo (Benin) people arrived in West Africa around 1300 and this

seems to be the time the vessel was made.

Given the importance of it, the size of the group of people gathered to be represented, the effort to make and charge it, it may have played an important role in the formation of the new fiefdoms and kingdoms in the region. The formation of the Edo/Benin empire started at that time and the first Benin Bronzes are ascribed to that period. Some of the metals used came from local sources, but the influx of metals into the region from outside, notably brass brought across the Sahara by Arab caravans started in the twelfth century. it's also possible, that the people migrating there in that timeframe, presumably from more Eastern region and there is mention of Sudan, did bring the technology and maybe the materials with them.

Neutralising

The small group around the statue tried to understand what happened when the object was made and charged and what the role was of the people portrayed and present. There was however also the question of the released spirit, moving somewhere around the house and maybe so mad because of the incarceration, that other bad things could happen. Now spirits can't do much in actual terms, except influencing the minds of people and make them do things. Remember, the incident started, not by spirit intervention, but because some act or words by Eleonora called in some magical energy. However, someone might be so worried or shaken, that they would fall prey to suggestions by a wandering and maybe mad spirit.

So neutralising this wandering or freed spirit was needed. For this there are more or less standard (but esoteric) techniques, that can appease such spirits. In trying to find the name of the spirit the sound "T" came up, even in connection to the word Ashan"T", so this was used to appease the spirit and welcome it as a guest rather than as a prisoner.

So we addressed "T" and asked him to join us and eventually got him to go back into the vessel, which we adorned with symbols and some gold nuggets, not as his prison, but as his residence. During the process images and notions came 'down' about why the vessel was made and charged, why it was used in this way, what was the importance. This shed some light on what happened at the time of the making and charging of the vessel.

Obviously it had been an important event, for making such a lost-wax cast takes time and as the 13 people had their images, with appropriate symbols, on the vessel, the whole group had to be present for a certain time, maybe as long as a month. The timing obviously had to be aligned with astrological data, important events were always coordinated in that sense.

The event must have been important and it felt it has had important consequences, maybe a new alliance or cooperation between peoples or kings was the result, it must have happened at a time



Detail of the Benin Bronze vessel

when major forces were threatening the area or the peoples involved.

The calling of “T” and neutralising the energy did work, maybe in a 20 minute timeframe and we went back to join the group outside, some chanting, some talking, and slowly the group came back to a more relaxed mood. The people outside remarked how they felt touched by the praying and chanting while we were inside.

The only strange event was that Xander saw a strange figure in the half-dark garden, humanlike but with two heads.

Origin of the bronze vessel

We assume the object to be of Benin origin, as the imagery is closest to that, but similar objects were common in what was once called the Slave Coast (Gulf of Benin) with countries like Nigeria, Benin (Dahomey), Togo, Ghana and consisting of many kingdoms and fiefdoms before the colonial era. The term Benin Bronzes is usually used to refer to cast bronzes (mostly using indigenous lost-wax casting techniques) from the region, but originally applied to more than a thousand commemorative metal plaques that decorated the royal palace of the Benin Empire in Nigeria (not in present day Benin) and were taken by the British in 1897 during a military expedition.

The more general Benin art, sculptures in brass and bronze, came from the Edo people (Ife), from the thirteenth century onwards. The Benin Empire existed since 1180 or even earlier according to some sources (“The History of the Ancient Benin Kingdom and Empire” by Chief D.N. Oronsaye.) Igodomigodo, also known as Ile (Home) is the ancient name and home of the Edo people and their Ogiso (kings), before they took on the name of Oba. The



Detail of the Benin Bronze vessel

making of bronzes statues has become, since the original Benin Bronze collection attracted so much attention, a kind of export industry and many pieces were made in the twentieth century and even today.

The specific type of the object is probably what in the Akan kingdoms (in Ghana, the Gold Coast) was called a kuduo. The object at hand seems to fit the description and usage of these kuduos, but in style is different and more like the Benin Bronzes. The Akan ornate, cast brass vessels were the possessions of kings and courtiers and used to keep gold and items of

personal value and significance. As receptacles for their owners' kra, or life force, they were prominent features of ceremonies designed to honour and protect that individual.

At the time of his death, a person's kuduo was filled with gold and other offerings and included in an assembly of items left at the burial site. The vessels played an important role in religious ceremonies.

The emphasis on gold however was more an Asante (Akan) thing, as the Asante of Ghana regulated the regional gold trade and the Golden Stool of the Asante is the primary symbol of the Asante nation.

The kuduo of Asante chiefs were presumably based on prototypes imported from North Africa during the region's early involvement in the trans-Saharan trade, but this trade may have affected mostly the decoration style. The demographic of African people in medieval times and before isn't very clear, but many peoples in West Africa came from the Easter or Central parts of Africa, like the Edo of the later Benin empire or from area's more North East like the Dogon in Mali who arrived somewhere in the fifteenth century. These migrations might have to do with a climate change,



The Dogon (of Mali to the north) had similar vessels of about the same size

the small ice-age in the late Middle Ages may have had an effect on Sahel climate conditions and when it ended may have forced whole peoples to migrate. Another explanation is the spread of Islam, first in East Africa. But what did they take with them in cultural and religious terms, what did they absorb from the cultures they invaded, what can be attributed to older and what to newer influences?

We know that the Dogon culture and especially their cosmological knowledge has much resonance with the Egyptian Pharaonic culture and their focus on funeral rites. So what was the magical purpose of these vessels, where did their use come from, what relationship do they have with for instance Egyptian magical practice, or even the notion of the Grail?

The magical aspects of what is referred to as the kuduo's (of the whole region), as usual in rational anthropology, were largely ignored or broadly described as superstitious rituals or ceremonial purposes. The vessels were described as practical strongboxes and urns, but there is no sign they had a physical lock of some kind. Obviously the decoration and imagery marked them as sacred or 'protected' property of the royalty, but was that enough to prevent thieving? There must have been other means of safeguarding the content, but here the scientific literature falls silent. Little is known about why and how the magical powers and charge of these vessels was established or created. This is why the incident at hand might shed light on this aspect of the Benin and West African culture.



A Benin statue of a warrior, not part of the vessel at hand, but in the same style and posture of the warriors

It may be, that such vessels and the rituals used to charge them (make them safe and powerful) were not just ornaments, they may have played an important role in the hierarchy and power balance of the people. They were reserved for use by the royal family, seemingly more related to the queen or queen-mother than to the king. The queens were very important, something which is known from other sources and stories about the West African kingdoms at the Gold and Slave Coasts.

The charging of the vessel, at time of the 'initiation' or main ritual, involved human sacrifice. This didn't happen at a funeral, but as this incident seems to indicate, such rituals

were performed at events where the vessel was important as a symbol of power and maybe in an exchange with other peoples, maybe in a marriage context. Maybe a princess from another people was involved and then the vessel was a marriage gift. Anyway, it feels what happened had some serious impact on what happened in the region.

Those were the times, that the climate change seeming influenced Sahara crossing and Arab and Islamic traders started to come down, trading gold, slaves, ivory, etc. with the coastal region in the Benin Gulf. This was a time, when the very magical cultures of that area, often coming from further East (as far as Sudan), were confronted with the decidedly anti-magical and aniconical (no humans in imagery etc.) Soenni Muslim culture.

It may have been part of the political manoeuvring of those days, to forge new alliances to withstand the pressure from the North.

Maybe this vessel, so obviously from a magical tradition, was part of that. The Benin/Edo empire that evolved in those days, was a very strong entity with much influence in the region and was even able to fight off colonial invasion for a long time, until eventually in 1897 an English military expedition conquered them.

23 APPENDIX: THE SURVEY DATA

Name	Age	M/F	Religion	Fbook/Twitter/Skype	P.C./Tablet/Phone	Q1	Q2	Q3	a.Emotions b.Thinking c.Tempo	Q4
Xander	17	M	Buddhist	Skype	P.C./Phone	Bad	Yes	No. yes. yes in the past	Yes	
Robert	46	M	/	Fb	P.C./Phone	Bad	Yes	No(1y). No. /	No	
Anon	50	F	/	Fb	P.C./Phone	it's my choice	Yes	take in. it takes a lot of time once you start = the worst thing	Sometimes	
Wiluna	51	F	/	Fb	P.C./Phone	Good	Yes	Positive. positive. Up tempo	Yes	
Farouk	71	M	Muslim	Fb	P.C.	Both	No	No. no, I've learnt to avoid stupid people from the first comment. No effect	Yes	
Sonja	14	F	/	Fb, twitter, snapchat, whatsapp		Good	Yes	In a good way, i don't know. no	Most of the time, but a firewall helps.	
Amber	14	F		Fb, twitter, instagram, snapchat, whatsapp		Good	Yes	In a good way. it made me realise that everything is closer to reach. i could do so much more without the internet.	Most of the time	
Lucia	49	F	/	Fb and Skype (mainly for Bionanza.lt facilitates it)	P.C./Phone	Good because I select	Yes	Sharing. just like any other means of exchange of information. Speed up	Not really	
Linda	22	F	Muslim	Fb, skype	P.C./Phone	Good	Yes	Depends. no. no, but we waste to much t	Yes	
Renee	53	F		Fb, skype	P.C.		Yes	No. sometimes pleasant sometimes not. slowed it down	Yes	
D Koopmans	57	F	RK	Fb		Equal	Yes	info. slow because of games	No	

Anutosh	78 M	/		Fb, twitter, skype	P.C./Phone	Good	Yes	No, not much, no No, makes it more superficial. Feel overness.	Yes, mostly
Daniela	55 F	/		Fb	P.C.	Both	Yes	takes time	
Susana	48 F	/		Fb	P.C./Phone	Both	Yes	I communicate with my friends and relatives a lot, if they tell me their feelings I am affected with that. Yes. affects my lifestyle.	Yes, of course
Nicola	32 M	/		Skype	P.C./Phone	Good	Yes	It depends. it depends. Time goes faster	Absolutely yes
Agnes	59 F	/		Fb, Skype	P.C./Phone/Tablet	Good	Yes	Positive. I am more critical and I wanna make people make the difference between conspiracy theory and the truth. No	Yes
Jaap van Tili	70 M	/		Fb, twitter, skype, snapchat, instagram	Tablet	Both	Yes	/yes. / Negative if I do not appreciate them, in a positive way if they are close and if i feel happy for them, people share good news, and are hypocrit. no. I loose to much time on it.	Yes
Can	24 F	/		Fb, twitter, skype	P.C./Phone	Both	No		Yes

Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Yes	Harder and Better, Yes	4+	1 Month	Yes, they give less value to physical objects	Sometimes	It is generally pro buddhist	No
	More comfortable	1h/day (fb, gmail)	1y (no choice) "I don't feel addicted"	physicality = less convenient. Everything goes fast	Yes: news from every country. It creates opportunities. Crosses borders.	/	In contact. My sister found a new husband.
	Harder when hacked	A few or 0	1w or 2w	Yes	No	/	No
Yes	Better (when I was lonely)	1.5 h/d	3 days	Yes, 70% does	Yes	/	No
Yes	No	4-5 /d (work)	3 w	Yes	Yes	Depends upon the supplier	No
	Both, but sometimes harder, because people can say mean things easily on the internet.	I don't know, but A Lot	4 weeks, but I had to	No	No	/	No
Yes	Better because I learn things from the internet	4-5h	5 w because I was travelling	Yes	No	/	No
They are there, on different levels	Both. I use it for facebook	4 h (work)	5 w, in 2008	It's not about objects. It's a way of story telling	You have to spend less time finding superficial information. But it takes time away for more deep information	/	Yes, I met superficial friends
Yes	Better	3h	10 d	Yes	Yes	(globalization)	No
A lot	Harder	2-3h	2-4 w, on holiday		Yes	Doesn't affect me	Yes, only bad
No	Better	3h	12 d	I don't know	Yes I do	I don't know	No

Yes	Better	1-2h	2 m	No	Yes	Does the internet have a view?	Yes. Transparency
Yes, I think they can take advantage of me	Better It has 2 faces. I can find unbelievable information I could never had if i did not have an internet access	1h I don't measure it. Maybe this is the danger			Yes		Yes
	Both (Easier : travelling, keeping in touch with friends, buying, learning. Harder : importants information got via an email, loosing time			with the spontaneity, improvisation, incontrolled things from others and from themselves.	Feeling of insecurity when i can't be in touch with the real world. I don't feel empowered.	/	I met old friends. You make a different world
Yes		1,5 h		No (they escape from it)	Yes	/	No (good : for a gay in a small town, a disabled person. Bad: just an illusion)
Yes, and i have an antivirus software	Better	1,5 h	3d (it wasn't a choice)	No	Yes, you have to look for your information	/	
Yes	Better	4-5 h	/	It's a combination	Yes, it makes life more interesting	/	No
Yes	Better	7h (work) + 1.5h	1 w (it was not a choice)	Not really	No, it is hard to focus on something because there are many things attracting my attention.	/	Yes. Good thing: finding new set of friends with the same interest.

Q13	Q14 a. Phone b. Internet	Q15	Q16	Q17	Q18	Q19j	Q20i	Q21s
Feel safe and secure behind a computer	Yes. yes	Yes It would be Very Hard. Back to pigeons.	Yes	No	No, my work requires creativity skill and talent, imagination, something that the internet can't supply	No	Yes	No
No consequences.	Yes. /		No. people are limiting themselves, not the technology limiting the people		No (no job). But if the job is creative, handmade, art, then yes.			
No idea. Is it ?	I feel bad knowing that I feel safer with a phone. But you can	Yes	Not necessary . It's a choice	No	No			
Yes	Yes.yes	Yes	Yes	I don't but a lot do	No	No	No, but life is easier	
People may lie, but don't change their personality	Yes. no	Yes	Yes, somehow but also increasing it	If it happens without internet it will also happen with it	No	Yes	No	
I don't feel concerned	Yes with a mobile phone	Yes, but not too long	No, it makes interacting with people easier, because the distance does not matter	No	No			
No	Yes with a mobile phone	Yes !	No, because with social media I keep in touch with old friends	It is easy to speak in a chat . But I always say things I would say in real life	No			
Image has a different place. Because of the distance. They feel safe	Yes. Internet: I don't know , it's easy, not safe	Yes	Yes. I believe non digital contact goes deeper	No	No	Sometimes have a weird feeling in my right hand guess yes	Some services are faster. So I guess yes	
	Yes and yes (never alone, never lost)	Yes	Yes (people don't talk anymore or interact) ex: in a bus	No	/	Astigmatism	Yes	No
	Not safer, but you are forced to use them	Yes, for sure	A lot	It can happen	No	No	Haha, no	
	Yes. No	No	Yes	Sometimes	Yes, less interviews	much pain from hanging	No	

Don't know	No, yes	Yes	In general not, unless you are addicted	No	No	No	Yes	
Life is a mirror don't see the other person in the real world. So they aren't intimidated.	No, no	Of course	Yes	No	Remark : My project : AMO : Assemblée Mondiale Online (like Eurosong festival)	No	Yes	
	None of them, with myself being more confident	Of course	I think new generations are learning other way of communication	No, but I see some people doing it. That's good for the ego	Ideas are in the air	Asigmatism	Yes The reductions of mobiles and pc are not good for health, but does it makes your life shorter?	
Because it's virtual. They feel protected by the screen	Yes (contact doctors)	Yes		It can happen	No	Yes (finding a good cardiologist)		
Yes, but nothing happened.	No, but life is easier, Yes	Yes	Both	No	No	Yes (wrist joint)	No	No
/	Yes, yes	Yes	No	One anonymous account on Twitter for protection.	You have to be very good at something	No	Yes, by feeling connected	Yes
It does not have an influence on people's sex life.	Yes and no	Yes	Yes	Yes, and even without the internet	No	Yes, pain in my wrist	No, because we practice less physical activities, but we get more information about health.	No

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