STORYTELLERS OF THE INFORMATION AGE
On the role of narrative in UBERMORGEN.COM's work [1]
Inke Arns

> "A minor literature doesn't come from a minor language;
> it is rather that which a minority constructs within a major language" [2]
> (Gilles Deleuze and Félix Guattari)

The last fifteen years of net art, media and net activism have been a time of intensive story telling. Against the prevailing narrative of the "frontier" once proposed by John Perry Barlow [3] – which some have dubbed the "Californian Ideology" [4] – we have seen the emergence of counter-narratives, such as "Temporary Autonomous Zones" (TAZ), for example [5]. A public consisting not only of *net aficionados* remembers the heroic David vs. Goliath confrontation between a global toy retailer and a small group of net artists in 1999/2000, which the artists won thanks to the *Toywar* campaign that mobilized its global coalition of supporters [6]. Earlier in the mid-1990s there were the "Hacktivist" activities of the Electronic Disturbance Theatre (EDT) which consisted of blocking the website of the Mexican government in support of the Zapatista movement (*FloodNet*, 1998) [7]. And then there were the activities of the ZaMir initiative in the early 1990s which, in a different direction to the Distributed Denial of Service (DDoS) attacks by the EDT, were designed to enable communication between the citizens of the former Yugoslavia at a time when communication was made impossible by the warring states themselves. ZaMir enabled dialogue between citizens of the former Yugoslavia by re-routing messages via a mailbox in Bielefeld, Germany [8].

The last decade, meanwhile, has been marked not so much by stories and technologies of obvious resistance, but by artistic narratives that insert a seed of doubt into what Deleuze and Guattari call a "major language", namely the fabric of society, by taking up, twisting and playing back the ruling norms of society (that normally remain hidden) to that very society in an explicit way. The music group Laibach, since the early 1980s, the artistic collectives RTMark and The Yes Men, the theatre and film director Christoph Schlingensief, Santiago Sierra in the field of contemporary art, and the (net) artist duo UBERMORGEN.COM, are all representatives of the artistic subversive-affirmative strategy of over-identification [9]. As critical art strategies have become increasingly ineffective – since, as BAVO has it, "they conform to what is expected" [10], the art of over-identification "offers an uneasy answer to the question of artistic resistance" [11] in a post-critical condition; it asks artists "to ignore society's pathetic demand for small creative acts and, inversely, to uncompromisingly identify with the ruling order itself and to act out its logic in its most extreme, dystopian form" [12]. The art of over-identification thus aims to "radically confront the current order with the ultimate consequences of its own principles [...] in order to confront it with the impossibility of its desire" [13]. It is in this line that we should consider works like Christoph Schlingensief's *Please love Austria! First European Coalition Week* (2000) [14]. This event, which was publicly advertised as an action of the FPÖ (the right-wing Freedom Party of Austria, in power as part of the Austrian ruling coalition since 2000) adopted the Big Brother mass-media format to stage a live, media-savvy deportation of asylum seekers from a container located next to Vienna opera house. The Yes Men, for their part, have been appearing as the official representatives of the World Trade Organization (WTO) since 2001. Using faked websites that are the spitting images of official WTO sites, these artist-activists have received numerous invitations to appear as WTO representatives at international conferences. Their overall goal is "identity correction": they want to help corporations and organizations openly articulate aspects which are implicit in their business practices. For example, in the case of the WTO, The Yes Men bring the idea of free trade to its logical consequence, hoping to provoke a sense of dread in their audience. Most of the time, they succeed in quite the opposite direction, awakening pure enthusiasm in their listeners. Even the most radical suggestions are taken seriously on the strength of the WTO's authority. Since 2002, The Yes

Men have also been engaged in correcting the identity of Dow Chemical. In 2002, they set up a fake website, on which the corporation announced that it would not be able to provide compensation to the victims of the chemical accident that wreaked havoc on Bhopal in 1984, since neither the victims nor their families were shareholders (!). As a result, The Yes Men were invited to a live talk show on BBC World in November 2004, where the Dow representative "Jude Finisterra" announced that the company had changed its mind, and had decided to compensate all victims on occasion of the 20th anniversary of the catastrophe [15]. The company denied this immediately (well, after the "news" had circulated for an hour on BBC World and CNN), but the value of its stock went down considerably. In 2005, a certain "Erastmus Hamm" spoke on behalf of Dow Chemical at a conference on "Global Risk Management" in London. Here, he presented a computer programme called the *Acceptable Risk Calculator* to an enthusiastic audience of bankers. This programme was apparently designed to allow companies to establish the risks they were willing to accept in exchange for potential profits. On occasion of this action, which was recorded with a hidden camera, The Yes Men unveiled Gilda, the golden skeleton. Delighted, the executives and managers attending the conference posed for photographs with this golden "skeleton in the closet" and exchanged business cards with the representative of Dow Chemical [16]. The Yes Men infiltrate the world of big business and smuggle out stories that are both shocking and hilarious; author Naomi Klein has dubbed them "the Jonathan Swift of the Jackass generation" [17].

Klein's reference to the famous Anglo-Irish satirist, essayist and author of *Gulliver's Travels* brings us back to the importance of narrative in contemporary net cultures, and, more precisely, to the crucial role of narrative in UBERMORGEN.COM's work. My argument starts from the assumption that we live in a world that, due to growing digitalization, is increasingly complex and transparent. However, transparency, in this respect, should not be mistaken for visibility – it is rather that the age of transparency is marked by a dual structure of the panoptical and post-optical. On the one hand, we are confronted with total, panoptical visibility: this began in the 1980s, if not indeed earlier, with the installation of video-monitoring systems, and is now being perfected in the shape of state and private-sector surveillance satellites (GoogleEarth, anyone?) [18]. In parallel with this panoptical visibility, the technical structures that observe and act have increasingly withdrawn into invisibility. In many cases, the performative structures are recognizable only by their effects, but no longer necessarily visible. Satellites, for instance, are so far from the earth that they can scarcely be detected with the naked human eye; miniaturized nano-machines are simply too small, and most software eludes human perception because it involves "inconspicuous" performative (geno-)texts lying below the visible surfaces (pheno-texts) that generate them. In the age of transparency we find ourselves dealing with a fundamental de-coupling of visibility and performativity/effectivity. While everything else is being subjected to the paradigm of permanent visibility, the performative structures - the ones that actually act - are withdrawing from this very visibility, and thus from our direct control. These structures have become transparent. Invisibility is thus becoming the privilege of operative, performative structures [19].

So, how do we – not necessarily being extremely tech-savvy – make sense of such a complex and transparent world (understanding still being a prerequisite for acting)? One way of making sense of a world which increasingly withdraws from human perception is storytelling. I would claim that stories – and, in a broader sense, narratives – are extremely powerful tools that give form/shape to contexts that cannot easily be grasped and made sense of by our "unenhanced" human senses. Narratives and counter-narratives have the capacity to make complicated and complex structures and the interrelations they are based on understandable, and thus to make a transparent world opaque - i.e. graspable. In the context of media and net activism this holds especially true for UBERMORGEN.COM's art of storytelling.

After leaving the corporate art group etoy ("the first street gang on the information super highway") which he had co-founded in the early 1990s, in 1999 Hans Bernhard (a.k.a. etoy.HANS, etoy.BRAINHARD, hans_extrem, e01) together with Maria Haas (a.k.a. liz or lizvlx) founded the

company UBERMORGEN.COM, registered in Germany, Austria, Switzerland and Bulgaria. UBERMORGEN.COM is active in the fields of software development, licence contracts and applied design and consulting services for multinational corporations, as well as action art, performance art and mass media communication art. UBERMORGEN.COM describes its activities as "media hacking" and distributes its contents via "guerilla-marketing tactics" and through so-called "shock marketing".

Storytelling is an integral part of these media hacking activities, or rather, it is the *very core* of these tactics. However, it does not actually matter whether the stories that we are told by the artists are true or not, whether they have really happened or not; what is important is whether they function as stories. What really matters is whether the stories are good stories. We can therefore say that within media and net activism it is not only the technical hacks or the hardcore programming code – the *fact*, if you will – that are performative in the sense of Austin's speech act theory, but also the narratives – the *fiction*. Narrative is the framework that not only assigns meaning to the disparate, unconnected elements of the world we perceive; as a performative text it also has the potential to mobilize people. Fiction has an effect on those it is being told to, as well as on those who are engaged in (re-)telling and further distributing it. By infusing and releasing these stories (hoaxes) into the mass media (i.e. by hacking the mass media) it becomes possible to launch a certain topic in the mass media and to reach a global audience. UBERMORGEN.COM are masters of storytelling in, with and through the media.

[V]ote Auction: Bringing capitalism and democracy closer together

UBERMORGEN.COM's first ingenious media hack intervened in no less than the (in)famous U.S. presidential elections in 2000 (G. W. Bush vs. Al Gore). Based on an idea by James Baumgartner, further developed by UBERMORGEN.COM, the media hack *[V]ote Auction* made extensive use of the aforementioned tactics. Under the catchy slogan "Bringing capitalism and democracy closer together!", voters were offered the possibility, via the online auction platform vote-auction.com, to auction off their vote to the highest bidder. Once the votes of an entire U.S. state were sold, the vote sellers would be paid their due share from the returns. What was demonstrated here in enviable clarity was the entanglement of capital and (voting) power: while the selling of individual votes is illegal in all U.S. states and on a Federal level, this prohibition is at the same time constantly being undermined by massive (legal) campaign contributions from big corporations. *[V]ote Auction's* repercussions in the mass media were overwhelming. During the three months before the election, every day UBERMORGEN.COM gave up to five interviews for radio and television, and up to 20 e-mail and phone interviews. Several State Attorneys announced a total of thirteen lawsuits against UBERMORGEN.COM. In four U.S. states legal proceedings against UBERMORGEN.COM were instituted (Missouri, Chicago, Massachusetts and Wisconsin) and temporary injunctions were issued. Following a judgment in Illinois the domain was blocked, but it managed to get back online under a slightly altered name – in time for the elections. CNN reported on the project seven times and on October 24, 2000, the channel dedicated a thirty-minute episode of the legal programme "Burden of Proof" entitled "Bidding for Ballots: Democracy on the Block" to *[V]ote Auction*. UBERMORGEN.COM claims that with *[V]ote Auction* they reached an audience of 450 million media consumers. But as no evidence for illegal activities could be provided, the legal proceedings in all the U.S. states (except Illinois) had to be closed. In actual fact, however, the entire project was a hoax – the online auction platform was entirely inoperative. *[V]ote Auction* spread like a sinister virus through the global media networks, but it was merely a *story* that multiplied and gained strength and authenticity by being distributed through the mass media. In this respect it resembles Orson Welles' radio play of H. G. Wells' *War of the Worlds,* that is said to have created mass panic at Halloween in 1938, because radio listeners really believed that the Martians were invading. Yet despite *[V]ote Auction* being purely fictitious, to this very day the project's representatives are denied entry into the United States of America.

Psych|OS: Sickness as Metaphor and Narrative

In March 2002, UBERMORGEN.COM's Hans Bernhard experienced [20] a manic outbreak (bipolar affective disorder) [21] in Cape Town, South Africa. He was airlifted to Austria – General Hospital Vienna. Two and a half years later, UBERMORGEN.COM found video footage of his stay at the mental hospital – Station 4B, Department of Psychiatry, (the reference to the 1999 movie *The Blair Witch Project* is by no means incidental) [22]. They decided to release the material unedited, with only minimal contextual information: "We are the children of the 1980s. We are the first internet-pop-generation. We grew up with radical Michael Milken [The King of Junk Bonds] and mythical Michael Jackson [The King of Junk Pop]. Hans Bernhard is loaded with 10 years of internet & tech [digital cocaine], mass media hacking, underground techno, hardcore [illegal] drugs, rock&roll lifestyle and net.art jet set [etoy]. His neuronal networks and brain structures are similar to the global synthetic network he helped build up and maintained subversive activity within. And now they are "infected" by a manic-depression [WHO ICD-10, F31.1.], both Hans Bernhard and the "Network" are infected by this structural disorder. Waves of mania and depression are running through the technical, social and economic structures. Contemporary high-tech societies deal with hardcore brains using bio-chemical "agents" to control the internal information flow, we call them psychotropic drugs. Hans Bernhard was legally sloshed by Zyprexa®, Temesta®, Dominal®, Depakine®, Neurotop® [23]. But how can we treat a mentally ill global network?" [24]. The video installation *Psych|OS* (2004) consists of a back projection of the video material onto a sensitive membrane. The screen serves as a thin skin which is penetrated by light and onto which a unique reality is projected. This membrane moves if you touch it and it curls if you blow: the image twists. The membrane represents the human and the network – it is hypersensitive. The sound is played quietly via speakers and very loud via earphones. The room is filled with daylight so the mood of the viewer is influenced by the weather outside. It is no different from a room in a mental hospital [25].

"202,345,117 years until GWEI fully owns Google"

This rather disillusioned yet poetic statement opens the first chapter of UBERMORGEN.COM's *EKMRZ Trilogy*, entitled *GWEI – Google Will Eat Itself*, which began in 2005. Together with colleagues Paolo Cirio and Alessandro Ludovico [26] the duo tackles the trinity of EKMRZ [27] giants that survived the crash of the dotcom boom and are now almost generic names for unique business models – and monopolies – on the Internet: Google, Amazon and eBay. Founded in 1998, Google is the most popular search engine on the Internet. Over the last decade it has developed from a simple search engine into a bold conglomerate of free services: e-mail (Gmail), online mapping (Google Earth), office productivity, social networking, and video sharing services (YouTube). Amazon.com started out in 1995 as an on-line bookstore, but soon diversified to product lines including VHS, DVDs, music CDs, MP3s, computer software, video games, electronics, apparel, furniture, food, toys, etc. [28]. Today it is the largest content distributor online. eBay.com, also founded in 1995, is an online auction and shopping website in which people and businesses buy and sell goods and services worldwide [29].
The EKMRZ Trilogy looks at the monopolists' distinctive business models and proposes creative ways to "short-circuit" the immaterial wiring of these models. While UBERMORGEN.COM proposed that Google "eat itself" by obediently turning themselves into the ultimate torch-bearers of the Google advertising system (thus coming to own Google in a remote future), they performed another kind of hack on the Amazon system by bluntly downloading the digital content of thousands of books. Within *The EKMRZ Trilogy*, eBay, in turn, is made to play the tune of e-commerce, created by transforming eBay user data into the dull yet hypnotic soundtrack of ubiquitous online micro payments.
GWEI – Google Will Eat Itself (2005-2008), the first part of the trilogy, generates money by serving Google text advertisements on a network of hidden websites. With this money the artists

automatically buy Google shares: "We buy Google via their own advertising! Google eats itself – but in the end we own it! By establishing this autocannibalistic model we deconstruct the new global advertisement mechanisms by rendering them into a surreal click-based economic model." [30] The artists have calculated that it will take exactly 202,345,117 years until GWEI fully owns Google. We are thus informed that by re-routing some of the immaterial wires of the digital information economy it is potentially possible to hack the system – no matter that the result will only be visible more than 200 million years later.

The second EKMRZ hack, which followed just a year later, was *Amazon Noir – The Big Book Crime* (2006-2007). This exploited Amazon's "Search Inside the Book" feature – a service which allows customers to search for keywords in the full texts of the 250,000 books in their catalogue [31]. Between July and October 2006, 3,000 digital books were "stolen" from the Amazon website by targeting weaknesses in the "Search Inside the Book" feature. A specially programmed software "bombarded the Search InsideTM interface with multiple requests, assembling full versions of texts and distributing them across peer-to-peer networks (P2P)" [32]. Michael Dieter points to the fact that far from being a purely malicious and anonymous hack, the "heist" was publicized as a tactical media performance, based, one should add, on a script that recalls a Spaghetti Western: "The Bad Guys (The Amazon Noir Crew: Cirio, Lizvlx, Ludovico and Bernhard) stole copyrighted books from Amazon using sophisticated robot-perversion technology coded by supervillain Paolo Cirio. A subliminal media fight and a covert legal dispute escalated into an online showdown with the heist of over 3,000 books at the centre of the story. Lizvlx from UBERMORGEN.COM had daily shoot-outs with the global mass media, Cirio continuously pushed the boundaries of copyright (books are just pixels on a screen or just ink on paper), Ludovico and Bernhard resisted kickback-bribes from the powerful Amazon.com until they finally gave in and sold the technology for an undisclosed sum to Amazon. Betrayal, blasphemy and pessimism finally split the gang of bad guys. The good guys (Amazon.com) won the showdown and drove off into the blistering sun with the beautiful femme fatale, the seductive and erotic massmedia." [33] Michael Dieter has further suggested that the extensive use of imagery and iconography from the "noir" genre can be understood as an explicit reference to the increasing criminalization of copyright violation through digital technologies. At the same time, the term also refers to the fact that it is increasingly difficult (in *Amazon Noir,* as in real life) to distinguish between the "bad guys" and the "good guys". The politics of filesharing, Dieter continues, essentially depend on the "command of imaginaries" – *Amazon Noir* specifically "dramatizes these ambiguities by framing technological action through the fictional sensibilities of narrative genre." [34]

The Sound of eBay (*SoE*, -2009), the final and most recent chapter of *The EKMRZ Trilogy*, provides us with the ultimate soundtrack of the e-commerce that underlies most online activities. *SoE* generates unique songs from eBay user data. By entering any eBay username and an e-mail address, and clicking "generate", a "score-file" is created from the data harvested by the software, and this is then transformed "into your unique but uniform song and presented in teletext porn style!" UBERMORGEN.COM continue in their inimitably over-enthusiastic style: "We love it! *The Sound of eBay* is our affirmative low-tech contribution to the ATOMIC soundtrack of the peer-to-peer hyper-catastrophic shock-capitalism. reference: Peter Weibel's song *Sex in der Stadt* (Sex in the City) from 1982 – Hotel Morphila Orchester, where PW "raps" (sings) sex-ads from a newspaper". [35] Indeed, Peter Weibel's singing of sex-ads [36] provides an interesting frame of reference for this project: it is about reading the underlying texts of our surroundings and reproducing them in real time, like a parallel reading (input) and automatic writing (output) which recalls the Surrealist writing experiments of *écriture automatique*, or glossolalia (speaking in tongues). We are also reminded of other artistic performances: for example, Sanja Ivekovic's *Town Crier* (1979) [37], Gebhard Sengmüllers' *TV Poetry* (1993-1994) [38], Igor Stromajer's *Oppera Internettikka* (since 1998) [39], and Christophe Bruno's *Human Browser* (2004) [40]. All of them, to a certain degree, limit the factor of intentionality, namely the active role of the artist, in favour of casting themselves (or the performers) in the role of a medium through which *language speaks*. The artist/performer appears as an entity loaded with pre-existing language which cannot utter anything but the discourse

of the Other. Jacques Lacan defines this repetition as the "insistence of the letter" [41] (*l'instance de la lettre*), that is, the compulsive repetition of certain signifiers or letters despite the subject's conscious attempts to repress them. "Repetition", he writes, "is fundamentally the insistence of speech." [42] Of course, in *The Sound of eBay* it is not the voice of the radically decentered subject that produces language utterances, but a software program that generates a catchy 8-bit musical soundtrack from eBay user data. It reminds us that underneath the shiny surfaces and glossy interfaces there is a layer of performative code and precious personal data that performs the constant modulations crucial for the functioning of today's society of control [43].

Above all in their *EKMRZ Trilogy,* UBERMORGEN.COM formulate dark visions of the "information society" and turn these visions into highly entertaining, blithe narratives about the age of transparency, using the format of film scripts (Western and "noir"), adventure novels and tabloids. "We have stolen the invisible" – this apparently intimate confession opens the story of "The Big Book Crime", which involves assaults on stage coaches filled with digital gold, and the sombre highwaymen of the information super highway. In the end, the good guys drive off into the blistering sun... and the bad guys? They are certainly on their way to the next story, and we are all curious to know what it will be about this time.

Footnotes:

[1] I would like to thank Johannes Auer, who invited both Hans Bernhard and myself to two literary events in Stuttgart, in 2007 and 2008, which led me to think in more depth about the crucial role of narrative in UBERMORGEN.COM's work: Hans Bernhard im Gespräch mit Inke Arns, "Netz(kunst)aktivismus. UBERMORGEN.COM + friends" , in *tell.net,* Stadtbücherei Stuttgart, January 17, 2007; Hans Bernhard im Gespräch mit Inke Arns, "Erzählungen als Strukturelement von Medienaktivismus", in *Literaturfestival Stuttgart,* April 17/18, 2008.
[2] Gilles Deleuze and Félix Guattari, *Kafka. Toward a Minor Literature*, University of Minnesota Press, p. 16.
[3] John Perry Barlow, "A Declaration of the Independence of Cyberspace", 1996, online at homes.eff.org/~barlow/Declaration-Final.html (last accessed January 2, 2009).
[4] Richard Barbrook and Andy Cameron, "The Californian Ideology. A critique of West Coast cyber-libertarianism", 1995, online at www.hrc.wmin.ac.uk/theory-californianideology.html (last accessed January 2, 2009).
[5] Hakim Bey, *T. A. Z. The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism*, Autonomedia, New York 1985 (1991). Also online at www.hermetic.com/bey/taz_cont.html (last accessed January 2, 2009).
[6] Inke Arns, "This is not a toy war: Politischer Aktivismus in Zeiten des Internet". In Stefan Münker, Alexander Roesler (eds.), *Praxis Internet. Kulturtechniken der vernetzten Welt*, Frankfurt/Main, Suhrkamp 2002, pp. 37-60. Also online at www.inkearns.de/Texts/Media/notoywar.html (last accessed January 2, 2009).
[7] The activities of the EDT (Stefan Wray and Ricardo Dominguez) were modelled after Critical Art Ensemble's *Electronic Civil Disobedience*, online at www.critical-art.net/books/ecd/ (last accessed January 2, 2009).
[8] A broad panorama and typology of net activism can be found in Inke Arns, *Netzkulturen*, Hamburg, Europäische Verlagsanstalt 2002.
[9] The term was coined by Slovenian philosopher Slavoj Zizek in his seminal essay "Why are Laibach and NSK not Fascists? ", in *M'ARS - Casopis Moderne Galerije,* /3.4 1993, p. 4. I co-edited, together with Sylvia Sasse, an issue of the Slovenian journal of performing arts *Maska* dedicated to this topic in 2006. See Inke Arns, Sylvia Sasse, "Subversive Affirmation. On Mimesis as a Strategy of Resistance", in Inke Arns / Sylvia Sasse (eds.), "Subversive Affirmation", *Maska*, Vol. XIX/ 3-4 (98-99) / 2006, Ljubljana 2006, pp. 5-21 (also published in: IRWIN (ed.): *East Art Map. Contemporary Art and Eastern Europe*, MIT Press 2006, pp. 444-455).

[10] BAVO, "Introduction", in *Cultural Activism Today: The Art of Over-Identification*, Rotterdam, Episode Publishers, 2007.

[11] Ibid.

[12] Ibid.

[13] Ibid.

[14] Online at www.schlingensief.com/auslaenderraus/ (last accessed January 2, 2009).

[15] In 2001, Dow Chemical bought Union Carbide, the chemical company responsible for the Bhopal catastrophe. But Dow continued to refuse to assume responsibility for the events of 1984.

[16] The project was included in the exhibition *Glamour and Globalisation*, curated by Inke Arns and presented at Hartware MedienKunstVerein in the PHOENIX Halle Dortmund in 2006 and at PROGR Zentrum für Kulturproduktion Bern in 2008.

[17] Online at www.theyesmen.org/yes-men-book (last accessed January 2, 2009).

[18] See Lisa Parks, *Cultures in Orbit: Satellites and the Televisual*, Durham and London 2005; see also "Satellite Voyeurism", event created by Francis Hunger (PHOENIX Halle, Dortmund, 2007).

[19] See Inke Arns, "Transparent World. Minoritarian Tactics in the Age of Transparency", in Dennis Del Favero, Ursula Frohne and Peter Weibel (eds), *un_imaginable*, ZIP digital arts edition, ZKM Center for Art and Media, Karlsruhe; iCinema Center/University of New South Wales, Sydney; University of Pittsburgh; Hatje Cantz 2008, pp. 20-35. Also online at www.inkearns.de/Texts/Media/2008_Arns-Transparent-e.pdf (last accessed January 2, 2009).

[20] Online at hansbernhard.com/TEXT/2000_2002/2002_BRAIN_MELTDOWN/ (last accessed January 2, 2009).

[21] WHO, ICD-10 Classification: F31.1 Bipolar affective disorder, current episode manic without psychotic symptoms.

[22] UBERMORGEN.COM's text about the work begins with the following quote, from *The Blair Witch Project* teaser: "In October 1994 three student filmmakers disappeared in the woods near Burkittsville, Maryland while shooting a documentary. A year later their footage was found...".

[23] Online at hansbernhard.com/drugs (last accessed January 2, 2009).

[24] UBERMORGEN.COM, "Psych|OS - Digital cocaine - Children of the 1980s", in Inke Arns, Ute Vorkoeper, HMKV (eds.), *On Disappearance. Loss of World and Escaping from the World*, Frankfurt/Main: Revolver - Archiv für aktuelle Kunst, 2005.

[25] This description follows UBERMORGEN.COM's compelling text "Psych|OS - Digital cocaine - Children of the 1980s", see previous footnote.

[26] Italian programmer Paolo Cirio and Neural.it editor Alessandro Ludovico worked with UBERMORGEN.COM on *Google Will Eat Itself* (2005) and *Amazon Noir* (2006), but not on the *Sound of eBay* (2008-2009).

[27] EKMRZ is the artists' word for e-commerce.

[28] Online at en.wikipedia.org/wiki/Amazon.com (last accessed January 2, 2009).

[29] Online at en.wikipedia.org/wiki/EBay (last accessed January 2, 2009).

[30] Online at www.ubermorgen.com/EKMRZ_Trilogy/ (last accessed January 2, 2009).

[31] This feature started with 120,000 titles (or 33 million pages of text) on October 23, 2003. There are currently about 250,000 books in the programme. Source: en.wikipedia.org/wiki/Amazon.com (last accessed January 2, 2009).

[32] Michael Dieter, "Amazon Noir. Piracy, Distribution, Control", in M/C Journal - A Journal of Media and Culture, Vol. 10, Issue 5, Oct 2007. Online at journal.media-culture.org.au/0710/07-dieter.php (last accessed January 2, 2009).

[33] Online at www.ubermorgen.com/EKMRZ_Trilogy/ (last accessed January 2, 2009).

[34] Dieter, op. cit.

[35] Online at www.ubermorgen.com/EKMRZ_Trilogy/ (last accessed January 2, 2009).

[36] Listen to this great song on YouTube: www.youtube.com/watch?v=rvIMbUGo9Fk (last accessed January 2, 2009).

[37] The performance took place on 12 December 1979, at the Gallery of Contemporary Art in Zagreb, Yugoslavia. The artist was facing a TV set which in turn was facing the wall. Ivekovic was

the only one who could see the TV screen and hear the audio via a headset. At the beginning of the News of the Day on Zagreb Television at 8.30 pm, the performance started. "I try to repeat every word I hear, but because of the rapid flow of verbal information some words and parts of sentences are missing in my speech, or else they are mispronounced. However, the audience is able to discern that the content of my narration is the News of the Day, transmitted by Zagreb Television at that moment. When the TV News ends, the performance also ends." (Sanja Ivekovic, *This Is My True Face*, Muzej Suvremene Umjetnosti Zagreb, Zagreb 1998, p. 54).

[38] On occasion of the Medienbiennale Leipzig 94, which I organized together with Dieter Daniels, the Austrian artist Gebhard Sengmüller installed *TV Poetry*. It consisted of satellite TV receivers in Vienna, Rotterdam and Lüneburg, which changed channel every ten seconds. On the computers connected to the satellite receiver, a text-recognition programme was running, filtering out the text elements; e.g. subtitles or news headers. The software then converted the graphical text into ASCII characters. Depending on the size and the clarity of the "original" texts in the TV images, the result was more or less correct. Every ten minutes the computers connected via modem to the central computer in Leipzig, where the results - easily readable texts alternating with machinic gibberish and vice versa - were displayed as an infinite text stream on a monitor. TV Poetry was a silent meditation on the aesthetics of the machinic and the uncertainties of communication. See also www.gebseng.com/ (last accessed January 2, 2009).

[39] *Oppera Internettikka* is a series of low-tech Internet opera art projects which Stromajer started in 1998 by singing HTML code. It explores the combination of classical opera tactics and strategies, together with singing HTML source code, text-to-speech software, Java scripts and applets. Online at www.intima.org/index_1995-2007.html (last accessed January 2, 2009).

[40] "A human being embodies the World Wide Web": Via a headset, an actor hears a text-to-speech audio that comes directly from the Internet in real-time. The actor repeats the text as he hears it. The textual flow is actually retrieved by a programme that hijacks Google. Depending on the context the actor is in, keywords are sent to the programme and used as search strings in Google so that the content of the text flow is always related to the context. Online at www.christophebruno.com/?p=83 (last accessed January 2, 2009).

[41] Jacques Lacan, "The Insistence of the Letter in the Unconscious", in *Yale French Studies*, n. 36/37, "Structuralism" (1966), pp. 112-147.

[42] Jacques Lacan, *The Seminar. Book III. The Psychoses*, 1955-56, London, Routledge 1993, p. 242.

[43] Gilles Deleuze, "Postscript on the Society of Control", 1990, in *Negotiations*, New York 1995.