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The Invisible Landscapes

The Construction of New Subjectivities in the Era of the Mobile Telephone

Yoshida, Miya

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The Invisible Landscapes

The Construction of New Subjectivities in the Era of the Mobile Telephone

Miya Yoshida
Malmö Academies of Performing Arts, Lund University, Sweden 2006

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The Invisible Landscapes
The Construction of New Subjectivities in the Era of the Mobile Telephone

Malmö Academies of Performing Arts, Lund University, Sweden 2006
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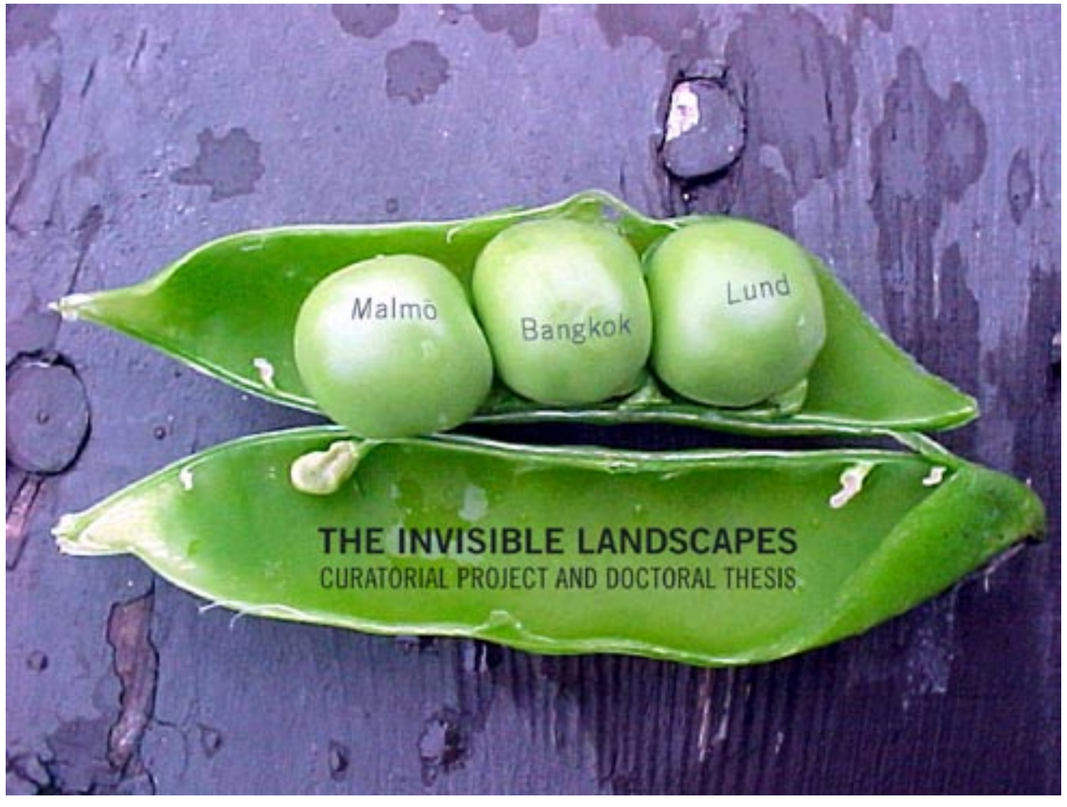
Yoshida Miya, Malmö, August 2006



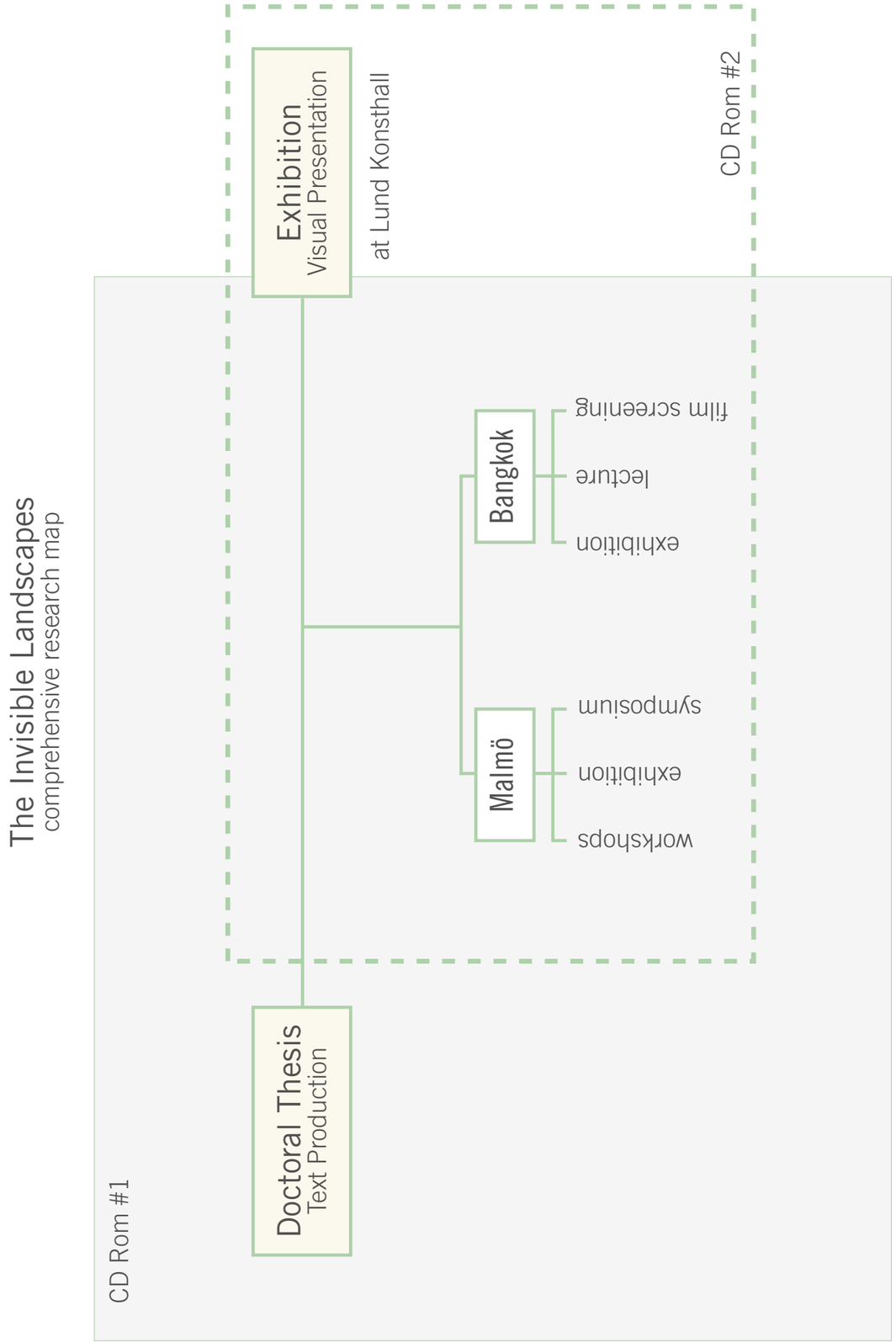
Abstract

The interventions of portable digital devices such as mobile telephones, mp3 players, PDAs and many others, have contributed to the formation of contemporary notions of space. The impact of these devices' mobility (informing the users' mobility) could even be paralleled to the shift from the effects of still photography to those of film in the 19th century. Especially important for the perspective of this study is the notion that mobile telephony is said to enhance the complexity of subjective space – for example by its passive aural communication functions questioning and relativising existing spatial boundaries. As this study can exemplify in many cases, the shift in spatialities is one that is first and foremost one that involves subjectivities – "objective" space remains unchanged, although the rhetoric of telecommunication hastens to suggest this. What has actually changed are the social institutions in public environments, implementing a variety of significant changes in the relation of public and private space as well as introducing critical changes in the perception of and attention for the self as related to an external social reality. This implies not only a transcendence of spatial models, but also modal change of our being-in-space.

In order to think about these questions, I have developed the concept of a methodological "juxtassemblage" out of the manifold evidence of historical and contemporary mobile communication – a quasi-"cubist", multi-perspective research method that involves the retrieval and juxtaposition of artistic materials as well as found "non-artistic" elements – as my adisciplinary working approach, since it promises to facilitate thinking about and in newly emerging spaces, which are complicated, if not impossible, to grasp within the confines of a single discipline. In order to develop this "juxtassemblage"

based on concrete materials and observations in different fields of "commonplace" knowledge about mobile communication, I curated two interrelated art projects under the title The Invisible Landscapes – one in Malmö (2003), the other in Bangkok (2005). In both cases, I used a curatorial platform for testing, examining and collecting artistic and theoretical knowledge.

As a result of the valuable contributions of artists to these two exhibitions and the curatorial process connected to them, I was able to unfold the inherent contradictions, paradoxes and disjunctures in the way the space of mobile telecommunication is perceived individually and socially, and I have further developed them with an exploration of a collection of visual materials from the realm of mobile network communication. By navigating through these concrete materials – artistic, non-artistic / subjective, less subjective / visual and non-visual –, my study comes to conclude that phenomena to be described by a psychological "flatness" – a "flattening-out" of subjectivities to conform to a mode of existence that is replaced by capitalist economies and geopolitics mostly organized in networks – can be observed as one pervasive aspect of new modes of being in space produced through individual and collective uses of digital mobile communication.



A. What´s In The Bag?

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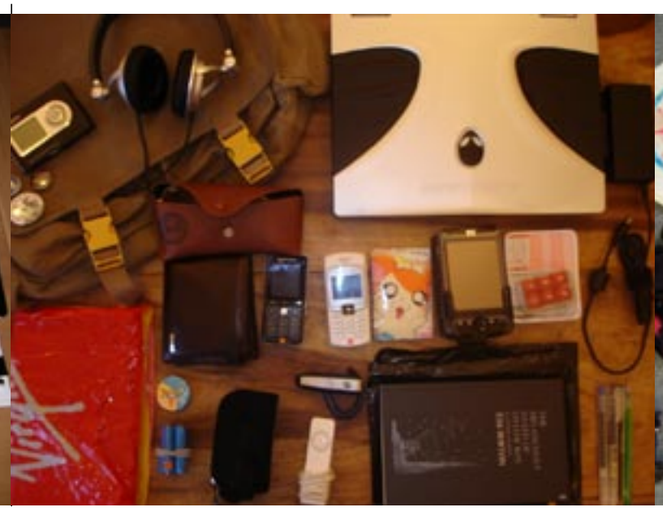

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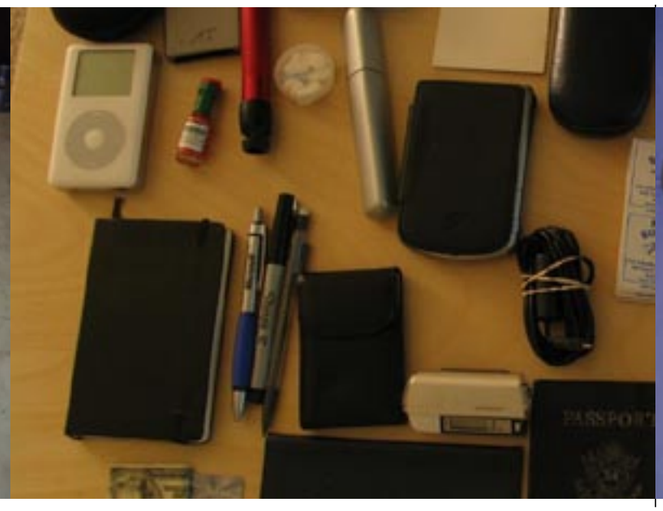
Chogyam Trungpa

Orbit



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A. Introduction

Portable media – mobile phones, Walkmans, iPods, PDAs, mp3 players, miniature gaming devices such as portable Playstations, Gameboys, and Xbox3 – have almost become indispensable parts of our portable luggage in contemporary life. Especially the mobile phone is today's most popular communication medium; whatever its more specific historical or technical definition, it is still in a process of transformation, so that at the point in time where my study sets in, it cannot be clear what it really is (if there is ever a single clear perspective on "organic" units of technological development). This is a point where mobile media are in the middle of an ongoing process of integration and re-formatting. Powerful devices like the mobile phone are promising unlimited connectivity. However, my personal experience with mobile telecommunication, especially outside of Japan, has had little to offer in the way of being "unlimited" and "smooth". Receiving a call in the middle of a London traffic jam, with no possibility to actually have the conversation offered when buried in urban noise and the jolting movements of other disoriented participants in the same traffic, I would rush back home to return the call, but often arrived too late because of the geographical time difference – maybe even caused by a different speed of being. Life in London is simply not as calculable as it is in Japan, not out of personal mismanagement, but out of different conditions and relations to society, place and people. Such differences are not easy to overcome by imagination, not even by the conveniences of accessibility offered by today's communication technologies. Even though the mobile phone – my mobile phone! – is such a personalised device, I found it was very difficult to carry out personal communication even if using my mother tongue, and started to question what this communication really is.

Contrary to my personal experiences, the mobile phone has become an ever more multi-functional and powerful device. Much more than tools, they are influencing our perception of the world, as well as the way in which the world perceives us. For some, their promise also bears threatening qualities: not only here, being included in a network has advantages, but as soon as they turn into necessities, they also implicated in rational and irrational fears of being controlled, under surveillance, traceable. The two-sided potential of connectivity is now on an open-ended trajectory, from the already "connected" mobile telephony to that of other gadgets: the portable phone already incorporates a host of functionalities far beyond placing and receiving calls. It is becoming a model platform for the interconnection, fusion, and integration of all portable media – and promises to achieve the same with its users.

For many, mobile phone culture is already a normalised part of public/private life. But "the" mobile phone could also be seen as a comparatively brief episode within a longer process of the mobilization of communication. There have been many other mobile and static devices that, in some way or another, have fulfilled comparable needs as the portable, satellite-operated, private mobile phones of recent years.[1] As had been the case with Internet technologies, predecessors to modern mobile telephony can be found in the fields of military, police, and other state-run research that have only slowly transformed into "civilian" (or "civic") versions of the earlier applications.[2] "The" mobile phone we

[1] Telephony was invented in 1876 by Graham Bell. In 1924, half a century after this invention, a mobile radio telephone system was invented by Bell Laboratories. It first started to operate in 1928 Chicago police cars. After that, some trials and developments of mobile radio telephony did take place, but it took more than half a century for a commercial use of the analogue to emerge – when the first generation of cellular systems was launched. After the first transistor making the construction of a portable telephone possible was introduced in 1971, a patent for radio telephone systems was finally accepted in 1973 in the United States, and later, in 1975 put on trial by Motorola. However, commercial mobile telephony did not start until 1984. Satellite mobile telephones were introduced as low earth-orbit satellite projects in the 1990s, and then customised for use in mobile phones around 2000. http://www.affordablephones.net/HistoryMobile.htm.

[2] New technologies have always been firstly developed for military and policing purposes, and the mobile phone is no exception. The first portable telephone documented is from 1889 – primarily for railroad and canal works, and military purposes. Lars Magnus Ericsson, founder of what was to become the Swedish

are speaking of today represents a set of functionalities that stems from diverse previous uses and stages – including the precursors of many other possible functionalities not yet ready for implementation.

The statistics that are constantly invoked – the explosive diffusion rates of mobile phones in countries like Sweden, Finland, and Denmark, in relation to the smaller number of landline subscribers **(fig. 1)** – cannot be ignored, even if they clearly have to obey to a logic of progression and promotion. They are, at the present state of things and relations, too general to offer a deeper analysis of individual "conditions of use", such as the distribution of satellite or earth frequencies and bandwidth, the fees that have to be paid in order to remain competitive and "online" within each country or political formation, and also "internationally", how the alleged "transgression" of fixed nation-state or other political boundaries is or is not working.

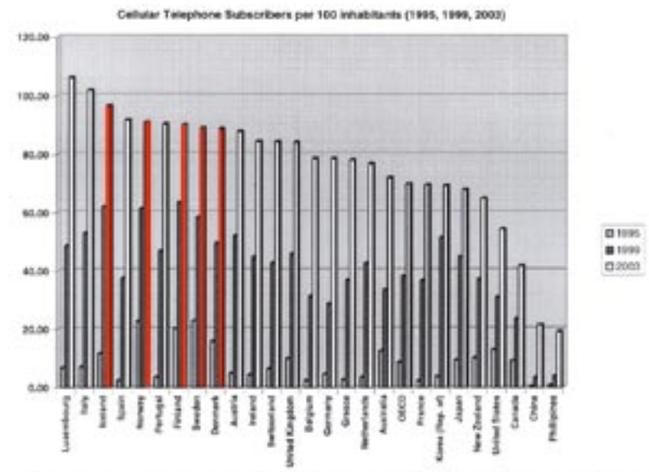


Fig. 1 Mobile telephone subscribers per one hundred inhabitants; years 1995, 1999, 2004.

media corporation Ericsson had experimented with portable telephones for military use in 1890's. It was brought to South Africa by the Swedish Army during the Boer War (1899–1902) The mobile radio telephone system was invented in 1924 by Bell Laboratories. Marine communications also used the system at an early date.

While I am not seeking to propose a "foundational" phenomenology of mobile communication, this technology and its consequences can be considered nothing less than a major attempt at reorganizing world-wide structures or spheres of influence – and this certainly forbids getting lost merely in the details of microanalysis. Much in this sense, precise analyses of technical possibilities are of minor interest here compared to more general aspects of their "everyday" use – that will undoubtedly go on to inform the workings of technically organised social exchanges. The most important aspects here are those of mobility (portability), accessibility, and connectivity, aspects that have already marked the fundamental shift to the "newness" of this historical mixture of technologies. People not only listen to, talk, and share experiences and information with one another, but also with remote acquaintances by dislocating and dispersing the self in formerly public, not privatised spaces. These technologies of communication and the self in communication have opened up new spaces of potentiality, bringing "information culture" as an extension of visual culture that included methods for organizing and retrieving information as well as patterns of user interaction with information, object and displays.[3] "Information culture," in this sense, is a culture of simulation. The notion of simulation, most prominently introduced by French philosopher Jean Baudrillard, questions and even negates the existence of one single, modern viewpoint and strives to open up multiple viewpoints. Mobile communication technologies again break down the multiplicity of perspectives from the abstract or technocratic theories to concrete practices in everyday life. It has become impossible to depart theoretically from the idea of a single space, be it public or private. Through ubiquitous networks and portable artefacts, individuals are capable not only of emancipating themselves from modernist simplification but are expected to transfer to reality what postmodernism proposed as the simultaneity of

[3] Lev Manovich, *The Language of New Media,* Cambridge, The MIT Press, 2001, p.13.

multiple viewpoints: download, reflects and distribute multiple views to spaces. This is more and more becoming an absolute condition of being in the world, which makes notions of space in general more complex. This is also true of the subject of communication.

After roughly fifteen years,[4] what does the "scene" of mobile telephony look like today? How do we understand such a scene? How does it affect us in our ways of being? Public and private spaces cannot be defined by pre-planned thought and conditions anymore, as these two constantly and continuously shift and intervene on different levels, transforming each other, dissolving, reappearing and emancipating themselves. Can these mobile gadgets be held responsible to be the instruments by which the privatization of public space and life is completed? Does their quality of "intimisation" relate or correspond to a general "decline" of public space? Transformations of space and life world also have affected notions of "intimacy", which has now rendered intimacy to acquire multiple and more complex shapes. The invasion or fragmentation of (subjects in) space makes public spaces vulnerable, and simultaneously brings further complexity and questions to the morals and ethics of everyday acts. With reference to the importance of morals of everyday acts, Jürgen Habermas has emphasised the need to reconstitute the public sphere by bringing down politics from the level of the "system" into the everyday "lifeworld".[5] How is this ideology relevant to a scene of mobile communication technologies? How can the subjective level constantly function to transgress the boundary into the social level of "system"? As a matter of fact, mobile communication technologies have already contorted and complicated such spatial boundaries in everyday life.

[4] An alternative reading would assume a date twenty-five years ago.
[5] Jürgen Habermas, *The Theory of Communicative Action. Volume I: Lifeworld and System: A Critique of Functionalist Reason*, trans. Thomas McCarthy, Cambridge: Polity Press. 1985. P.154

As this development is still unclear in the course it is taking, it is at least becoming clear to many that some aspects of this readily, almost generally available technology of communication may contain incalculable and unimaginable risks from the perspective of the political organization of public "security"; this surpasses the standard regressive or even reactionary reflexes that have accompanied all major changes in the history of media. It is a distinct element of such a criticism that "the speed and intensity with which both material and ideological elements now transnationally circulate have created a new order of uncertainty in social life".[6] Parallel to this, a "decline" of the public sphere as well as of security is frequently deplored. It is true that we see more and more public space, or space that was once neutral or open, occupied by private capital in a continued process of expansionism, recently most iconically embodied by the phenomenon of shopping malls, which, despite their actual lack of economic success, are still promoted as pioneer carriers of venture capitalism. This – along with other issues – raises questions about recent developments of society and economy from the viewpoint of a (post)modernist agenda. Attesting to a decline of the public sphere, Jürgen Habermas affirmed the need to reconstitute what he considered to be "the public sphere" by reintroducing what he calls "thinking politics". However, it is not easy to render the reasoning about public spaces more pragmatic without reconsidering past idealizing theoretical concepts of political thinking.

It seems that the infusion of a variety of properties into a fast-growing network of private-public media with their fundamental negation of formerly uncontested boundaries will not merely repeat discussions about the opposition of "public" and "private". Rather, it seems more apt to predict that the promise of a "universality" will not remain one – but will lead to a whole new set of promises, if not a new "paradigm". The anthropologist

[6] Arjun Appadurai, "Dead Certainty: Ethic Violence in the Era of Globalization", in *Development and Change* 29 (1998), pp. 905–925.

Victor Turner introduced the idea of the "liminal moment", which he described as "a moment of passage when new cultural symbols and meanings can emerge". It may be possible to apply statements like this to almost everything that is moving in processes of historical development. In this sense, mobile communication, more than being a moment of passage, could be approaching the discursive status of a meta-phenomenon in that it repeats, embodies, and epitomises what is moving, making the historical moment itself *moveable*.

Mobile telephony, even in the present, still occupies a rather specialised and limited stage. Still, it can be seen as being in a process of becoming the "role model" for technically organised communications in general. Can it still be described, to use Marshall McLuhan's term, as a "cool" medium, such as the original telephone was? How does mobile telephony help us to understand contemporary scenes of communication? There are, however, certain aspects that, without falling into the trap of "utopian" prognostics – most frequently found in advertising, but also quite present in media studies and media art – offer an opportunity to discuss the impact of such a reorganization of social structures. More and more powerfully, spaces of communication are integrated into complex clusters by the interaction between communication industries and consumers/users. They suggest the existence of an "almighty", direct and complete connectivity between any given subject A and any given subject B, and in the aesthetics of advertising illustrate the space of communication as a smooth, transparent continuum that is increasingly becoming more available and affordable. Has communication really become that simple? Whatever happens to the layers of meanings which cannot be encoded into digital data, which cannot be transported, where do they go, where does their negativity go? What kind of accountability does mobile telephony have? How do the spaces created through the use of mobile telephony contradict each other?

If we tentatively take into account McLuhan's idea that technology shapes the "mind" of users, how would mobile telephony then affect our way of thinking? What sort of topologies could mobile telephony be producing? If we see the contemporary era as a transition period, as a "liminal moment", what sort of new meanings are produced through portable technologies? Is its performative value in the foreground, or is it a sort of display, a rendering conspicuous, of private matters in public? Or does it amount to a "mediatization" of everyday life? If technology opens up new spaces for communication, are we transforming ourselves to fit into such new conditions, do we open up a new self? It is a simplification in itself – but a widespread and very effective one – that the digital mode of thinking, "1/0", "on/off" and "yes/no" – oversimplifies what is regarded as the "contents of culture", or the practice of everyday life, the way in which we operate, manage, master, craft, engineer, create our lives. How does such a mode of operation of thinking affect our ways of being? Keeping these questions in mind, in the following I will focus on three primary issues:

a) the uses, and consumer strategies that have been developed in the context of mobile telephony,
b) the way in which artistic and/or curatorial strategies can be considered fruitful in a discussion of these developments and in the construction of a critical condition around them,
c) the way visuals and audios are constructive and manipulative within these conditions.

To describe the geopolitical as well as the epistemological effects of mobile telephony in such a way that it can offer a bridge back to previous notions, I have decided to talk of a spatial-economical, political, social and perceptual complex that I have come to call "invisible landscapes", landscapes being created by newer communication and navigation

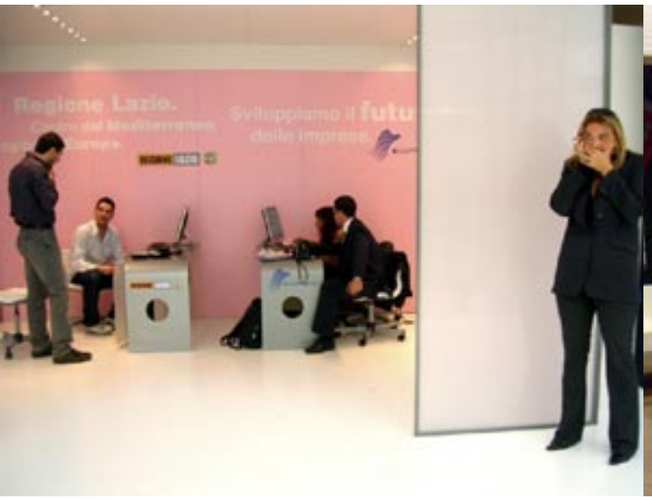
technologies. Using this notion equivalent of a perceptual and political space where the social and the individual as well as the public and the private are to be negotiated, it becomes possible to not only address the unifying rationale (or ideology) of networks or other technological platforms in their own terms, but to remain connected to the (also artistic/aesthetic) notion of "landscape" as a category that pertains both to the fields of the political and the imaginary, and to address social "markers" that correspond to degrees of visibility in each society / group / context, opening up better possibilities for a discussion that includes rather than excludes artistic and curatorial modes of knowledge production and/or criticism, which may or may not fit comfortably in existing academic categorization.

To see the social model being processed through such diverse, in part "quasi-naturalistic" (in as far as they claim to subvert naturalism) discourses may be a cause for worries – worries that should be dealt with seriously – but, if possible, starting from as few idealist concepts as possible, especially considering the wealth of very "material" (as opposed to "idealist" notions flaunting the "immaterial" character of mediated communion) information that can be collected on resources, as well as productive and distributional structures around mobile telephony.

Departing from the notions of "invisibility" and "landscapes", I will proceed to combine aesthetical and political aspects in a possible discussion of mobile phones from a variety of non-specialist viewpoints, a multiplicity of views that was once developed in literature and art as "cubist", but also, as in Kurosawa's *Rashomon*, takes juridical, forensic modes of (re)construction as its model. It must be mentioned here that my methodology includes three stages of work that are "external" to my written dissertation: The Invisible Landscapes was and is the title for three exhibitions, one in Malmö, one in Bangkok, one in Lund. Their contribution to this project is indeed crucial, as they helped to introduce

rich inspirations from artistic forms of research and knowledge, a complex of sources that is not easily categorised as one single discourse but represents a multi-faceted array of different experimental types of knowledge. My curatorial work in this field, that was an important initial impulse, was to research, discuss and present types of informal exploration – a type of research that, in itself, is historical in that it also represents present-day mainstream and alternative elements of mediatised production.

The exhibitions involved a great number of international artistic and non-artistic producers who were juxtaposed and commented upon by my own research results on different aspects, for example my exploration of the material basis of global Coltan trade as the basis of a political discussion of the phenomena at stake – that are not debatable on an aesthetic level alone. That was also the reason to combine the exhibitions with a conference and a workshop. The written dissertation represents the attempt to document such an interaction over a period of three years, but also tries to carefully consider possible consequences by "juxtassembling" – dialectically combining the diverse contributions – without trying to fix them into easy definitions and conclusions. The objective was and is to present different approaches, exposing them to potentially unsecured encounters with what seems to be opposite or contradictory. The use of mobility and its technologies is presented in relation to theoretical concepts of new subjectivities that are emerging as a consequence of new forms of social ordering and conditioning. In a time where mobility is a crucial signifier in any discussion of curatorial activities within and without the so-called "art world", I hope to offer relevant elements of methodological reflection by addressing what is still in "flow", not yet fixed, still on the way to the peak of normal.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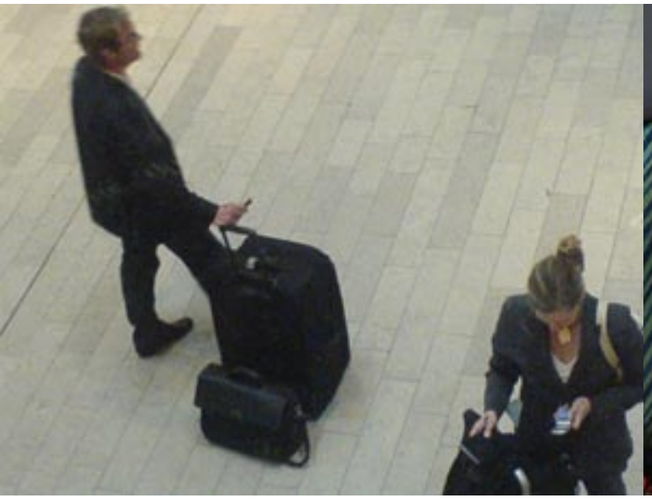

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TERROR EXPLOSIONS

Coca-Cola

Happy
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Day!

B. The Invisible Landscapes: Spatial Imaginaries

B.1. The Invisible Landscapes

This study sets out to discuss contemporary artworks on and around mobile telephony – images, sounds, texts, and others – as well as notions used by those who are involved in the production of social imaginaries. It is based on the analysis of works that allow us to clarify the structure, functioning, and experiential qualities of mobile telecommunication as related to previous telecommunicative ways of interacting between individuals and/or matters that were limited to "immobile" networks. Strictly speaking, those early networks were of course also "mobile" in a sense of expansion, that is: not by the design of individual users, but as an expansive "movement" of constructive activities facilitating global, transatlantic, and extra-orbital communications closely tied to construction-related industries and urban planning. It may be necessary to keep this mode of expansive movement in mind, since it has not stopped with the advent of mobile technologies, but has now developed to become ever more complex, incorporating individual, erratic, non-linear movements in "everyday life". Indeed, the comparatively short but significant cultural career of the mobile phone can be seen as one excellent example of this.

The term "landscape," used in the title of this dissertation as well as in the exhibitions presented in preparing and developing it, has been deliberately chosen as a historical reference. At the same time, this term is also being de-formed and re-formed in various contemporary media philosophies and theories; I will explore this in the following pages. First, I would like to sketch out my specific take on "landscape". As today we cannot speak of any "original" reference or relation to this concept, it makes sense to

define it as a set of conventions and agreements, as an artificial code used for many different interests. Landscape, in this historical respect, is also an optical structure composed of lines that extend to and across a horizon of visibility, as designed and claimed from a specific panoptical vantage point. Historical landscapes were idealised concepts, the centre they represented was a symbolic one. Standing on the top of a mountain, many rulers defined their spheres of influence as realms that included each and every thing visible from that point; but the important rhetorical gesture was to claim spaces and objects behind, beyond that horizon line. Speaking of landscapes today, I have to acknowledge that the "centredness" of ideal perspective is now no longer a privilege of the ruler, but in the meantime has been inscribed time and again into modern subjectivities. "Subjects", formerly an expression for *subjected* individuals, now describes a far more complex relation between individual realities. For our context, the landscape is a metaphor for subjectivity in an overarching complex of mobile temporal spatialities and unfixed identitarian states that have become significant today. The factual mobility of the media-operated grasp on the world-as-landscape is what most clearly defines the transformation of the term "landscape" here. This flow of landscapes is constituted by multiple aspects between a systematic level to that of an everyday experience, which I will elaborate in the following.

Since the 1990s, the complexity of these media-related contemporary realities has been discussed in different fields[7] of cultural studies, political sciences, anthropology, media studies, and others, introducing new terms and concepts to describe an interconnected plurality of consumer-producers and their imaginaries. Arjun Appadurai,

[7] See for example: Modernity at Large by Appadurai (1996), *The Information Age: Economy, Society, and Culture* by Manuel Castells (1996/97/98), *Globalization* by Jan Aart Scholte (2000), *Political Machines* by Andrew Barry (2001), "Virtual Landscapes of Memory" by Maja Mikula in Information, Communication and Society (2003) and a series of conferences called The Planetary Collegium, which has been organised by Roy Ascot since 1997.

for example, addressed the fact that "…there has been an important shift in recent decades, in which the imagination has become a collective, social fact. This development, in turn, is the basis of the plurality of imagined worlds."[8] Reflecting on such conditions, Appadurai proposed the notion of the "disjuncture" to indicate significant difficulties one faces in the analysis of a globalised society from a single point of view; and, accordingly, he has suggested five dimensions of global "cultural flow" as an elementary framework for exploring those disjunctures (Appadurai, 1996) transgressing cultural boundaries, which he calls "scapes": 1) "ethnoscapes",[9] 2) "technoscapes",[10] 3) "financescapes",[11] 4) "mediascapes",[12] and 5) "ideoscapes",[13] ideologies of states and counter-ideologies of movements, around which nation-states have organised their political cultures. Especially with the influence of technological changes over a century in mind, he emphasised the importance to consider "technoscapes" and "ethnoscapes" in rapid processes of "mutual contextualizing"[14] or displacement of technology and persons in a complex topology. Appadurai's schematic proposal certainly invites us to think of other "scapes" – but it is exactly of the mutability of a notion of landscape by adding different prefixes that is

[8] Moving and imagining moving: infrastructural software on the technoscape, p. 3.
[9] "By *ethnoscape*, I mean the landscape of persons who constitute the shifting world in which we live: tourists, immigrants, refugees, exiles, guest workers, and other moving groups and individuals constitute an essential feature of the world and appear to affect the politics of nations to a hitherto unprecedented degree." Appadurai (1996), p. 33.
[10] "By *technoscape*, I mean the global configuration, also ever fluid, of technology and the fact that technology, both high and low, both mechanical and informational, now moves at high speeds across various kinds of previously impervious boundaries." Ibid., p. 34.
[11] [Financescape:] "The disposition of global capital is now a more mysterious, rapid, and difficult landscape to follow than ever before, as current markets, national stock exchanges, and commodity speculations move megamonies through national turnstiles at blinding speed, with vast, absolute implications for small differences in percentage points and time units." Ibid., pp-34–35.
[12] "*Mediascapes* refer both to the distribution of the electronic capabilities to produce and disseminate information (newspapers, magazines, television stations, and film-production studios), which are now available to a growing number of private and public interests throughout the world, and to the images of the world created by these media." Ibid., p. 35.
[13] "*Ideoscapes* are also concatenations of images, but they are often directly political and frequently have to do with the ideologies of states and counter-ideologies of movements explicitly oriented to capturing state power or a piece of it. These ideoscapes are composed of elements of the Enlightenment worldview, which consists of a chain of ideas, terms, and images, including *freedom*, *welfare*, *rights*, *sovereignty*, *representation*, and the master term *democracy*." Ibid., p. 36.
[14] Apparurai, 1996,p.5

advantageous in comparison with other established terminologies of space, terminologies that need to be considered here as well.

In media studies referring to significant shifts in information values and technologies, Manuel Castells has taken recourse to the long-established notion of the "network" in order to render the complex and sometimes self-contradictory dynamics of "flow" in the information era understandable. Recently, the notion of "networking" has been widely adopted in political, administrative, marketing, cultural, and many other fields, as a model and a metaphor. The wide diffusion of the term is partly due to its potential to be suggestive of alternative, progressively developing structures, but it is also open enough to remain "promising" and to stimulate other, more utopian imaginations for the future. However, there are several critical points in the use of "network" here. One is that it remains abstract and general. Second is that the usage of the notion frequently ignores its historical background – including World War II mainframe computing and the Cold War context of ARPANET – that network technologies stem from government, military, and economic developments and spheres, and still contain their notional and structural frameworks inside their systems. It therefore seems highly advisable to apply much caution before easily adopting this term without a specific context.

Questioning further the specific topology of networks, the British sociologist Andrew Barry has asked for a novel way to describe them and to explore what sort of frictions exist within them. In his book *Political Machines: Governing a Technological Society* (2001), Barry has critically analyzed the problematic use of the notion of "network" both as a metaphor and a model – basing his criticism mainly on the biased image of information and political predominance it conveys. Starting from Appadurai's "technoscapes", he developed a new point by introducing the notion of the "(technological) zone".

Helping to conceive of an organization of governance – state, empire or nation – the concept of the "technological zone" functions flexibly, making it possible to translate new asymmetries between different locations and situations, while "networks" remain confined to be makers of "new" politics (Barry, 2001) and have become a fashionable catalyst for re-imagining a dominant sense of political urgency. The term merely replicates the functionalism and technological determinism of the dominant political discourse of the European institution. In "Notes on the State of Networking", Geert Lovink and Florian Schneider also speak of various kinds of "networks" as structures and their potential to resist what they, hinting at Toni Negri and Michael Hardt's term "info-empire". They admit that "networking has lost its mysterious and subversive character" after the hype around networks – that the notion has revealed its conceptual emptiness. Still, they see networks as viable alternatives to waves of popular conspiracy theories and as a medium of "freedom", when they describe them as "a syncope of power" against traditional hierarchies and existing structures.[15]

The danger of a romanticizing view of networking as a counter-cultural cliché is one point here that seems hard to accept. Responding to Lovink and Schneider's statement, Alexander Galloway has also found their definition of "info-empire" too general; he felt it is lacking a precise perspective or a further specification of the actual technologies contained within networks.[16] The generalizing use of "networks" often leads to a "metaphysics of the network". The concept then starts to pick up speed without actually having anything to do with actual networks in a contemporary everyday sense. Instead, and focusing more on the technological aspects of networks, Galloway has proposed the

[15] Geert Lovink and Florian Schneider, "Notes on the State of Networking", Feb. 29, 2004 in nettime. http://www.nettime.org/Lists-Archives/nettime-l-0402/msg00099.html
[16] Alexander Galloway, "The Limits of Networking", March 25, 2004, in *nettime*; http://www.nettime.org/Lists-Archives/nettime-l-0403/msg00090.html

term "protocol" to think the apparatus of political control and technological networks.[17] According to his analysis, the notion of "protocol" indicates an apparatus that facilitates networks and a logic of governing rules of relationships within networks.

"Protocol" as well as "network" both stem from computer science and the so-called "life sciences". They may give people a sense of relief because they sound "technological" enough to emanate a feeling of legitimacy. However, terminologies like these create the impression of an already existing, but somehow vague and unknown apparatus, which is still in an open process of becoming, and they are dragged into existing technological structures without much consideration. In addition to that, in exploring the general effect of tentative terminologies we have to take into account that the "free use" of terminology drags its unreflected particles right into the network technological structure, and the terms are allowed to already syncopate or limit the unimaginable.

If we consider mobile telecommunication to be part of a "network society", layers of political, commercial, bureaucratic, organizational, spatial complexity are permanently being added: for example, through permanently renewed industrial transmission standards, which, compared to the simple user-client structures in landline networks also necessitate novel ways of an increasingly flexibilised organization. But it is not only this technological and logistic complexity that produces serious difficulties to imagine the workings of a political organigram (or comparable image formats) in sufficient detail to "know one's place/location"[18] within an ephemeral structure. Tasks like this cannot be resolved by the broadcast media structure developed in traditional media theory. If one agrees to consider mobile telecommunication as a crucial mode of social interaction and

[17] Ibid.
[18] For an early example of artistic/curatorial work on "locatedness", see "Us trobeu aquí. Arquitectura i fluxos d'informació / You are here. Architecture and Information flows", eds. Laura Kurgan and Xavier Costa, Museu d'Art Contemporani de Barcelona, Barcelona 1995.

management, this calls for a reflection of processes within social (un)imaginaries that think, dream, perceive, symbolise, express, and discuss notions and images by which this new stage of technical interaction is being understood by its users and/or organisers.

The strong capitalist interest in the mobile telephone industry has led to an increasing worldwide quantity of related advertising. By promoting images of the mobile phone as markers for a "cool" and "trendy" social habitus, mobile telephony has even become something like the sexy version of McLuhan's "extension of the body" and, as such, occupies important spaces in contemporary spectacularised life. In order not to remain within the assumptions of an "uncanny" epistemology, this process of understanding is already going on – in the most diverse organised and unorganised ways.

In the age of material and immaterial mobility and connectivity, animate and inanimate organisms, things are on the move, reflect each other and are in constant processes of transformation. Mobility and connectivity signify open doors to something new, and seem to open up new fields of possible action. The quality of connectivity in itself remains unpredictable, allowing for unknown relations to be established and expanded. Telecommunications have for a long time been described as complex and mysterious and potentially dangerous, while contemporary conditions make it almost impossible to see any "big picture" or to get a valid impression of the "whole",[19] especially when one is not limiting oneself to root in a particular field. All these conditions suggest the necessity to reconsider relevance of mobile telephony through contemporary art and related issues such as how new technology involves the field of art.

[19] R. Buckminster Fuller emphasised critical needs of humanity of a „big picture" – as a context of the whole global system in many of his writings, see "Operating Manual for Spaceship Earth", New York, Southern Illinois University Press 1971.

Why "The Invisible Landscapes"?

Not only the term "landscape", "invisible" has been very much in use by now as well. In a sense, the title "The Invisible Landscapes" may not evoke any strong surprise in an unexpected, catchy or fashionable way. However, I see more potential in this familiar term to explore deeper concepts in a more generalised and communicative way. As already discussed, I hesitate to use particular terms taken from computer science and turn them into metaphorical speech, such as "networks" or "protocol", because they inevitably carry linear, binary connection of thought with them. On the contrary, I would like to include a non- (or trans-) computational as well as a non-logistic mode of thinking and imagining into my research. In other words, I deem any seemingly minor or subtle phenomena just as important as "major" or distinct ones, because they all constitute the world we live in, a world that may be expected to exist outside of or apart from "networks" and "zones". There may be a world that cannot be homogenised into a "protocol" language. The notion of the "zone" has difficulties to include the temporal dimension, and it lacks an affiliated concept of mutual contextualisation. But the plurality of imaginations on this level is a crucial part of the notions of "landscape" I am using here. Being inclusive and collective, the notion of "landscapes" is more apt than previous notions for the research I envision.

By using the notion of the "invisible landscapes", I am referring to a variety of "invisibilities" in daily life that are clearly triggered by the new communication technology of the mobile phone. For instance, there are curious tensions within special and perceptual changes triggered by an almighty connectivity and accessibility, questions of surveillance, power of capital and politics behind world-wide diffusions, the infrastructure of wireless connectivity, globalisation issues around the consumer device of the mobile phone, rumours and myths on the effects of radiation on the human brain, and

so on. All the above consists of modulations of new realities stemming from direct individual acts, but they automatically put us into a relation with questions of politics, media, advertising, and mass imaginaries.

As an answer to the neutral term of the "zone," while seeking for possibilities to grasp the complexity of the digital mobile communication, I have decided to use the notion of "landscapes". This historically rich notion is, both directly and indirectly, and subjectively and non-subjectively, linked to diverse social associations, interpreting them according to layers of human activities such as history, culture politics, perceptions and imaginations. Needless to say, "landscape" has been used as an ideological artistic metaphor in cartography, painting, and literature from the Middle Age, the Renaissance, and far into Western modernity. Continued into the contemporary, "landscapes" connects some experimental ideas and imaginaries: to name but one example, consider the title of a series of works by John Cage.[20] In addition, post-modernism has reassessed and developed a connotation of a critical approach to geography, in unison with a critique of cultural determinisms. Foucault, for example, using the notion of "landscape," was able to extract deeper power structures in governance and capitalism. Roland Barthes approached landscape in semiotic concerns to extract more layers of meaning out of (textual) landscapes. In comparison with these uses of "landscape", other notions – networks, territories, regions – show themselves to be just as much politically connected, which automatically regulate those spaces I try to explore with limited associations. Especially, these terms are based on results from media studies, and are developed on the model of

[20] John Cage worked on an early series of live performance works he called "imaginary landscapes". The first series, *Imaginary Landscape No. 1*, was created in 1939; here he experimented with conventional instruments and electronic devices in a variable speed record player. Later, in *Imaginary Landscape No. 4* (1951), he experimented with his concept of chance using twelve radio receivers.

broadcast media. However, the mobile phone may be an "intimate medium"[21] (Kluitenberg), "the first towards a micro-politics of resistance against the broadcast hegemony." This is also why it makes no sense to adapt the term "network" for spaces created by mobile telephony. These spaces imply many social structures, cultural traditions, economic activities and political patterns and more illegitimate spaces, all of which can explore and alter the notion of "landscape" deeply and significantly.

Applied to contemporary mobile communication landscapes, it can be used as an equivalent to subjective, spontaneous interactivity – in terms of perception, description, depiction and reaction – as well as political, social and economical interactivities. Returning to the phrase "landscapes are texts with multiple meanings,"[22] it implies individual results of attitudes and interactions – what we see, hear, talk, and think – as well as mass imaginaries in daily life. Especially in the case of personalised technologies, human agency with its flow of activities and productions is a crucial factor of the "scapes". They may belong to different layers in a process of transformation, but constantly affect our physical and psychological environment. The collectives of subjective imaginaries are as important as the abstract discourses. Instead of decoding the representation within landscapes, media theorist and art historian W.J.T. Mitchell has proposed a reverse hypothesis on landscapes as instruments of cultural power, of imperialism, or nationalism.[23] His approach implies that the notion of landscapes is not limited to representation, but stretches "beyond".

Consequently, the impulse of the mobile phone's existence forces us to think non-legitimate invisible domains and helps us to raise a set of questions. Which new way of

[21] Eric Kluitenberg, "Transfiguration of the Avant-Garde / The Negative Dialectics of the Net, Jan. 23, 2003 in nettime. http://www.nettime.org/Lists-Archives/nettime-l-0201/msg00104.html
[22] Barthes, Roland: "The Death of the Author" in Roland Barthes: Image, Music, Text. London: Fontana Press, 1977 (first published in *Aspen*, ed. by Brian O'Doherty, no. 5/6, 1967).
[23] W.J.T. Mitchell, *Landscape and Power: Space, Place and Landscapes*, Chicago: The University of Chicago Press. 2002, pp. 20–22.

invisible communication is created here, based on what type of cognition? Does cognitive science help us to understand visible as well as invisible phenomena in this context? What form of thinking does it produce? Is the visual simply limited to surface visibility, does it create the invisible within the visible? What kinds of invisibilities are emerging through mobile telecommunication? How are senses and organic function or dysfunction affected by these activities?

Although the mobile phone is already so incorporated into most of our daily lives, more serious and/or independent forms of research into its impact have only recently begun. Although volumes after volumes have been published, a great deal of which was funded by major telecommunication corporations, very few of these publications are actually known to a larger (scholarly, cultural, artistic) public. In this sense, the existing studies on the mobile phone can be considered as crucial connecting points for different disciplines to cultivate, grow and reflect a contemporary mode of thinking. In order to find ways not only to sensitively perceive phenomena, but also to understand both the invisible, the visible and the invisible in the visible, and to create a positive implementation out of new realities, I have pursued a research process in two exhibitions, The Invisible Landscapes, curated in Malmö (2003) and in Bangkok (2005). A third, conclusive exhibition will be held in Lund (2006).

B.2 Two Exhibition Concepts

B.2.1 Curatorial Projects: Malmö and Bangkok

In order to develop this project, two exhibition projects with accompanying programs were organised under the title of "The Invisible Landscapes", one was in Malmö, 2003, and the other in Bangkok, 2005, in a curatorial collaboration with Sopawan Boonnimitra. Each project had three parts along with the art practices presented in exhibition, aiming at different goals and using different methodologies.

The Invisible Landscapes in Malmö consisted of an exhibition, workshops (Malmö Konstmuseum and Rooseum, August 16 – September 7, 2003), and a conference (Rooseum, September 5–7, 2003), focusing on the topic of the mobile phone. The individual parts were organised to reinforce one another. Participating artists were: Henrik Andersson (Sweden), Henrik Frisk (Sweden), Laura Horelli (Finland), Kay Lokøy (Norway), Tony Oursler (USA) and Annika Ström (Sweden). The audience was able to start attending at workshops as an introduction to gain the basic knowledge of the mobile phone, then could move on to experience the representation of the mobile phone by artists, and eventually could take the fragments of knowledge and information, making their own linkages with expert knowledge and discourse. The whole project juxtaposed artworks with both material and immaterial information in different contexts, such as research on Coltan, a mineral component essential for the functioning of mobile phones, a documentary TV program on radiation, and other related information on the mobile phone, in technical, political, social and health issues. The research project continued on

the basis and in critical evaluation of the information gained in this functional complex in different formats.

The second set of presentations, Lak-ka-pid-lak-ka-perd: The Bangkok Version of Invisible Landscapes – the Thai title literally means: "sometimes closed, sometimes open" – aimed more at opening up an interpretation of Bangkok as a specific site and its mediated realities, viewed from diverse points such as political, social, sexual, and technological imaginaries. It was built on the assumption that the "invisible landscapes" addressed in the title can be regarded as symptomatic for a new form of capital, politics, media, and technology, here in the context of an Asian metropolis. The impact of the invisibility of these significant factors is affecting almost everyone, as well as the very notion of what can be called "the visible". Lak-ka-pid-lak-ka-perd: The Bangkok Invisible Landscapes project consisted of an exhibition, a one-day seminar and a film program. Again, each single event was planned in order to support the others as a point of departure from which the audience was able to explore their own understanding of contemporary complexities in Bangkok. Twelve artists – Howard Chen (Taiwan), Shilpa Gupta (India), Chung Haessen (Korea), Surasi Kusolwong (Thailand), MayT Noijinda and David "futon" (Thailand, UK), Bundith Phunsombatiert (Thailand), Wit Pimkanchanapong (Thailand), Manit Sriwanichpoom (Thailand), Annika Ström (Sweden), Tsang Tak Ping (Hong Kong) and Wang Ya-hui (Taiwan) – participated in the exhibitions at the Art Center for Academic Resources and at House Rama Theatre (an alternative cinema). Six speakers from diverse academic fields and Bangkok popular culture contributed to our one-day seminar. For the short film program, three commissioned films and eight applied works were shown in the House Rama Theatre.

Both versions of The Invisible Landscapes addressed contemporary issues in everyday life. According to the curatorial method applied, Malmö and Bangkok were set in

sharp contrast against each other, formally, and also methodologically. The former focused on a thematic exploration of the topic, the latter opened up questions raised by the former by reaching deep into the social imaginaries of a specific site, but viewed from a variety of "insider" and "outsider" perspectives. Two different methods brought a set of critical insight about the topic, but about the curatorial practice, as well (an aspect to be discussed later in section B.3.5.).

B.2.2 Curating under Conditions of Mobility: Curating as Mediation?

In a complex globalised network world, curators in the art field are now expected to become almost god-like, mediating figures managing different fields of the imaginary (and "unimaginary"). Concerning "attitudes of curating", Rainer Ganahl wrote an essay[24] about how the Boeing 747 Jumbo Jet started to operate in 1970,[25] enabling massive long distance travels and creating world-wide transport possibilities – for contemporary art as well. He stated that the new agency of mobility and networking has rendered the art system highly sophisticated and internationalised, and these facts made the emergence of conceptual art in the 1970s possible. These phenomena appeared together with other emerging forms of connectivity in new technologies and media theory of the same decade. Not just in terms of the media, but physically, the Jumbo Jet has made the concept of a "global village" become a reality. Both animate and inanimate have become more easily to be connected than ever before through constant acts of global networking. This space produced by mobility and connectivity created new roles and new spheres of influence within the contemporary art world: artists, curators, critics, writers, pedagogues, collectors, dealers, etc. could now change between these professions in worldwide networks. Ganahl points out that, in his view, this is the nature of a networking art world

[24] Rainer Ganahl: "When Attitudes Become … Curating". *Manifesta Journal* 4, pp. 38-50

[25] "The 747 was born from the explosion of air travel in the 1960s." On January 1, 1970 the first B747, a four-engine long-range airliner, finally entered service. This is the first moment for the shift the world in mobility, as the famous aircraft changed completely the way of flying in a sense of distanced travel, capacity of passengers and the lower cost. B747 is the first giant passenger plane, which is over double the size of the previous airplane, and is able to carry 498 passengers in early versions (550 passengers in later models). Fuel efficiency was realised by adapting a three-engine system to significantly reduce the cost of fuel per flight, causing the airlines lower costs. Retrieved on July, 10, 2005 from http://en.wikipedia.org/wiki/Boeing_747#History

in the age of mobility. Interweaving economic interests, identity investments and political tensions, the contemporary art world constantly reshapes social, political and cultural landscapes – ultimately made possible by the use of instant communication technologies. While, under the impression of the critique of authorship and "delegating" practices in conceptual art, the sentence, "This exhibition seems to be curated on the phone," slowly became a quite natural thing to say since the 1970s, the figure of the "travelling curator" has long become a staple of the contemporary art world's mythography. The contemporary need for intercultural communications certainly being justified, there is still a growing critique of those "agents" of the art world whose continual dislocation and (self-)displacement all around the world seems to reduce them to an existence merely symbolisng the immaterial nature of current global forms of capitalism, and not so much allowing them more than highly subjective and superficial insights into rapidly changing contexts. The possibilities of the Internet and mobile communication technologies can almost entirely be regarded as the basis of this development: mobilised communication has augmented the frequency of communications to a degree that is sometimes exaggeratedly called "simultaneity". Some of the developments urging curators to corporeal presence in hundreds of different locations around the world also seem to be indicative of a widespread distrust against mediatised realities. Combined with a tendency to promote idealised concepts of "immediacy" and "authenticity" that is still the "trademark" of the art world, there seems a curious contradiction between the current "art world tourism" and the claim to critical practice. It could be argued that, apart from facilitating the flow of art, tourism and business, contemporary media are generally used in the old sense of "status symbols" – in the case I am referring to here, the status of the worldwide cultural agent – and the chance to operate *with* them, *with* the advantages of immaterial transmissions, remains largely unconsidered. In the near future, any curatorial practice will

have to measured up against its ability to reflect the intricacies of the involvement with "material presence" (anywhere) in the art world and in its main medium, the art market – much as, for example, practices of institutional critique had to shift their focus from aesthetics issues to wider social discourses, and ultimately to the functioning of or their function within the market. More subtle consideration on the attitude of curating is now required, even more so since a wholly economistic view, of course, does not contain important debates about political and cultural strategies of representation that partly still function on the basis of a "real" (i.e. visual and/or corporeal) representation and of essentialist views of mediated presence as the only valid proof of existence.

In the late 1960s, the development of computer technologies and cybernetics dramatically transformed cultural production – it gave rise to "immaterial" art practices, not only literally through the application of computer software, but also as a generalised paradigm of a "conceptual" cultural practice of programming and protocolling – as opposed to material, hardware, and object-based practices.[26] Seeing early examples in System Esthetics (1968), Real Time Systems (1969) by Jack Burnham and an exhibition called Software (1970) at the Jewish Museum, New York City, the conceptual paradigm not only introduced "immaterial production" into a larger discussion but also that of immaterial labour.

Communication technologies in network systems and mobility are creating new conditions affecting people's lives on an increasingly global scale, since they seem inescapably subject to digital network systems. The practice of curating is not exempt from these developments. In order to reflect the reality of the dynamic changes in our life world, traditional approaches do no longer suffice for a new inquiry of the emerging fields

[26] See for example Lucy R. Lippard and John Chandler, "The Dematerialization of Art," in Art International, vol. 12, no. 2 (1968): 31–36. See also Lucy Lippard, Six Years: The Dematerialization of the Art Object from 1966 to 1972 (New York: Praeger, 1973).

– that, at least, is the present state of the discussion, in which the possibility to oversee and compare everything on a global level seems equal to the necessity – to travel. The exploration of the act of curatingis not limited to positioning, categorising, and analysing artworks, or merely understanding, filtering, grouping, and organizing. Acts of curatorship have long been linked to wider socio-political contexts and have developed partly in parallel to the artistic paradigm of site specificity, which significantly included an unspoken inclusion of the temporal aspect into the complex of their spatial practices. The amount of time dedicated to the specificity of a topos has to be regarded not just as an "economical" factor, but also as an ethical question. Today, this aspect of site-specific practice seems to be largely dismissed – people keep moving.

What has been said here to voice a critical perspective on a tendency towards "curatorial tourism" to a certain degree also applies to the project that was at the basis of this dissertation. Travelling to Bangkok as an "outsider" with few earlier contacts with Thai culture, I decided to accept the opportunity to travel and curate the second part of the exhibition project there. It need not be said that such conditions also brought a lot of difficulties at many levels in regard to the realization of the different artistic and curatorial projects there, on top of the significant cultural differences that have to be taken into account by anyone visiting a previously unknown place. Never having lived in Bangkok before, I spent over six weeks in the city in order to prepare and realise the project. What I can relate about this experience is perhaps not so different from other visitors' impressions. The city of Bangkok is filled with layers of highways, soaring skyscrapers of concrete and sheer glass walls, jams of tuk-tuks, busses and automobiles, a new metro and elevated rail system, and non-stop engulfing noise on the streets. From this level of fleeting perception, it is a dazzling display of the energy of nine million people. In the middle of an Asian cosmopolis, it was an almost impossible mission to navigate and negotiate with

others in developing things in this unknown place. One is required in Bangkok to react constantly, immediately, actively, but not offensively toward the others who entertain a different kind of respect for themselves and others. Given my constant lack of information and my repeated failure to grasp the situation, it was not easy to figure out where the point of negotiating really opens up, not only prices for different goods, but also standards of punctuality, "quality", ways of organizing and networking, communicating on an oblique level of verbal communication – a fact that I had to acknowledge, and ultimately gave the subtitle of the exhibition (sometimes open, sometimes closed) at least a double meaning. That means that the combined process of travelling and curating required me to learn about the conceptual basis of the project "on the fly", a process that proves to be as difficult as repairing a motor while it is running. The highly privileged situation that develops from there – to move with a set of experimental, makeshift methodologies in unknown and not always easy situations – is unmistakably an enriching one. Even in the course of only six weeks, the insights into different ways of social organization rooted in the local culture came in too massively to directly inform what had to be realised on the spot. Sweat, crying, conflicts, chaos, patience, losing hope, silence – eat and laugh; then the cycle would just resume: sweat, crying…

Through the project, I learned many things, and began to understand artworks by Thai artists on a deeper level. It was a kind of knowledge gained through direct experience and developed in a heightened sense of respect to others. Simultaneously, it contributed to clarifying the boundaries of the self, and enhanced further relational positioning between the self and the other. Global mobility is never as easy as a developed traffic today, but provides a certain approach to gain knowledge as well, which is uneasy to digest and requires large amounts of time for reflection. Otherwise it just contributes to preserving and reinforcing prejudices. The balance between the imperatives of mobility and of

knowledge differs from individual to individual. There is, of course, no standard model, no middle way between the two. However, just as most plants bear fruit only once a year, the production rate of the fruit of knowledge cannot be compressed. Or, are we becoming a foie gras to be stuffed with "information" and "knowledge"?

Related to its possible bio-political dimension, Alexander Galloway and Eugene Thacker have described the act of curating as follows: "It enflames, contextualises, bounds, manages, regulates and controls (…). It is the point where control and transformation intersect."[27] Joasia Krysa has tried to answer what could be called a need for structural knowledge and has also questioned the contemporary position of the curator in an immaterial (specifically software-based) mode of curating. She is seeking new possibilities of organizing the curatorial process itself, under conditions of newly established power relations.[28] Krysa introduces a historical context of curating in new media in relation to notions of immaterial production and labour. She ends her essay with a question, "The tension (…) between control and collectivity in cybernetic systems, is all the more apparent in distributed systems. Can the same be said of curating in the context of distributed forms?" She has transferred this perspective from Galloway's model of networks and Nicolas's analysis of cybernetics' influence on curating. However, both these arguments focus on the function of curating and on the power relations active in distribution, and hardly pay any attention to an intensified discussion about the potentials of conceptual aspects of curating.

[27] Alexander R. Galloway and Eugene Thacker, "On Misanthropy" http://cultureandcommunication.org/galloway/articles.html
[28] Joasia Krysa, "Curating Immateriality: The Work of the curator in the Age of Network Systems", in DATA browser 03 (2006) The editorial group are Geoff Cox, Joasia Krysa, Anya Lewin, Malcolm Miles, Mike Punt & Hugo de Rijke. This volume is produced in association with Arts Council England and University of Plymouth.

As Krysa further points out, "the practice of curating cannot be dissociated from social and technological developments."[29] It makes a lot of sense to say that a model of curating also follows, accompanies and triggers transformations in the age of mobile networking. Since contemporary curating is now situated in a much wider space than before, I would propose that curatorial acts could be much more active and creative, taking more initiative in terms of both thinking and production – researching, testing ideas and concepts through different, particular subjectivities, creating new (forms of) reference and producing spaces of knowledge with a lesser importance of boundaries and categories. The curatorial platform, in many ways a (con)temporary agency that should also be questioned because of its involvement within hegemonic structures, can also be seen as an experiment of intuitive assumption of thinking processes, and as a site for capacitating different modes of knowledge – through juxtaposing different contexts and methods – ideally from a viewpoint that is conscious of its own entanglement – and juxtassembling knowledge in one temporal (exhibition) space. In other words, a set of communication and mobile technologies has started to inform and produce an "attitude" of curating as an art practice.

[29] Ibid.

B.3 Towards a Curatorial Practice With the Mobile Phone

In order to give a brief outline of what is talked about here when we talk about the mobile phone as a technology, I want to sketch out a historical introduction about its origin that was closely related to military technology. After this, I will move on to show a very short chronological summary of major art projects both with telephony (since 1890) and mobile telephony (since 1990). This will not only provide necessary background about what kind of works have been created in the past, but it can also help to clarify a particular context of telecommunication-based works, to show the "state of the art" related to artistic practices with mobile telephony. How are these works conceptually different from earlier telephone art? If artworks with mobile phones develop or shift the focus of their conceptual approach, is there any inherited or adapted conceptual development that can be traced back to earlier works with the telephone? Or do mobile telephones require positing a totally different conceptual development? Following this thread – which is not just reproducing the "canon," but also includes less known works – through artworks both with wired and wireless telephony, I have tried to make understandable what kind of medium the mobile phone is.

B.3.1 Art as Communication in the 20th Century: Exhibitions and Artworks

A Short Archaeology of Telephony

The invention of telephony by Alexander Graham Bell goes back to the year 1876. He succeeded in translating sound into fluctuating electric currents passing through a wire and converted these back into sound with a receiver at the other end of the wire. Nowadays, telephony is quite naturally considered as a communication device. Bell's original idea for his telephone, however, was to use it as a training tool in speech therapy for deaf people.[30] It is quite fascinating how the history of the use of the telephone has been influenced and altered through developments in technology and through the application of social inquiry. Carolyn Marvin, a media historian, describes the early use of the telephone as a point-to-point conveyor of information and entertainment at the turn of the nineteenth century.[31] In 1881, experiments to use telephone lines to send out information (news, entertainment, and other content) were organised in both Europe and the United States. For over thirty years, the most advanced point-to-point telephone distribution system existed in Hungary. From 1892 to 1925, Telefon Hirmondo, the Hungarian "telephone newspaper" distributed a schedule of market reports, political news, sports, and nightly

[30] See Robert V. Bruce, *Bell: Alexander Graham Bell and the Conquest of Solitude*, Ithaca: Cornell University Press, 1990. Bell's positive work in the field of deaf people's education needs to be contextualised within his role in the promotion of eugenics: http://en.wikipedia.org/wiki/Alexander_Graham_Bell#Eugenics.
[31] Carolyn Marvin, "When Old Technologies Were New: Thinking about Electric Communication in the Late Nineteenth Century", Oxford: Oxford University Press, 1989.

entertainment from places like the Budapest Opera and Volkstheater.[32] In parallel with the expansion of the landline network, the mobile radiotelephone system was invented in 1924 by Bell Laboratories and began operation in Chicago police cars in 1928.

As was also the case with Internet technologies, there have been predecessors of mobile telephony in the fields of military, police and other state-run research that have only slowly transformed into "civilian" versions of the former applications. The first documented transportable telephone is from 1889 – invented in Sweden primarily for railroads and canals, as well as for military purposes. Lars Magnus Ericsson, the founder of the today still active Ericsson Corporation, already experimented with portable telephones for military use in the field in the 1890s. During the Boer War (1899–1902), the invention was brought to South Africa. The end of the World War II saw the release of the technology into civilian use. In order to customise the technology from the two world wars in the twentieth century, the first mobile telecommunication service (single manual operation) was started in St. Louis by AT&T in 1946. As a next step, the Swedish Telecommunications Administration's S. Lauhrén designed the world's first automatic mobile telephone system in 1951. That means that mobile telephony was invented in the United States and further developed in Sweden, even though it took over a half century for the commercial use of analogue technology that launched the first generation cellular system. In 1969, Nokia introduced the world's first 30-channel PCM (Pulse Code Modulation) transmission equipment conforming to standards of the CCITT (Consultative Committee in International Telegraphy and Telephony). With its important potential to reduce the size of phones, the first transistor was introduced in Sweden in 1971.[33] In Scandinavia, it was used by Nordic Mobile Telephone beginning in 1981. The

[32] On Telefon Hirmondo: http://earlyradiohistory.us/telenew1.htm.
[33] A patent for radio telephone system was finally accepted in 1973 in the U.S. and put on trial by Motorola in 1975. However, commercial mobile telephony has not started until 1984.

Scandinavian countries and Japan were early starters of the mobile telephone "movement", as well as Mexico City; Saudi Arabia joined in September 1981, a few weeks earlier than Sweden, which began operation in October 1981. Since then, mobile telephony started to spread widely, and in parallel, the development of telephone technology from transportable phones, mobile radiophones, analogue cellular (mobile) phones continued to evolve into GMS and G3 digital wireless technologies and satellite-operated phones.

Telephony and Art

Throughout the history of art and telephony, and until the present day, a considerable number of artists have directed attention to telephony. Although the concern was not the use of the telephone as an artistic medium, in a certain sense, the first encounter of art and telephony dates back to the year 1922, when the Hungarian constructivist artist László Moholy-Nagy devised his *Telephone Pictures* **(fig. 2)**.[34] Moholy-Nagy ordered five paintings to be produced in porcelain enamel technique – by telephone. This was, of course, not primarily for inherent technical advantages; the historical dimension lies in his questioning the role of the artist-creator as a mythical, isolated individual figure as well as the role art works as unique, original, hand-crafted objects. Moholy-Nagy used telephone communication as a remote control, but also as a tool to overcome prefixed images and ideologies of art, combined with his vision of the power of the concept of communication. A concept of "two-way communication" in the production of artworks was first proposed by Bertolt Brecht in 1929 with his didactic, participatory radio play *Der Lindberghflug* (The

[34] The first proposal for telephone art was made by Dadaists in Berlin (The Dada Almanac) two years earlier, but it was not realised. The proposal was to order an artisan by telephone to make a picture.

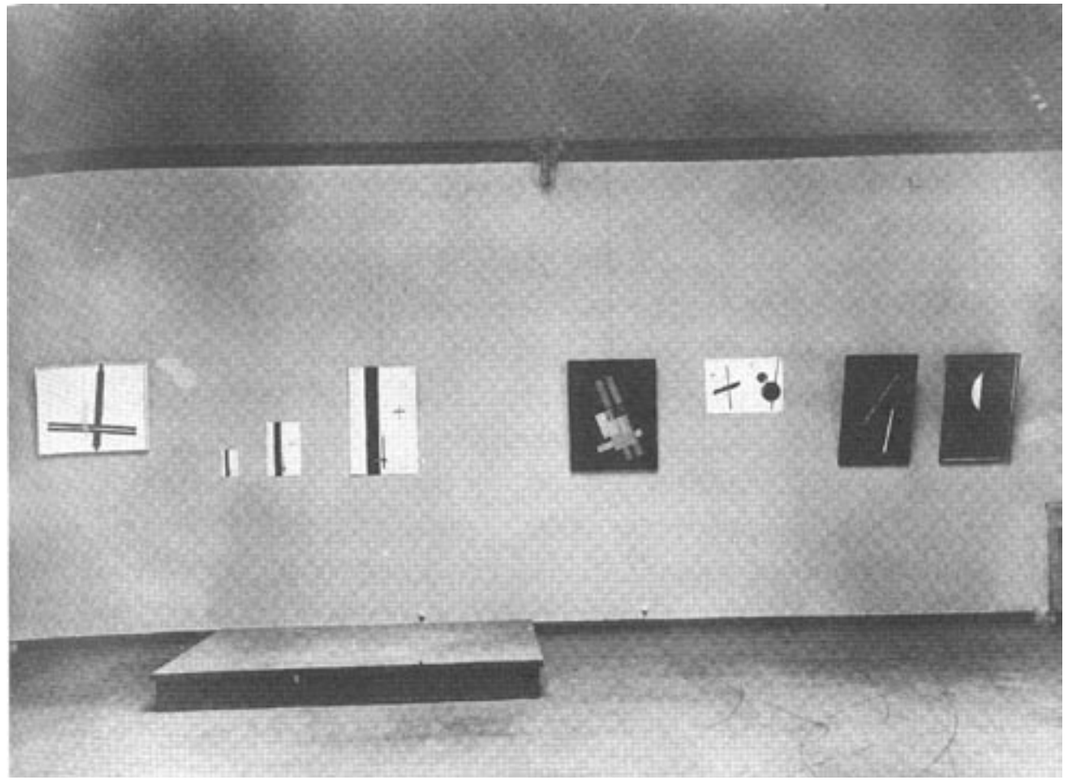

Fig. 2 László Moholy-Nagy, *Telephone Pictures*, 1924, Gallery Der Sturm, Berlin (Courtesy Hattula Moholy-Nagy.)

Fig. 3 Bertolt Brecht, *The Lindbergh Flight* (*Der Lindberghflug*), 1929. (Courtesy Bertolt-Brecht-Archiv.)

Lindbergh Flight) **(fig. 3)**.[35] His idea was to use radio as a form of communication exchange that allows listeners to participate in the production of a work. Later, in 1932, in his writings on radio theory, Brecht further developed his idea to use telephony as a tool to transform the audience into "suppliers" – producers of art. In his famous article "The Radio as an Apparatus of Communication",[36] he emphasised radio's importance as a "two-way" communication medium, since it can provide modern artists' practice with an educational, instructive dimension. Much later, in the mid-1980s, artist and media theoretician Roy Ascott, strongly influenced by Brecht, claimed that two-way telephony was the first democratic medium, and theorised telephone networks as decentralised and nonhierarchical structures[37] able to break through all sorts of boundaries – individual, institutional, territorial, and temporal.

The 1960s saw the emergence of art exhibitions and projects working with telephone technology, all with a certain undeniable optimistic enthusiasm for the new technology. Especially the-mid 1960s marked a flourishing period of experimental works using telephony. Attempts by visual artists to use telecommunication devices and technologies mainly surfaced under the form of experimental works of performance-based art, the "happenings".[38] Happenings in 1965 that combined technology with performance events by John Cage and Allan Kaprow, and initiated a continued series of collaborations

[35] Bertolt Brecht, "An Example of Pedagogics (Notes to Der Lindberghflug", trans. by John Willett, in: *Brecht on Theatre: The Development of an Aesthetics*, ed. Willett, New York: Hill and Wang, 1964, p. 31. Complete audio version is accessible under: http://www.medienkunstnetz.de/works/bertold-brecht/) See also Eduardo Kac, *Telepresence & Bio Art: Networking Humans, Rabbits & Robots*. Ann Arbor: University of Michigan Press, 2005.
[36] Bertolt Brecht, "The Radio as an Apparatus of Communication", trans. in: Video Culture: A Critical Investigation, ed. by John G. Hanhardt, Layton, Utah: G.M. Smith, Peregrine Smith Books, in association with Visual Studies Workshop Preess, 1986. Net version of the original edition as part of „Brecht and Theatre": http://distributedcreativity.typepad.com/on_collecting/files/brecht.pdf
[37] Roy Ascott, *Telematic Embrace – Visionary Theories of Art, Technology, and Consciousness*, Ed. Edward A. Shanken, Berkeley: University of California Press, 2003.
[38] Happenings were named after interactive participatory performances by John Cage and Allan Kaprow in the late 1950s and early 1960s as part of a larger New York avant-garde movement; they were mostly performed only once, and in relation to a specific space and time. "Happening" also designates an act of extension of action painting as represented by Jackson Pollock.

among the most diverse professionals[39] were strongly supported by the group Experiments in Art and Technology (E.A.T.), which was founded by the artists Robert Rauschenberg, Robert Whitman, Billy Klüver (a physicist from Bell Laboratories) and Fred Waldhauer, a scientist. Using existing telecommunication structures as their links, many of these works or projects typically claimed to connect remote live performances that were bridging continents, for instance the 1966 *Three Country Happenings* by artists Marta Minujín,[40] Allan Kaprow, Wolf Vostell, in Buenos Aires, Berlin, and New York City, respectively – early takes on a Western rhetoric of globalization through technology and media. John Cage also used telephone in his performance *Variation VII*. It was a real-time sound mixture, simultaneously using ten telephone lines installed in various places in New York City, twenty radio-band and twelve contact microphones on kitchen tools – a blender, a juicer, a coaster, a fan and etc. – and others. In the same year, Max Neuhaus produced *Public Supply I*. It was an experimental audio work using the existing telephone network. He mixed telephone calls coming in at the studio of the New York-based radio station WBAI in different ways and broadcast the listeners' sound and noises. Some listeners turned on their radios during the calls, and Neuhaus spontaneously responded to their acts through sounds. This created bundled sounds communication. As Neuhaus said, "I realised I could open a large door into the radio studio with the telephone; if I installed telephone lines in the studio, anybody could sonically walk in from any telephone…"[41] *Public Supply I* was foreseeing the coming model of Internet communication. In 1968, the *Air Art Event* was continuously organised by another group of artists consisting of Liza Bear, Keith Sonnier, and Willough Sharp, in Philadelphia. Art by Telephone was held for the first time

[39] In 1966, a great collaborative work with thirty Bell Laboratory engineers, visual artists, dancers, and musicians. *Nine Evenings in Theater and Engineering* were arranged by contacting individual corporations, foundations, art dealers, and collectors. The series of events significantly revealed difficulties in collaborations beyond the individual professionalities of "artist" and "engineer".
[40] http://www.martaminujin.com/happenings.html
[41] http://www.medienkunstnetz.de/works/public-supply-i/

Chicago's Museum of Contemporary Art (MCA) from November 1969. It was a group exhibition by thirty-six artists, including Joseph Kosuth, James Lee Byars, Richard Hamilton, and Robert Huot, who instructed and supervised the creation of a work using telephone communication. Telephones were used to send instructional messages to let paintings and other artworks be created in some remote, "invisible" place. A "recorded catalogue" was set up, documenting the telephone dialogues between artists and people at the museum **(see fig. 4 and 5)**.[42] Such early events, however, were tied up with John Cage's notion of chance operation and randomness, and rarely provided more than an imaginary sketch of coming forms of interactivity, rather claiming their imminence and necessity on a symbolic level.

The *Anand Project* was another ambitious example of large-scale projects organised by E.A.T. As a collaborative work with Vikram Sarabhai, an Indian scientist, it made use of telecommunication networks and satellite communications. In the work that spanned over six years, they succeeded to transmit educational television programs, to potentially over 600,000 villages, and to an estimated five million people to be reached in India through 1,200 hours of programming, in the year 1975 alone. Continuously, several other satellite projects were organised with the intention of crossing national boundaries.[43]

Reflecting the emergence of the abovementioned individual artworks, the year 1970 was a pivotal year insofar as a couple of significant exhibitions on information were held. One is the famous Information by curator Kynaston McShine at the Museum of Modern Art, New York, the other is Software, by pioneer media artist Jack Burnham, at the

[42] Eduardo Kac, "Aspects of the Aesthetics of Telecommunications", in: *Telepresence and Bio Art*, Ann Arbor: The University of Michigan Press, 2005.
[43] *Utopia Q & A* (1971: Telex text exchange between New York, Tokyo, Ahmedabad, India and Stockholm through specialised telecommunications terminals. It was a project to realise the concept of a global village across borders); Aesthetic Research in Telecommunications (1975ff.), Satellite Arts Project: A Space with No Boundaries (1977: Kit Galloway and Sherrie Rabinowitz supported by NASA); *Send/ Receive Satellite Network, Sat-Tel-Comp Collaboratory'* (1978: the multimedia telecommunication art project inspired by Brecht's theory of media as an interactive and two-way exchange of information.)

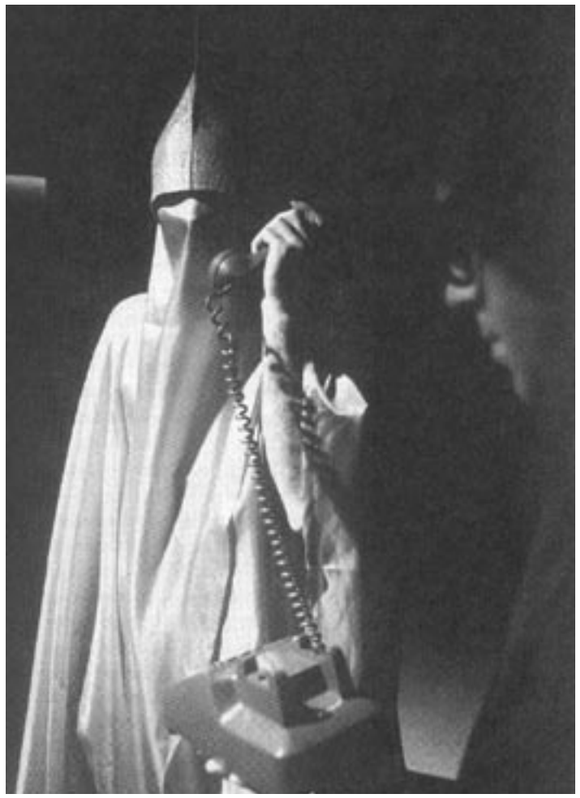

Fig. 4 James Lee Byars, *Art by Telephone*, Museum of Contemporary Art, Chicago, 1969.

Fig. 5 Richard Hamilton, *Chicago Project I*, 1969, The British Council

Jewish Museum, New York. The former was seen a model for coming exhibitions on conceptual art, the latter was an early statement on the development of digital computing technology and the Internet. Burnham used the real time informational system as a metaphor to describe "technological culture and the changing role of the artist within the art system." The exhibition also presented an idea that processes and systems was considered as a new form of art, which is opposed to the traditional object-based works. In the 70's, network still means telephones, electro-writers, telex machines and facsimile machines in the context of art. In 1971, E.A.T. organised another challenging project for children to link uptown and downtown spaces in Manhattan with fourteen specially connected telephone lines. More than 500 children visited the sites. They enjoyed communicating to children from other areas of the city they would normally never have met. The *Children and Communication Project* also revealed class problems related to the areas involved and hinted at the anonymity of telephone communication as a starting point for mutual understanding.

Never wanting to see this categorised as "telephone art", Jim Pallas started to work in 1973 with his idea of what he called PhoneyVents,[44] in which he played his audio works to whomever he chose to call. Later, the PhoneyVents were developed into Dialvents, which set up an open opportunity for callers to hear his works.

In the 1970s, multi-party teleconference systems were invented, so that, after early experiments together with Douglas Davis in 1974,[45] in the focus of "Art and Media" at Documenta 6 in Kassel (1977), Joseph Beuys and Nam June Paik communicated from geographically remote places in the opening through a teleconference link-up – and transmitted live into more than thirty different countries. Continuously, between 1979 and 1983, linked telephone concerts were simultaneously organised by musicians in multiple

[44] http://www.jpallas.com/phone/phoneyvent.html
[45] For a chronology, cf. http://cristine.org/events/douglas_davis.html.

locations like Berlin, Vienna, Vancouver, and Warsaw. Of course, the technology used was still quite exclusive and mostly not available to a larger public yet. The 1970s were a time of exploring the interactive potentials of telecommunication that could be used in education and in new forms of government and commerce. In retrospect, it also seems important to stress the rather naïve, utopian ideology behind the enthusiasm of most "alternative" projects using telephony in art – while at the same time, and with artist-supported anti-war movements in full-fledged activity, new possibilities of the strategic use of telephony as a military technology shaped the course of the wars in Vietnam and Cambodia.

The mid 1980s saw a shift in the attitude towards the ideology of technology, and participatory events came into the focus of interest. In 1982, the Pittsburgh-based Dax Group worked to create a series of telecommunication events, which were realised at the Ubiqua telecommunication lab on the occasion of the 42nd Venice Biennial (1986). In the same year, the exhibition The Machine as Seen at the End of the Mechanical Age (MoMA, New York, 1986) presented a manifesto proclaiming the "end of technology" in modernism and a shift towards information technologies and societies in postmodernity. On the other hand, in the same year as the Dax Group event, Liam Gillick organised telephone events in London (1982), early premonitions of a new model of art practice, "relational aesthetics", labelled in this way in the 1990s by Nicolas Bourriaud.[46] For these events, Gillick would call up a café and ask the barman to call someone there in order to have a totally made-up conversation with that person on the phone. In what seems to be a simple telephone prank, for Gillick there was an interest in an element of "happening" out of which things emerge and evaporate. His event again highlighted the notion of documentation by questioning the meaning of traces of events as opposed to the "act

[46] Nicolas Bourriaud, *Relational Aesthetics* (1998), Dijon: les presses du réel, (transl.) 2002.

itself". In 1979, parallel to the technological inflections and developments in contemporary art, Ars Electronica was started as a series of yearly exhibitions in the Austrian city of Linz. It encouraged the emergence of many network-related projects in the field of media art, which can be mentioned in a context with magazines like *Leonardo* which, since the 1960s, promotes a closer relationship between arts and sciences, providing information, promoting exchanges and stimulating thinking on both sides.[47] In the late 1980s, a number of video art festivals became media art, multimedia, or digital art festivals. International media art festivals and conference, – Osnabrück (1988), Multimediale in Karlsruhe (1989), Digitart in Budapest (1986, 1990), Mediawave in Gyor, Hungary (1991), Transmediale (transformed from Berlin's Videofest, since 1996), Future Sonic, ISEA (Inter-Society Electronic Arts), SEGRAPH, and many others[48] – created a particular dynamic for telecommunication-based art, and encouraged the conception of wireless projects as well as the development of related theoretical thinking by devoting a section to the theme of telephony in the field of media art.

Along with technological developments, more intensive efforts were made to create new categories, and the telephone as a medium was replaced by a new interface, monitor, mouse and computers, even though they were still using the same network and dealt with telepresence in the same way. This fundamentally changed the nature of many artworks – from anonymous sound-based work to multimedia or mixed media work such as net art, browser art, and software art.

[47] The online version has started to be available since 1994 as an MIT electronic publication. (mitpress.mit.edu/Leonardo).
[48] „Next 5 Minutes Festival of Tactical Media" began in 1993, and has been organised on an irregular basis. , Art + Communication: International Festival for New Media Culture in Riga, Latvia since 1999 focus on browser and software art. ICC Biennale, Tokyo since 1997, Electrohype in Malmö from 2000, Read_Me festival from 2002 in Moscow, Helsinki, Aarhus and Dortmund, Cardiff Festival of Creative Technology and so on.

Under such a conditions, some relevant telephony projects surfaced, both in small and big scale. For instance, in 1990, the Dax Group organised the first collaboration with African artists in a telecommunications event. Another recent work was developed by the Disembodied Art Gallery,[49] a British group who worked to explore a series of telecommunication-based art. One example is *King's Cross Phone-in* (1994), which scattered a message asking participants to call the number of a public phone at an appointed time for a chat. The telephone numbers were distributed around King's Cross Station in London via Internet.

A similar, but more computer-generated approach to a public audience using public pay phones was developed in Is Anyone There? A Voice Activated Tour of San Francisco Via Its Pay Telephone[50] (1992) by Stephen Wilson, running over a week's time in San Francisco. The artist organised a computer-based system, from which a digital voice automatically called five public phones. This was intended to be an open invitation for an open-ended conversation about life in the city, integrating whoever would pick up the phone. All dialogues were stored in an archive later available for public access. It was a trial if people conversing with a computer could use the anonymity of the telephone as a trigger for their imagination. The task of giving people an opportunity to escape their solitary life in the city was, significantly, assigned to a computer, which to some may seem as cynical as the "confession cells" in George Lucas's early science fiction movie *THX 1138* (1971): the computer keeps spitting out garbled general signs of affirmation and of hierarchical presence, ontologically oblivious of the concerns of the users/believers (see illustration in appendix). But if in Lucas's negative utopia there was a strong sense of disappointment about the lack of guidance from a supposedly higher instance or a father figure, Wilson's experiment seems to come from another tradition of questioning

[49] http://www.dismbody.demon.co.uk/
[50] http://userwww.sfsu.edu/~swilson/

authority that is more informed by the weird sense of humour of an artist like William S. Burroughs. But more than the question of "automatic authority", the form of the archive that Wilson alluded to as a psychological representation of "the city" has to be taken into equal consideration.

Frustrated with the mainstream media coverage of former Yugoslavia, Fred Forrest[51] created an alternative communication network project, *The Watchtowers of Peace* in 1993, which consisted of three watchtowers in the mountains along Austro-Slovenian border, and another one in a gallery in Paris. Peace messages collected from callers to a specific telephone number in different countries were transmitted to these towers, from which they were broadcast into the war zone. Works like *Pursuit, Fear, Catastrophe: Ruskin, BC* by Stan Douglas (1993), *Telephones* (1995) by Christian Marclay,[52] showing a tendency towards a cultural theory-inflected perspective on the uses of telephony, can be regarded as representative as well as *Local 411* by Ian Pollock and Janet Silk (1997).[53]

After 2000, with the rapidly increasing popularity of the mobile phone, telephony in general regained intensified attention, and from that solidified viewpoint and a growing interest in the juxtaposition of hardware and the body, material and immaterial art, appropriation art strategies have started to focus on artists' performances of the 1960s and 1970s, to re-evaluate and re-enact them with modifications, such as *Cellphone Performance*[54] by

[51] http://www.fredforrest.org/ny/wsr.htm
[52] Marclay's research-based work is a seven-minute video narrative consisting of collected scenes from Hollywood movies that show a great variety of reactions on the intrusion caused by telephone calls. Popular American actors and actresses play archetypes of human behaviour in the face of the technologically transferred Uncanny – anxiety, fear, boredom, joy, anger – all transmitted via telephone communication.
[53] Pollock's and Silk's work offered viewers from a specific urban area a set of telephone numbers where they could inquire about former residents in their area who had been exiled by urban renewal.
[54] A 30-minute cell phone performance based on a work Robert Whitman – originally performed using payphones in New York City in 1970. The performance in Leeds, 30 volunteers with cell phones stationed at predefined locations around the city centre. The participants repeatedly called a central telephone number and switch board situated on Millennium Square. The resulting calls were mixed by the artist and answered live by public address speakers to an audience in the outdoor square. – Robert Whitman, "Experiments with Art and Technology", in: Melik Ohanian/Jean-Christophe Royoux (eds.), *Cosmograms*, New York: Lukas & Sternberg, 2005, pp. 47–53, esp. p. 52 (where he describes the trajectory of his works from the 1970s to the present day).

Robert Whitman in Leeds (2002) or *World Question Center* by James Lee Byars (2004).[55] Mobile Music Technology Workshops have been held since 2002 in Sussex, Brighton, and Gothenburg. In parallel, a number of festivals and conferences featured wireless communication as their special focus. ISEA (Inter-Society for the Electronic Arts) 2004, along with a series of conferences, dedicated one whole section to Wireless Experiences, a section that consisted of close to twenty works, many of which were related to mobile telephony. In 2004, Futuresonic in Manchester was organised as an event on "mobile connections", including a conference, workshops and talks.

As can be seen in this section, a considerable number of experiments have been done with telephony since 1920s, with a wide variety of approaches. Telephone art was a part of early conceptual art; non-object based, chance-operated, shifting the position of audience as well as that of the artist. Conceiving of communication in an optimistic perspective, elements of telecommunication such as connectivity and anonymity were successfully adopted into many artists' strategies with the hope to break down boundaries – of geographical, time-related, territorial, institutional, national, and individual boundaries – from which forms and potentials of interactivity resulted. This has transformed notions of production, audience, and creator (artist), although the level of interactivity has mostly remained an imaginary or symbolic one. In some of these artworks, telephone networks are developed for public use, but somehow a strong "personal" attachment remains within them, which produces a different kind of trust toward the distribution of information. This has also established telephone art as an alternative medium for collecting and distributing information, in opposition to mass broadcasting and the net.

[55] A re-enacted performance by James Lee Byars from the 1970s, *The World Question Center*, curated by Jens Hoffmann in 2003 at BAK (Utrecht, Netherlands). It consisted of calling 100 "brilliant minds" all over the world. The performance lasted for almost 6-7 hours.

B.3.2 Mobile Phone Art Since the Late 1990s

When we now turn to art practices directly related to mobile telephony, it becomes evident that artists, computer programmers, musicians, designers and media researchers, and hybrids of these vaguely descriptive professional labels approached the new device in very different ways. Some of these projects used the mobile phone either as a trendy, mostly decorative ornament object or everyday practice, or showed an interest in the a portable screen of the mobile phone (ex. cellular cinema and mobile novel), and applications which are usually offered by major telephone communication companies to test the market potential of future forms of commodity. Still others were interested in the mobile phone as a device for the sound production, as was the case in *Dial Tones: A Telesymphony* (2001–02) by Golan Levin, a large-scale sound performance using choreographed sounds of dial tones and rings. Similar approaches to sound in mobile phones can be seen in other projects.[56]

On the other hand, mobile calls or SMS as a media platform for participation can be exemplified through works such as *BlikenLight* (2001) by Chaos Computer Club, in which people are able to play a "Pong" game on the façade of highrise by controlling lights in the then abandoned Haus des Lehrers on Berlin's Alexanderplatz **(fig. 6)**. Another representative of the SMS messaging technology as a medium for art projects is *Hello, Mr. President* of the year 2002 **(fig. 7)**, a mixture of the political concepts of private and public, in which public participation and representation was invited. Similar uses of the mobile phone can be seen in many participatory projects.[57] *Amodal Suspension* (2003), a large-scale

[56] *Japanese Whispers* (2000) by Usaman Haque, *Telephony* (2002) by A. Craigharad and J. Thomson, *MobiSymfoni* (2001) by Tobias Trier, *Spring Cellphony* (2001) by Information Sought, *Drumming Hands Orchestra* (2003) by B. Kremling, *Location 33: A Mobile Musical* (2005) by William Carter and Leslie S. Liu.
[57] *Musical/Devices* (2002) and *Phonetic Faces* (2003) by J.B. Cohen, *etherSound* (2003) by Henrik Frisk, *Simple TEXT* (2003) by J.B.Cohen, T.Redfern and D.Murphy.

Fig. 6 Chaos Computer Club, *Bliken Light*, Alexanderplatz, Berlin 2001.

Fig. 7 Johannes Gees, *Hello, Mr. President*, Davos 2002.

installation developed by Rafael Lozano-Hemmer for the opening of the new Yamaguchi Center for Arts and Media; *Poetrica* (2003) by Giselle Beiguelman, which used three commercial billboards in Sao Paulo to allow the public to compose visual messages, submitting them via Internet or SMS.

The use of the mobile phone transferred and extended the state of being connected to the Internet to open urban spaces. This also mirrors an emphasis on real time sound transmission instead of recorded messages. Igor Stromajer and the Intima Virtual Base[58] has performed a series of tactical art projects called *Ballettikka Internettikka II (*2002), where they broadcast an illegal invasion act they staged in a public building in Moscow, combining guerrilla tactics with the mobile live broadcasting capacity of the mobile phone. Applications like mobile phone photography, podcasting and moblogging are among the most popular phenomena connected as spin-offs to the use of the mobile phone. These technologies succeeded in altering the role of the mobile phone user into a more active one: being a real-time information sender and producer instead of merely a receiver and consumer. The popularity of photo gallery applications such as Flickr and similar websites reflects this phenomenon. In the meantime, the production of mobile phone artworks is not limited to programmers or artists, but also gives access to the so-called "power users" of the new technology. In a sense, telephony with new facilities and mobility has brought a need to discuss an ethics of the encounter to everyday life.

Another shift caused by the use of mobile phone was that it released projects from fixed locations – telephone box, cafés, offices – and developed itself as a location-specific application. This has become a trend, and it has created the discourse on Locative Media, which was given this name by British media theorist Ben Russell.[59] With great interest in

[58] http://www.intima.org
[59] Russell, Ben (2004): "Transcultural Media Online Reader, Introduction". http://locative.net/tcmreader/index.php?intro;russell

the aspect of the easy portability of the device, location-based information projects started to be produced both by individual artists and telephone operation companies. For instance, *Ima Hima* (Prix Ars Electronica, 1999) by Neeraj Jhanji, was a "located" information service, indicating, for instance, friends nearby, the nearest restaurants and shops or the exact address and co-ordinates of the spot where the mobile phone carrier stands. It was developed by an Indian engineer in Tokyo.[60] Other uses of Locative Media Projects include for example the *Mölndal Digital Guide*,[61] a Bluetooth-based tour in Mölndal, Sweden (2002); a more fictional use of site-specificity is made in works such as *GeoStickies* by Noriyuki Fujimura;[62] a style which is more using a fictional game-like character to be played out in urban conditions is, for instance, recognizable in *Can you see me now?* (Prix Ars Electronica, 2003) by Blast Theory **(fig. 8)**, developed in collaboration with the Mixed Reality Lab at the University Nottingham, England. Later this was continued into *Uncle Roy All Around You* (2004), and *I Like Frank* (2005),[63] using 3G phones and incorporating the previous two projects. *My Social Fabric* by Steven Blyth **(fig. 9)** is a representation of a person's social world, displayed as a single visual array of graphic symbols on the screen of a mobile phone. These were all mobile phone projects that were situated in city spaces in order to facilitate the experience of a mixture of real and virtual components, combining the use of different media – public telephones, internet/webcams, and mobile phones with GPS technology.[64]

One other interesting mobile phone project brought a different approach to the ideology of connectivity, since, in contrast to most other projects, it pronounced a "denial

[60] A similar service called "friend finder" was developped by Telia in Sweden in 2002.
[61] http://www.museum.molndal.se
[62] Unrealised proposal for the exhibition The Invisible Landscapes, Malmö, 2002-3.
[63] http://www.ilikefrank.com
[64] *Renga Project* by Andrew Patterson, and *The Walking Project* by the same artist (2003-06) are other examples of the artistic use of mobile phones with built-in GPS, but rather for gaming purposes than for sociological surveys. *DuoSnap* – GPS-mapped moblog by Tokyo Picturesque (2005), *PDPal* (2004) by Marina Zurkow, Scott Paterson and Julian Bleecker supported by Creative Time and Panasonic.

Fig. 8 Blast Theory, *Can You See Me Now?*, 2001.
The Work has been presented in Sheffield at the b.tv festival, the Dutch Electronic Arts Festival (DEAF), Rotterdam; the Edith Russ Site for Media Art, Oldenburg; the International Festival for Dance, Media and Performance(DAMPF), Köln, Germany; Gardner Arts Center, Brighton; Art Futura, Barcelona and the InterCommunication Center(ICC), Tokyo. Prix Ars Electronica, 2003.

Fig. 9 Steven Blyth, *My Social Fabric*, 2005.

Fig. 10 Arthur Elsenaar and Taco Stolk, *Bubl Space – Beepfree*, ISEA2004, Helsinki, 2004.

of service“ and rather focused on ”disconnectivity“: *Bubl Space* by Arthur Elsenaar and Tim Stolk (2004) is a device **(fig. 10)** designed to create a “phone-free” zone around the user, thus proposing quite a counter-approach to the mobile phone by reverting the user/victim scheme in telephone networks to the possibility of an alternative, more aggressive behaviour pattern. Another critical approach to the artefacts has come from Robin Rimbaud (a.k.a. Scanner) who has being calling himself a “telephone terrorist”. Twisting technology to intercept in landline and mobile phone conversations, he used wiretapping devices to gain sound bites to weave into the sound pieces he performed and disseminated in the techno/electronica scene of the 1990s. He can rely on a tradition of live transmission and wiretapping represented by artists like Maryanne Amacher and Pauline Oliveros. In recent times, these approaches were also successfully employed by sound artist Kaffe Mathews. Rimbaud considers mobile conversations as a hidden noise within a multi-layered urban soundscape, which “symbolises the space where hidden meaning and missed contact emerges.”[65]

In contemporary art practices, works like “Interview on the Street” (1997/8) and “Mobile Phone Use” (1999) by Laura Horelli are mostly mentionable for the way they use tools to gain interesting observations. Since conspicuously few works/projects on the mobile phone contain a critical point of view, the few ones that exist are all the more important for any survey of visual and acoustic art works in this field. Some works reflect contemporary political conflicts, such as *Postwar Footprints* (2005) by Lisa Parks, which dealt with the topic of the “postwar” reconstruction in Yugoslavia and Croatia. Experimental practices using mobile phone do not only appear in the field of visual arts, stimulating adoptions of mobile phone technology can be found realised in theatre works such as *Call Cutta Mobile Phone Theater* (2005) and *Wallenstein* (2006) by the group Rimini Protokoll. In a

[65] http://www.scannerdot.com/sca_001.html

political theatre play, “Wallenstein” mobile telephony was used in the middle of theater play to deliberately distract the viewers’ attention from the stage scenery while at the same time bringing a realistic “live” aspect onto the stage.

Being site-specific and real-time based, which has often been picked up as a sensational of aspect of mobile phone projects, was indeed a challenge that had long been taken up by landline telephone art. As can be seen in many projects of the 1960s and 1970s, multiple boundaries were also already passed through experiments conducted back then. Mobility-based projects are different from most other telephone art, which were oriented toward a more or less general public and relied on chance principles on the level of deciding who was addressed, in that they tend to be targeted in a specific direction before their execution. These projects frequently more strongly involve the related economies and industries or make use of the infrastructural settings that actually enables their operation – since logistics to implement new networks would exceed any imaginable budget. This reality of funding conditions, which is often vanishing behind the gleaming façade of avant-garde promises but was very present from its start in the late 1960s, exerts an undeniable influence on this field of artistic production and introduces a (questionable) division to either produce a “guerrilla”-type work on a personal level, or to collaborate with institutions, subsidised media laboratories or public-private co-operations. There is, of course, no real reason to subscribe to such a dichotomy that has already inherently accepted the conditions of capitalist culture. Other possibilities, at least now, seem to remain in some fields of production that are based on scientific and artistic observation and experiment. This may represent a paradoxical aspect of some mobile phone projects, which are constantly trying to involve a public “interactively”, but here it seems difficult to go beyond something personal.

In a sense, the state of development the mobile phone has arrived to – as an undoubtedly highly popular interface and, simultaneously, as a multi-media, multi-sensorial networking device – brings in types of creators from much more diverse background than this was the case with earlier telephone art. The context of mobile telephone art is certainly not only constructed by visual and sound artists, but by a diversity of other people, such as engineers, both "power" users and "normal" users, programmers, different kinds of designers, and so forth. A different field is gradually evolving out of this confrontation that was prepared since the 1960s – to form a field of mobile telephone and art. This has also brought in a wide range of contexts otherwise impossible to integrate, but still, it becomes more complicated to understand this "scene", which is continually connecting to new media practices as its functionalities increase.

B.3.3. Mobile Phone Studies

Literature Survey: Sociology and Media Studies

Since the breakthrough of the mobile phone in the mid-1990s, it has become what is generally called a central popular technology. Especially the year 2002 can be considered a turning point, when for the first time the total number of mobile phones in the world exceeded the number of individual landline subscribers.[66] In that year, 981 million people living in 54 "developed" countries owned 670 million mobile phones, a further 280 million owners were counted in China. There are still different levels of diffusion among "developed" and "developing" countries.[67] In some "developed" countries, the statistics already count more than one mobile phone per individual, such as in Austria. But different payment systems, such as "prepaid" or "calling party pays" systems have helped to drastically accelerate the development of distribution. Its speed has increased beyond imagination, and it seems that it is still only in the middle of its trajectory. Statistics constantly confirms that shifts in telephony have been caused by the mobile phone. Indeed, it is no longer regarded as a substitute for landline telephones, but as an autonomous device in its own right.[68] It is growing not only as the leading worldwide communication tool, but also taking over the leading role by blending seamlessly into other network technologies, taking over an important share, boosted by its major advantage: mobility.

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[66] ITU, "Mobile Overtakes Fixed", 2003
[67] Statistics both from ITU and TNS show mobile phone penetrations correspond to the growth of per capita incomes, which means that richer countries have higher diffusion rates. The low range of diffusion in "developing" countries, however, is countered by the high availability of the prepaid system (ITU).
[68] Especially in areas with no landline infrastructure, the mobile phone has been the first telephone technology that was introduced at all. It is diffused adopting different local conditions. For example, in Rwanda, mobile phones are fixed in public phone booths and offered as communal communication devices.

The general character of mobile telephony with its connectivity and mobility/portability, as well as its development, automatically forms different relations to social dimensions worldwide. The impact of mobile telephony has now become undeniable, and thus has been discussed in sociology, in media studies, in the art field, and elsewhere.

As was the case many times before with newly introduced media, mobile media have been neglected by media historians for quite some time. The implications of their respective uses seem based on a self-evident practice – it was especially problematic to discuss them in detail when their specific progress had been "socially imagined" long before and their realisation was merely a question of time, or technological and economical feasibility or opportunity. These observations seem to apply all the more when one considers not only quantitative effects of the new technology and its use, and when questions from media philosophy, ethics, socio- and bio-politics, psychology and other disciplines enter the field. Beside long-term quantitative empirical studies, it is particularly hard to differentiate here between "popular discussions" and more scholarly forms of research. The study of mobile telephony had not been taken up seriously until the end of 1997 in Europe when diffusion rates started to dramatically increase within the EU15, whilst Japanese studies had started some years earlier, in the mid-1990s, because there, mobile telephony shared common ground with the previous big breakthrough of "pagers". Still it s evident that even as it was considered a breakthrough of the "information age" in the 1990s, a prominent author in the field like Manuel Castells did not even include the topic in his published considerations, at all. However, especially after the year 2000, a considerable number of sociological approaches have been proposed on the way towards a deeper understanding of the phenomenon, and some critical anthologies on the subject were published. The number of scholarly articles and essays has kept increasing, in close correspondence with the boom of mobiles in the world. Recent

studies on the mobile phone have started to pay closer attention to specific uses in "developing" countries, acknowledging mobile use at different social and political levels of use in different regions of the world and covering a wide range of other topics related with the mobile phone.

In Japan, Hidenori Tomita, Kenichi Fujimoto, Tomoyuki Okada et al. published their book *Pocket Bell and Keitai-ism* in 1997, Tomoyuki Okada and Misa Matsuda later published *Keitaigaku Nyumon* (Introductory Studies on Mobile Telephony) (2002), an early collection of essays on mobile use in urban centres, mostly focusing on office workers and teenagers. It describes very instructively how mobile phone technology actually manages to connect strangers in urban solitary life, and how it helps to vitalise surface activities. Based on anthologies on "pager" phenomena, Mizuko Ito and Daisuke Odaka have related the popular mobile phone use of Japanese youth to the strict social structure of that country, instead of earlier attempts to relate it to a decline of morality among the youth (Ito and Odaka, 2005).[69] In Eastern Europe, Kristóf Nyíri has initiated an important series of publications from conferences on mobile telephony in Hungary, organised since 2001 and focusing on a different topic every year. Topics range from sociological and political effects to questions about cognition and community life.

As an anthology on wireless devices like mobile phone, pagers, PDAs and hand-held computers, Howard Rheingold's seminal and often quoted *Smart Mobs* (2003)[70] describes the next major techno-cultural shift after the impact of personal computers in the 1980s and of the Internet in the 1990s, founding his analysis on observations in Japan, the Philippines, Helsinki, Seattle, and New York. Rich Ling and Birgitte Yttri of Telenor

[69] Ito and Odaka, "Intimate Connections: Contextualizing Japanese Youth and Mobile Messaging" (2005) They recently edited *Personal, Portable, Pedestrian – Mobile Phones in Japanese Life* (2005) with Misa Matsuda. Cambridge: The MIT Press. Some sources in Japanese are *Territory Machine*, ed. Gendai Fuzoku Kenkyu kai, Tokyo: Kawade Shobo Shinsya, 2003., *Keitai kenkyu no Saizensen*, ed. Japanese Association for Semiotics Studies Tokyo: Keiou University Press, 2005.
[70] The same title website is also run by Rheingold: http://www.smartmobs.com/

Research, Norway, illustrate different forms of coordination and social regulation in the everyday use of mobile phones, which they call "hyper-coordination", based on sociological analyses from a questionnaire among Norwegian teenagers in their essay, "Hyper-Coordination Via Mobile Phones in Norway" (2002). Ling further developed this research in his recent study *The Mobile Connection: The Cell Phone's Impact on Society* (2004), with data collected in European countries (with an emphasis on Norway), and in the United States. **Eija-Lisa Kasesniemi** (*Mobile Culture of Children and Teenagers in Finland*, 2002; *Mobile Messages: Young People and a New Communication Culture*, 2003) has conducted similar surveys in Finland.

Studies on the mobile phone use of teenagers can be seen in the United Kingdom in Nicola Green's (*Outwardly Mobile: Young People and Mobile Technologies*, 2003), Andrew Taylor and Robert Harper, (*The Gift of the Gab? A Design-Oriented Sociology of Young People's Use of Mobiles*, 2003), Jon Agar (*Constant Touch*, 2003) introduced an attempt at a first global history of the mobile phone. Another publication that has to be mentioned here is by Ampano Lasen and Lynne Hamil (*Mobile World: Past, Present and Future*, 2005).

"On the Mobile: The Effects of Mobile Telephones on Social and Individual Life", published by **Sadie Plant** in 2002, offers a cross-cultural analysis of different behaviours of mobile phone users, with individual approaches based on gender, age, profession, and context, largely relying on Erving Goffman's rather dated methodology from the 1950s. In her short essay "Mobile Knitting" (2003), Plant connects the expansion of networks by mobility applying the metaphor of knitting from a feminist perspective.

Manuel Castells, Mireia Fernandez-Ardevol, Jack Linchuan Qiu, and Araba Sey recently published their ambitious collection *The Mobile Communication Society: A Cross-Cultural Analysis of Available Evidence on the Social Uses of Wireless Communication Technology* (2004). It contains reviews covering a wide range of topics from statistic surveys to the emergence of youth

cultures specific to wireless communication, and socio-political mobilisation in politics, based on world-wide case studies – from the Asian Pacific (China, Japan, Korea, the Philippines), to Europe (Spain, Scandinavia), and the United States. *Mobile Communication, Private Talk, and Public Performance*, edited by James E. Katz and Mark Aakhus (2002), is a collection of world-wide sociological research on the mobile phone. It is useful as an overview of studies on the topic. Jonathan Donner recently published a collection of articles on mobile phone use in "developing" countries, mostly in Korea and Rwanda (2004), which was collected in *Thumb Culture: The Meaning of Mobile Phones for Society*, and edited by Peter Glotz, Stefan Bertschi, and Chris Locke in 2005.

Of course, the textbooks and publications listed above represent but a small fragment of a rapidly expanding body of literature. Scanning through the numbers of research projects, it becomes apparent that mobile phone studies have started out from techno-utopian models (addressing the shock of the new technology), and have then continued as sociological analyses on phenomena in Scandinavia, U.K., U.S. and Japan, with an important emphasis on youth cultural aspects. At present it seems these studies are moving on towards a combination of cultural studies-inflected approaches with sociological perspectives on "developing" countries, taking into account the undeniable effects of globalisation, hence making them impossible to ignore for scholarly studies.

As already mentioned, the field of professionalisations relevant for the study of mobile telephony has expanded. Many of the important projects have been and still are happening in media laboratories and similar research institutions around the world.[71] The applications and software developed there by young programmers or engineers are

[71] Among the many projects that could be mentioned here, consider the following: MIT Lab (USA), Media Lab Europe (Ireland), The Mixed Reality Lab at the University of Nottingham (UK), Keitai Labo at SFC, Keio University, MoDe Project (Mobiling & Designing Project) at Tokyo University (Japan), the Dynamic Graphic Project in Human Computer Interaction at University of Toronto (Canada) and several others. Many are initiated by and receive funding from the respective countries' mobile phone industries.

uncountable. Their research in computer engineering and programming bring a new perspective of the technological progress and its economic relevance. For instance, a research project titled "Reality Mining,"[72] conducted by Nathan Eagle, a Ph.D. researcher at MIT Lab. He collected data from one hundred mobile phones over a period of 350,000 hours or nine months about factors of location, proximity, (inter)activity and communication of volunteers. From this data, Eagle has developed an algorithm by which he is able to predict with some certainty what will be the next act of any of the mobile phone owners being tracked, whether someone will go out later based on the frequency of calls to and from friends. This can be seen as indicating a possible future vision of how mobile devices will change our lives, but also as a new way to study (within) social networks. This kind of research has already received a lot of attention by the industry, since it seems to promise the predictability of consumer behaviour. The similarity of the described methods to those of policing and surveillance is not only superficial. It corresponds to a general tendency to enhance one of modernism's key projects – to transfer probabilistic models into economy and business (as well as into research), and to increase predictability of developments in a regularised time-based hierarchy of limited access to information – the developers on the early, the consumers on the late end of things. Hundreds of similar examples for this modularised form of regulation could be enumerated here. I limit myself to the observation that the reversibility of access – becoming surveillance – is epitomised by networks and embodied by the mobile phone.

[72] http://reality.media.mit.edu/

B.3.4 Mobile Phones as "In-Between" Artefacts: Inventing a Methodology

Problems in Mobile Telephony Research

One observation to start with: In general, early sociological research on the mobile phone focused heavily on teenagers and young people and their playful interaction with the technology. This may be a result of early analyses of which consumers' group includes the majority of "power users", but it might just as well reflect an attitude identifying "youth" with "new technology" or "progress". Another common trait is that most of the studies share a utopian vision of mobile phone technology – and the publications of Rheingold, Okada and Matsuda, Ito and Odaka, or Ling and Yittri can serve as examples here. A great deal of empirical survey work has been done, especially taking into account Manuel Castells and other cross-cultural researchers in their collection of national surveys on more than three hundred pages (2005), in which they are focusing on economic and political issues and on the general impact of the mobile phone on society. The biggest part of this is dedicated to survey information that is quite helpful to gain an overview of worldwide conditions around the use of mobile phones. Its analysis fills a small volume, but it still is one of the few studies that suggest viewing mobile phone phenomena from a different angle, and reject easy psychologising approaches in favour of more objective ones.

In and around the field of media studies, media theories have been quite established since the 1960s through the analysis of mass media like radio, TV, and others; however, they are largely based on the broadcasting model. Compared with the rather

fixed broadcasting structures of previous decades, ubiquitous mobile networking in portable gadgets represents a quite different development and cannot at all be covered by already established media theories. Many media practices still have a rather strong tendency to privilege the technology factor over that of contents: this often remains a focus to present more performative surfaces, or to produce a technological fetish.

Significant problems of mobile telephony research lie in its deliberately expansive nature, and in its being inclusive toward all categories that somehow promise to offer a vision of the whole. This kind of research does not easily fit into a single academic discourse, because of its character of essentially complicating spaces with its emphasis on connectivity and mobility/portability, constantly entangling mobile telephony in an endless variety of other subjects and fields. Its rapid development automatically affects the most diverse social dimensions on a global scale, constantly reaching out to explore spaces along the path of its development. While mobile telephony research connects and engages in different, otherwise not coinciding terrains, categories within the academic field are becoming unstable (which at present seems to call forth a re-regularisation and re-bureaucratisation), just as so-called new media brought variability, modularity, automation, and transformations of coding systems. Here, this suggests a use of the notion of knowledge not as something settled and fixed, but as something constantly being tested, reinterpreted, recoded and decoded. As the impact of mobile telephony has become undeniable, many aspects of this technology and its implications have been discussed in fields such as sociology, media studies, and art studies. However, sociological academic research on this topic is generally lacking information about contemporary media practices; there is little attention paid to what sort of practices around mobile telephony are actually happening in creative fields of culture such as (media) art, music, and theatre. In mobile telephony research, it is crucial to focus on these practices, because they try to deal

with the development potentials within the medium. The cultural practices might be sometimes misunderstood or prejudged as the irrelevant, exceptional, minor, subjective, solipsistic. However, subjective and illogical thinking is not necessarily unscholarly: it have long been discussed as a liminal space that allows for a critique of the all-inclusive character of the knowledge system, and also helps to introduce new paradigms of methodology. Especially mobile digital networks consist of the connections of subjectively used media. Their users' trained sensibility can be taken into account as intuitive observations and fundamental questions that allow for critical insight.

There is some analytical research based on media practice by the practitioners (designers, media artists) themselves; this usually focuses on the practitioners' own practice. In the sense of an interdisciplinary approach within the academic field, Japanese media scholar Shin Mizukoshi has tried to develop a combination of scholarly research and workshops with a group of designers - as a feedback system of development. Through his research activities, Mizukoshi proposes what he calls a realm of "socio-media", combining media and sociology. His experiments over a few years have led to interesting possibilities. A laboratory situation like his can provide a platform to test out certain questions under close observation. Still, I would say that the methodology of the workshop offers only limited experimental contingency. As a participatory practice with pre-focused questions, it remains trapped within a fixed framework. In that sense, workshops can be considered more as self-organised practice rather than interactive experimentation.

Parallel to this, in the academic field, "interdisciplinary" methods have been fostered in cultural studies programs and art school departments that engage in critical theory. The notion of "interdisciplinarity" has become well established: in fact, it has now become somewhat clichéd, so that the corresponding language has become too exhausted to allow for new insights or critical dimensions. However, many researchers still base their

work on existing discourses and feel partially compelled by adjacent fields of research to call their own model "interdisciplinary". These are, in a sense, natural problems with something that is as relational and inherently open-ended as "interdisciplinarity", but the notion does contradict the structure of previous academic discourses and their development. Having lost its grasp on inter-institutional realities – that are always also caught up in individualizing procedures and cannot engage in a continuous movement of inclusion and fusion – the language of the interdisciplinary, at least from a perspective of institutional critique, has become much less significant in the field of research. Arguably like institutional critique itself, it has become too institutionalised to criticise or comment on new developments in mobile network technology, which in many ways is an institutional nightmare coming true. Following this line of thought, existing forms and notions of interdisciplinarity or transdisciplinarity have become much less promising when they are applied to mobile telephony.

A critique of interdisciplinarity can already be seen in notions formulated "against methodologies" (Paul Feyerabend) in the early 1970s.[73] In his book *Against Method*, Feyerabend questioned the understanding of scientific practices in about a chapter on "Verificationism and Conventionalism", where he wrote: "Now – how can we possibly examine something we are using all the time?"[74] He continued, "No theory ever agrees with all the facts in its domain, yet it is not always the theory that is to blame. Facts are constituted by older ideologies, and a clash between facts and theories maybe a proof of progress. It is also a first step in our attempt to find the principles implicit in familiar observational notions".[75] He criticised the limits of conventionalism and found the Dadaist way of thinking as an example of creative thinking that goes along with intellectual

[73] "All methodologies, even the most obvious ones, have their limits". Paul Feyerabend, *Against Method*, New Left Books (Verso): London, New York 1975 (1993) p. 23.
[74] Ibid., p. 22.
[75] Ibid., p. 39.

honesty; for him, it is "between 'reason' and 'irrationality'".[76] The origins of his provocative statement can be traced back to philosophers of science such as Imre Lakatos and Karl R. Popper. Feyerabend proposed to everyone to construct their own methodology, with the consequence that he did not produce any model for the application or realization of these ideas.

In a way, this also reflects the unstable condition of categories and the problems of rigorous delimitation that we are facing in the digital mobile network era. Reflecting contemporary political, economical and social conditions, Hal Foster has asked how "interdisciplinary" the results of interdisciplinary work can really be, since there is an immanent danger in relying on a single discourse and on a common theoretical ideology, which might or might not question assumptions when adopting other disciplines.[77] With a similar objective, in order to avoid institutionalisation and to give a term to a different approach of thinking, the notion of "Avidya" was used by Sarat Maharaj, based on the ancient Sanskrit word "Vidya" (to see-know, also at the root of the Latin word "video"). By adding the prefix "a-", Maharaj aims at removing disciplinary bounds and avoiding rigid legitimised boundaries. He says that "Avidya signals not just its polar opposite, ignorance – it's closer to the privative than to negation. It expresses the middle term as in moral < amoral > immoral or typical < atypical > untypical – the 'neutral gear' of knowing that is neither that of the 3D disciplines nor its conventional opposite 'ignorance'."[78] In this line of thought, he has proposed the idea of artworks as "non-knowledge", which is a different format of knowledge. These notions may already be sufficiently suggestive to show the problems of a single theoretical approach to

[76] Ibid., p. 115.
[77] Hal Foster, *The Return of the Real: The Avant-Garde at the End of the Century* (1996), Cambridge: The MIT Press, 1999.
[78] Sarat Maharaj, "Unfinishable Sketch of 'An Unknown Object in 4D': Scenes of art Research", *Lak-ka-pid, Lak-ka-perd: The Bangkok Invisible Landscapes*, Bangkok, 2005.

contemporary topics of research, and indicate the necessity to develop and entertain more inventive approaches to both a method and a language that is not yet exhausted, and still inclusive of multiple meanings beyond the disciplinary limitations of semiology. There is no existing, ready-made methodology to apply to such a topic. Methodologies have and will have to be invented, constructed, and enacted, with many contributing their own suffering, perplexity, and reflection to this end.

In this sense, I have tried to construct a methodology to understand the scene of mobile telephony, through both pragmatic modes of thinking that are based on curating practice, and "non-pragmatist" modes of thinking through the "juxtassembling" of many earlier and contemporary theoretical references. In fact, the methodology is self-reflective also insofar as it is actually a "juxtassemblage" of curating (creating concepts, moving objects and images, *donner à voir*) and thinking (juxtassemblage). In other words, it is more like a constant trying out that is based on a reality defined by ephemeral situations.[79] I juxtapose fragments of reality and different modes of knowledge in order to associate them and let them interact, in order to watch and listen to what they will say. As an artist decides what to do next only a moment after contemplating the last brushstroke, I gradually develop my thinking through different speeds and stages – confused, pondered, lost, observing the other and the self, thinking once again – by contemplating what I learned through curatorial practices, artistic practices, art objects, and other sources.

Here, I need to clarify that the curatorial model of thinking is neither equivalent with what I called a "well established" interdisciplinarity, nor with a kind of "chance

[79] Claudio Ciborra, an Italian cognitive scientist examined the relationship between technology and organizations. He proposed organizational learning within modes of bricolage and improvisation, which is valuable to construct alternative systems. The notion of „bricolage" was coined by French anthropologist Claude Lévi-Strauss as the name for an alternative methodology for research, in his well-known book, *The Savage Mind* (1968). „Bricoleurs" construct theories not through applied abstract dialectics (from axiom – theorem – corollary) but by arranging and rearranging (negotiating and re-negotiating) with a set of familiar materials. Lévi-Strauss expressed the bricolage as "science of the concrete," as opposed to Western science.

disciplinarity" that would negate all that common ground that has been created before. A "chance disciplinarity" would rely on coincidences to set a certain frame, and a set of expectations as to what sort of transcendence can possibly happen. On the other side, the curatorial model of thinking does not depend on coincidence, even though it can take advantage of coincidence to a certain degree.

The different terrains opened up in the process depend on the initial curatorial question. This was not easy to accept, and it often resulted in confusion trying to relate the diverse statements from the artists in and about their works: the factors pointed by the artworks were not harmonious, in fact rather dissonant. However, I tried to consider the dissonance as something important, and to interpret the non-harmonious diversity as a driving force to inspire me to acquire and invent new thoughts. This uneasiness urges me to keep a self-questioning attitude, to think about the topology of mobile telephony from a micro-level of observation instead of abstracting macro-theories, and to tear down the exclusive notion of information. "Juxtassemblage" is more like a conversation rather than like a monologue, and so is the act of curating. It is an unconventional approach to technology.[80] This also makes me aware of the existence of unclassifiable aspects of mobile communication, without developing any anti-technological attitude.

I also use "juxtassemblage" to avoid a cognitive tendency that reduces inconsistency. To not fall into the traps of my own cognitive beliefs, I commissioned and juxtaposed multiple disciplines – art (studies), music (musicology), economics, natural sciences, sociology, and others – within my curatorial concept of the two Invisible Landscapes projects. New points of reference were created by artists responding to the questions I proposed for the exhibitions, but the results were quite unpredictable. Artworks within the exhibition have become specific examples of the phenomena of

[80] Sherry Turkle calls it "soft mastery": see Sherry Turkle and Seymour Papert, "Epistemological Pluralism and the Revaluation of the Concrete" in *Journal of Mathematical Behaviours* 11.1 (March, 1992), pp. 3–33.

mobile telephony; however, they might or might not fit into my scheme. "Juxtassemblage" may sound like it is trying to reproduce a typical "non-linear", "participant observer" post-modern attitude, where works are constructed from various materials available or at hand. However, in my methodology I do not distance myself from the object of my study; instead, I tried to position myself, my viewpoint, within the object. This leads to a very peculiar position within the system – in control, but out of control. But it allows my thinking to evolve from the bottom up, instead of top-down, ending up with something I grasped as the crucial points within the emerging unknown culture of the mobile phones. The idea of being "within an object of study," an attitude beyond a mere reversal of perspective that has, for example, also informed the poetics of the writer Francis Ponge or the film director Jean Rouch, may seem to provide a potential for a different kind of theory. All of the elements of practice, observation, and interpretation weave out a mandala derived from discursive and dissonant elements within the practices and structures of mobile telephony. What artists have elaborated in their works does not always belong to the same intellectual domain. However, that is why the curatorial model of thinking contains ways of dealing with gaps in established categories and disciplines. A "reasoning within" may not be adequate for all problems. But for a kind of problem that I see in the study of contemporary mobile communication, "juxtassemblage" may prove sufficiently complex.

B.3.5. Curatorial and Artistic Practices

Interdisciplinary Alternatives in Art Practices Since the 1960s

Looking at the history of contemporary art after the 1960s, juxtapositions or variations of interdisciplinary approaches in themselves are nothing new. There have been many previous "pioneering" experiments. Just to name an obvious example from as early as the 1950s, the London-based Independent Group (consisting, among others, of artists Richard Hamilton, Nigel Henderson, Eduardo Paolozzi and William Turnbull, the critics Lawrence Alloway and Rayner Banham, and architects Colin St John Wilson and Alison and Peter Smithson), worked on interrelations between art, design and technology within consumer society. Their legendary exhibition *This Is Tomorrow* (June 1956, Whitechapel Art Gallery) was an attempt at a super-juxtaposed exhibition display, in order to explore the notion of space from multiple approaches: architectural, pop-cultural, social, aesthetical, and perceptual.[82]

Supplied with state funding in the mid-1960s, a wider scale of interdisciplinary challenges was adopted by the group Experiments in Art and Technology (E.A.T.), founded by artist Robert Rauschenberg and by Billy Klüver, a physicist from Bell Laboratories.[83] Although this ambitious project was tied to a practical understanding of reality and remained at the level of an early attempt at interdisciplinary collaboration, it achieved a

[82] David Robbins, ed., *The Independent Group: Postwar Britain and the Aesthetics of Plenty*, Cambridge, Mass.: The MIT Press, 1990.
[83] On E.A.T.: Roy Ascott, *Telematic Embrace* (2003), op. cit.; Steve Wilson: Information Arts: Intersections of Art, Science, and Technology (2002), op. cit. – Margot Lovejoy, Digital Currents: Art in the Electronic Age (1989), New York / London: Routledge, 3rd, expanded edition 2004.

quite dynamic collaboration of engineers, scientists, musicians and visual artists. On another level of curatorial practice, in his 1972 Documenta 5 the Swiss curator Harald Szeemann gathered and introduced a diversity of artistic models in parallel with what he called "everyday objects". In this exhibition, he also explicated his term of "individual mythologies", strongly emphasizing individual artistic subjectivities as exceptional "cases", and broadening a notion of art beyond existing aesthetic categories.[83] Most prominently from the late 1980s New York, Julie Ault and Martin Beck, members of Group Material, tried to exercise art practices in crossing over different denominations of space: from the space of confined art discourses (galleries and museums) to the space of open contexts (public space/private space in public, as billboards, plazas, prints, community centres, and etc.) for the sake of institutional critique and a rudimentary critique of the art market.[84]

All these earlier experiments had great value as challenges. As methods of interdisciplinary work or of aesthetic juxtaposition they could not be integrated to form a unified set, because the combination of plural discourses primarily relied on individual choice and capabilities. In this sense, it has to be constantly examined and re-formulated for subjects in contemporary contexts. In the 1950s, it was somewhat necessary that Independent Group experimented with notions of space (or architecture) as it was directly tied to economic, technological, industrial, and social changes. Nowadays, it can be said that media technology has emerged as one crucial direction in thematic exhibitions. It

[83] For an analysis of Szeemann's curatorial practice since the late 1960s, and of Szeemann's "Agency for Intelligent Guest-Work" ("Agentur für geistige Gastarbeit") and his concept of "Individual Mythologies" ("Individuelle Mythologien"), cf. Søren Grammel, Ausstellungsautorschaft. Die Konstruktion der auktorialen Position des Kurators bei Harald Szeemann. Eine Mikroanalyse (1999), Frankfurt/Main: Revolver Archiv fur aktuelle Kunst, 2005.

[84] Julie Ault / Martin Beck, *Critical Condition. Selected Texts in Dialogue*, Essen: Zeche Zollverein, 2003; for a (self-)historicization of their project see also Julie Ault (ed.), *Alternative Art New York 1965–1985*, Minneapolis: University of Minnesota Press, 2002. Interdisciplinary approaches were not limited to the field of art. They have been tried in other fields, as well. From the 1970s, Richard Buckminster Fuller formulated a unique thinking discipline by drawing knowledge from a wide range of fields: architecture, engineering, science, mathematics, literature, astronomy, design - producing an approach he called "Comprehensive Anticipatory Design Science".

seems suitable to adopt the methods of juxtaposition and assemblage as parts of my own methodology for describing not yet fully defined technology of mobile telephony.

In the following, I want to present two of three exhibition projects that were part of the production schedule for my dissertation project. This will not only be a description of curatorial decisions or ideas, it will also be an attempt to deepen the analysis of some of the questions that arose in the course of the preparation and presentation of these art projects and their accompanying workshops, conferences and film program. The questions asked are closely connected to an understanding of the scene of mobile telephony today and the preceding overview of mobile phone art (chapter B.2) as to the current state of art projects related to the mobile phone. More precisely it is also connected to a certain lack of proposals that could be considered to add a critical dimension or to significantly analyse or widen the imaginative horizon.

What could be the link between the media interfaces of mobile communication technologies and the multitude of spatial imaginaries pertaining both to utopian vision and to everyday use of technically transmitted words, images, and sounds? In which way is the notion of a "production of space" applicable to the technological imaginaries of postindustrial societies that show an exploding number of mobile phone users? How do we understand contemporary forms of social collective imaging/imagining? Do "power users" produce any kind of "new space", and in which way is it or could it be imagined? In how far can existing structural models of spatial organization ("tree", "free flow", "rhizome", "nodes", "networks") still offer adequate descriptions of the complex hierarchical relations that arise in worldwide mobile communications? For, just as locally fixed telephony provided a shift in paradigms on a variety of levels, the addition (and multiplication) of mobility should be expected to provide yet another step upwards into

complexity. How do people adjust themselves in a new communication space that may mutate into a different dimensional space?

Objectives of the First Two Curatorial Projects

Far from answering these question, the art projects I organised first of all tried to lay out the foundation for an inquiry into their shared subjects: the visibility or invisibility of space and time as categories of mobile media communications. For the Malmö project, I chose the framework of a thematic exhibition that was crossed-over with the format of a group exhibition, whereas for the more site-specific project in Bangkok I decided to use the advantages of a collaborative approach combining thematic research and a discussion of current social and political issues as well as issues of the spatial imaginary in that city.

In The Invisible Landscapes, especially in Malmö in 2003, the curatorial methods developed from my objectives were the juxtaposition of different kinds of knowledge production. This changes the role of the curator to a more actively engaged figure, with a significant amount of research. Collecting and investigating information on the mobile phone included research on different topics, from the geopolitics of mobile phone materials and components, radiation quotas, antennas and technology, to social phenomena in everyday life affected by that technology – even though the constellation of the topics was selected in a rather subjective choice. It was an experiment of loosening delimitations among different disciplines and organizing a collection of knowledge in plural categories under a single curatorial concept.

There, the articulation of the roles that artists have played in the fabrication of social imaginaries was of the most importance. In relation to the curatorial research, artists'

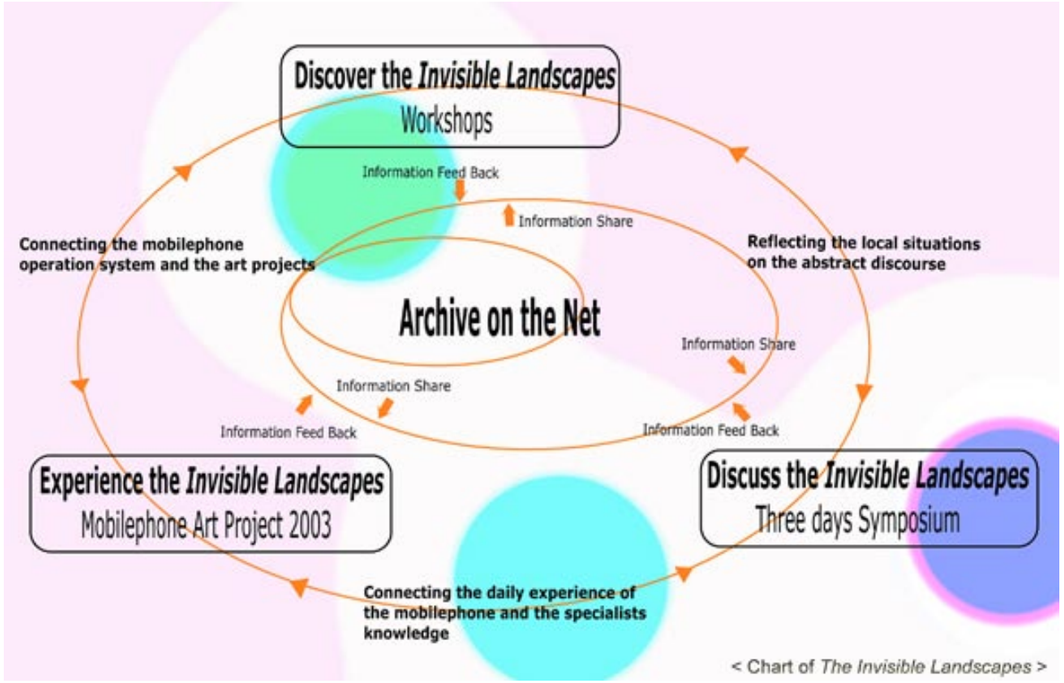
subjectivities did not merely add more layers to the curator's subjectivity, but significantly broadened the setting of the exhibition by introducing different approaches and creating new frames of reference for the study of mobile phones. In the next chapter, I will include case study examples of selected artworks to elucidate this particular point that touches on the question of the specificity of art and artistic imagination within a more complex visual and acoustic setting.

B.3.6. Malmö, Bangkok and After Bangkok

Site 1: Malmö, August–September 2003

"The Invisible Landscapes," the first exhibition of the project in Malmö, started to think and develop an image of hierarchical structures within the system of mobile telephony. By the year 2002, the mobile phone had already received a lot of attention. In order to present such phenomena, artists, musicians, scientists, some of which had already been fascinated by the mobile telephone, had devised art projects. Most of the previous projects around that time had focused more on technological developments or tried to practice "détournements" with the existing interfaces to find unexpected results from their "creative abuse". However, new interfaces, applications and forms are transitory and quickly replaceable, while the operation systems move more slowly and reveal a more resistant nature of technology. My intention was to curate a project to highlight mobile telephony by thinking about their "operation system" and making these thoughts visible **(fig. 11a, 11b)**.

"The Invisible Landscapes" organised in Malmö consisted of group projects on mobile telephony and was held from August 16 to September 7, 2003. It had three parts: 1) the exhibition, 2) a three-day conference and 3) workshops. The project intended to explore the mobile phone from diverse aspects, both from perspectives of subjective and objective knowledge, in order to deepen a general technical, historical, and artistic understanding of the device. The first part were four workshops called Discover the Invisible Landscapes, a series of sessions hosted by Noriyuki Fujimura in collaboration with me, at the Rooseum and at Malmö Konstmuseum. The workshops aimed at offering



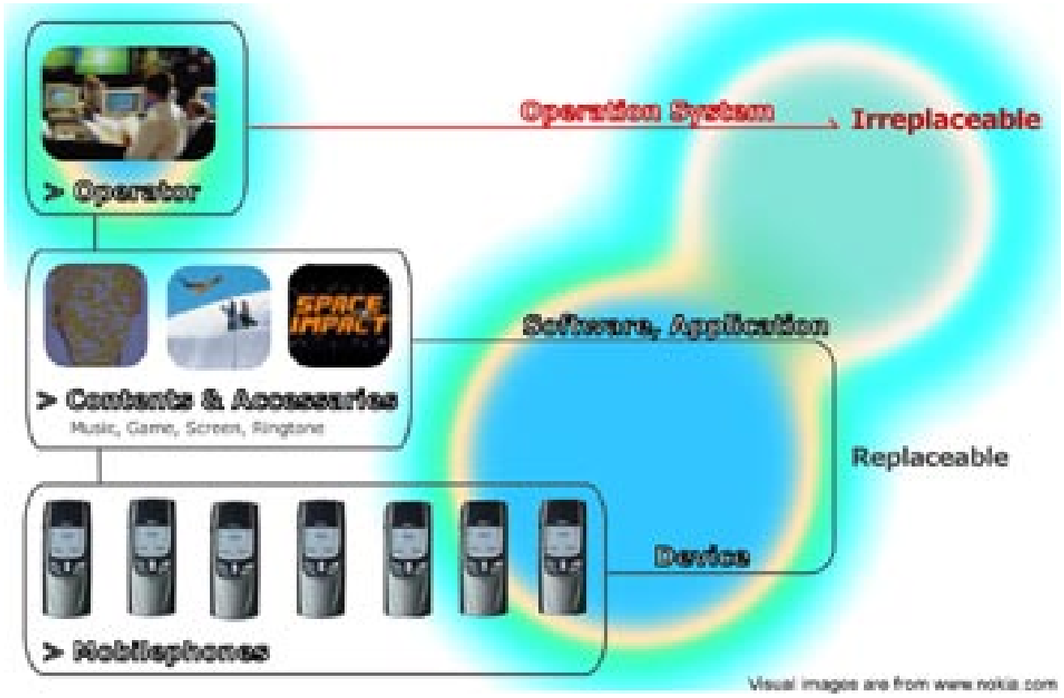


Fig. 11a, 11b Charts of *The Invisible Landscapes*, Malmö, Sweden, 2003

participants an understanding of how mobile phones actually function and are part of a complex world-spanning system of technologies. Over the first weekend workshop, participants tried to spot locations of mobile phone masts and antennas, while the next traced radiation routes of the mobile phone – the amount and location of emissions produced while completing one single phone call. Through their physical movement in urban space, not only theoretically but in actual movement, participants gained a better understanding of the invisible operation system "behind" the mobile phone. The series of workshops also pointed to a gap of articulation within everyday exchange processes of verbal information. The sessions revealed a different order of sending and perceiving information. People often unconsciously use their memory or their imagination to reinforce missing parts of information.

The exhibition part called Experience the Invisible Landscapes had six contributing artists: five from Sweden, Norway, Finland, and the United States were invited to produce newly commissioned works. Each artist presented his/her own artworks, which concerned the mobile phone's relation to public and private spaces. They introduced subjects crucial for the context of the mobile phone, such as the perception of the device by people from an older generation (Annika Ström, Laura Horelli), surveillance and political implications of the SMS system (Henrik Andersson), a critique of the information society (Kay Lokøy), a poetic interpretation of mediated existence (Tony Oursler), a democratic tool for public participation (Henrik Frisk), an observation of the image gaps of the mobile phone use in advertising and in reality (Laura Horelli), etc. The artists' observations, apart from any categorisation, created new reference materials and new angles for studying the mobile phone. I will explore these works in more detail and in relation to a deeper exploration of some of their "subject matter" in the next chapter.

The exhibition concept intended to provide a channel for the Invisible Landscapes through the different projects, and set out to indicate new possibilities for the mobile phone suggested by artists and researchers. Combinations of artworks and my own research on mobile telephony entered into conversation and continued to present different aspects of mobile telephony. For example, Henrik Andersson's work *Communication Central* was situated in a parcours-like sequence that led to the section for research archives created before the exhibition, where people could find further information – copies of articles, books and references to documentary films, displays of the economically contested rare substance Coltan in both Rooseum and Konstmuseum. The Coltan samples, for instance, were presented "as they were", without any accompanying written text, in order to give visual relationships to the topic take pride of place. At some distance from this display, but marked with the same yellow colour, the audience was able to discover the significance of the mineral.

The curatorial choice of artists for the exhibition included both "technological" and "non-technological" artists, to examine how each of them understands mobile telecommunication – the idea being not to limit the field to "professional developers" and "power users". The mix – media-oriented artists such as Tony Oursler, who examines relationships to technology in human psychology, Henrik Frisk and Henrik Andersson, who work on visuals or sound through computers, as well as "non-media" artists such as Annika Ström, Kay Lokøy, and Laura Horelli, who have subtly observed everyday realities starting from their own aesthetic questions – was designed to gain wider and more diverse views on the topic. Especially Annika Ström, to name but one example here, has often been using pop-like songs in her series of video works. Although she has not particularly developed her interest in mobile telephony, her attitude towards both sound and visuals seems similar to aesthetics in the early development of the mobile phone. I considered this

aspect of her approach quite apt for exploring the visual culture of daily mobile communication. A variety of platforms to experiment with or thinking about new media has been developed in new media conferences and festivals,[85] but they are usually organised by people who are already deeply engaged in this topic. The popularity of mobile communication technologies of course opens up such thinking processes not only to specifically media-oriented people. I intended to be in-between: not too technology-fixated, but inclusive toward more general, but especially critical voices that might contain open-eyed angles for a fresh understanding of mobile telephony. How do artists present the meaning of mobile telephony? How do they interpret this phenomenon, and on which different levels? How do they complicate it or contradict it? A whole set of questions is examined through the curatorial platform sketched here, as part of my research.

The third part was a three-day conference called Discuss the Invisible Landscapes. It aimed at re-viewing what the exhibited mobile phone art projects had explored over three weeks, and it provided a forum for further discussion with the contributors. The scope of the discussions was quite wide-ranging. It was an experiment of juxtaposition of different methods in diverse fields related to the mobile phone – from business, neuroscience, theoretical physics, contemporary art and sociology. In combination with the previous parts, the conference tried to provide a platform where the everyday experience of the mobile phone could be discussed alongside more specialist and abstract discourses. One of the curatorial expectations was not only an exchange of information but the emergence of a common space of dialogue capable of overcoming the speakers' various professional backgrounds. It showed different approaches to concepts of truth and subjectivity/ objectivity, not only between science and art, but among scientists as well. It also revealed

[85] Mobile Music Workshops have been held at Victoria Institute, Gortenburg in 2004 and the University of Sussex in 2006 to attempt exploring the new modes of music interaction, focusing on more technological innovations, such as sharing and wearing. Futuresonic 2004 also organised a mobile music conference and workshops that were focusing more on "locative media".

problematic aspects of presenting different kinds of knowledge within the apparatus of the neutral "white cube".

From Malmö to Bangkok: Critical Assessment of the First Project Stages

In general, if this kind of judgment is accessible to the curator of an exhibition, public response to the Malmö projects seemed positive. A group of artists, technology-oriented artists and others, reflected important parts of an emerging artistic scene around mobile telephony. The "juxtassemblage" method in the exhibition, where artworks were set into referential proximity with materials and information, seemed to be received as balanced. The unusual range of the speakers at the symposium also had a stimulating effect. The methodology of "juxtassemblage" helped me to understand different knowledge spaces within the same visual context. In hindsight, however, the project as a whole also had problematic aspects and showed the need for some improvement. Predictable problems arose when I tried to bring together different disciplinary spaces (even if they were only referenced or "represented"), especially in the significatory space of a public symposium. I had aimed to prepare a "neutral" space within an art context by collecting and coupling expertise from different fields. I presented them equally in a shared space, expecting that this would suffice to emancipate the speakers from their usual academic contexts and invite them to participate in discussions from a more or less independent position, but with their own crystallised knowledge behind them. "Juxtassemblage," as I already elaborated, was devised as a tool for critical thinking (without falling back into habitualised ways of thinking) and as space that could be motivating for productions. As things are learned not

only through reading within the confines of a narrow context, but also from experience through all other senses, I imagined such a space could function as a field of mutual inspiration and enrichment.

Eventually, most of the individual participants' engagement turned out to become self-conscious as a kind of "display" behaviour once it was set up in public, resulting from the insecurity of some of the speakers in this unfamiliar context. It was not easy to relate an understanding of the reasons why all were gathered there. It was not easy to open up cross-communication with established forms of knowledge, status, and discipline. My curatorial intention to be inclusive, or at least less exclusive, did not function in the way I imagined it would. Even though some contributions offered valuable insight, they sometimes did not succeed to open up to a less disciplinary way of communicating results.

Quite another problem arose with the way the topic of coltan, an essential mineral component for mobile phones, was introduced both in the exhibition and at the symposium. In the exhibition, I presented samples of the mineral in those parts of the world map where it is found, also indicating the remaining reserves. On the third day of the symposium, I invited Sofia Mikolo, a sociologist from Pole Institute, Institut Interculturel dans la Région des Grands Lacs, Democratic Republic of Congo, to present his research report based on local investigations. My curatorial objective was to think about invisible relations and effects behind the use of mobile communication – what supports our life of conveniences? What sorts of invisibility are produced in political and economic dimensions? The topic, seemingly unexpected in the context of an exhibition on mobile telephony within the art context, attracted a lot of attention. Mikolo's talk was very well accepted. However, it seemed that the topic that the Congolese scholar had introduced from an engaged political perspective was somehow easily consumed and integrated,

rather than provoking reactions and raising the questions to the other contexts of art, technology, economy, and politics that were present.

However, the presentation of the "Coltan case" – some basics of which could or should have been familiar to the participants – was enthusiastically welcomed as "unknown," as something new in the context of art with a geopolitical perspective. This struck me as very problematic, and it made me think of some other, similar displacements of knowledge that can be observed in the expansive space of contemporary art – the development that site specificity has taken, the increased role of art and art studies in national and international representations. What had my initial objective turned to be, after all? Did the discursive platform I provided function in a sense of mutual proficiency? Was I to blame myself for any exoticising gaze when I decided to include the issue of coltan into my project? Was this the proper way to present this issue within an art-related project?

Crossing boundaries of knowledge led to a series of shocking experiences and created some confusion for myself. It was as if I had opened up a Pandora's box, which prodded me now to go back to the core questions of my research. To say the least, it seemed very clear now that different disciplines condense or objectify knowledge in different ways. These do not easily meet in a communicative space, the notion of "communication" today frequently being overestimated as a magic that only creates happiness: "Connecting people"; "Building Networks that create opportunity"; "Change your perspective" – phrases like these, randomly taken from advertising campaigns, describe the almost magical allure of "communication".[86] Exhibitions working with juxtapositions could, in a certain sense, show the uneasiness inherent in "communication". The project in Malmö provided me with intense experiences but, from a more detached point of view, also with a great amount of information. While slowly

[86] For a recent example of scepticism against and a critique of the notion of communication, cf. Mario Perniola, *Contre la communication*, Paris: Editions Léo Scheer, 2003.

digesting what seemed to emerge as cognitive dissonances, I returned to reflect back on the meaning of communication in the mobile age, and on possible improved methods of juxtassemblage for different uses.

Site 2: Bangkok, March–April, 2005

The Bangkok Invisible Landscapes was a series of projects on contemporary conditions of visuality and visibility in Bangkok, which – inside of the project as a whole – was also organised to grant a level of reflection for the first project stage in Malmö. It was on display from March 11 to April 15, 2005. Art works, lectures, and films – these three forms were interrelated to approach Bangkok as a topical study in a comprehensive, yet necessarily fragmented way. All the fragments of the project provided viewers with diverse ways of re-mapping invisible landscapes of a contemporary Bangkok. Lak-ka-pid-lak-ka-perd: The Bangkok Invisible Landscapes introduced an open-ended thinking space to encourage us to foresee both the visible and invisible mutation of any city in everyone's life.

The exhibition aimed at exploring the notion of urban space in Asia (particularly Bangkok) starting from diverse fields of knowledge and from different cultural backgrounds – China, Korea, India, Sweden, Taiwan, Thailand. Some of the artistic approaches were more poetic (Bundith Phunsombatlert/Wang Ya-Hui), some laid emphasis on materiality (Tsai Tak-ping), some were simple collaborations in a sense of shared labour (Howard Chen), still others were cultivated in craft-oriented traditions. Their representation was filtered through different processes of modernization in Asia and

visualised an "essence" of Bangkok in each work, in significant contrast with more playful working concepts.

Reflecting on my experience in Malmö, The Bangkok Invisible Landscapes was set up quite differently. The Bangkok "version" aimed more at loosening up the topic, rendering it more general to provide ample occasions for collaboration. All the contributors felt secure enough to meet, without being too self-conscious to approach the context of mobile telephony. This attitude actually made the project less effective in literal terms of my specific interests – both in juxtassembly of different disciplines and experimentation around the mobile telephone. But it helped to find new key concepts to think about mutual communication, as the mobile phone situates people in relation to a numbers of other areas of culture. I was quite determined to make my experience visible –about how we understand the spaces of mobile communication without turning the "others" into sources of a purely intellectual pleasure of consumption, to not reaffirm stereotypical images of these "others". With these considerations in mind, my selection of artists was more focused on Asian countries, which today share largely similar conditions with modernisation experiences in other cosmopolitan cities. Even though the project acknowledged a global context, the whole set of programs was organised with a rather local audience, in order to open up spaces to re-imagine their own city from various viewpoints.

As part of the Bangkok project, I had another, more subjective interest, which was to understand a different context related to new communication technologies in Asia, a notion that is not tightened up by Western rationality. Especially in Thailand, there is a phrase that indicates a different way of framing reality: "Lak-ka-pid-lak-ka-perd". This phrase, which was used as the name for this part of the project, literally means "sometimes closed, sometimes open." This expression is used for any matters beyond binary

opposition, such as space (public/private), existence (the self/ the other), sexuality (hetero-/homo-) etc. "Lak-ka-pid-lak-ka-perd" suggests an alternative space of thinking in flow, a relative space, and in constant transformation. Postmodernism uses terms and concepts such as "fractal", "infinite", "hybrid" to describe a state of continuous change. These notions try to overcome binary oppositions, and emphasise a multiplicity of microscopic observations in the everyday and commonplace. However, theoretical problems of demarcation are not so easily resolved by simply calling them fractal or hybrid.

Quite on the contrary, I proposed that a space produced through communication technologies might be understood more easily through different conceptual approaches that have been developed in Asia. Accordingly, in the light of critical self-reflection on the previous project in Malmö, I collaborated with two artists in particular: Shilpa Gupta from Mumbai, India, and Annika Ström from Helsingborg, Sweden. Gupta is widely recognised as a media artist, but has begun her practice in the field of visual arts, and only later shifted her focus to media arts. I was interested in her potentials as a media artist, but also in the way she has been developing critical conceptual thought on global issues. Ström is an artist who had already contributed insightful works on mobile telephony in the exhibition in Malmö. She had already been to Thailand in 1997 and, this time, produced a short video piece, *Swedish Traveler*, where she caricatured herself as a stereotypical Swedish tourist. Her work in the past and previous collaboration in Malmö indicated possibilities for opening up an understanding of mobile communications in various contexts without being trapped by constraints of exoticism.

Along with the exhibition, a one-day seminar was held in order to do more experiments to unpack issues of visible and invisible Bangkok. It was conducted in six separate lectures. In the seminar at Chulalongkorn University, diverse approaches to

Bangkok were presented, ranging from politics, urban planning, architecture, technology and subculture. Thanes Wongyannawa contextualised conditions of the contemporary art scene in Thailand from a political point of view – how the previously de-centred Bangkok art scene has been centralised by means of a political initiation into globalisation. Khaisri Paksukcharern analyzed transgressive conditions of urban architecture in comparison with that of Tokyo, especially the significant impact of the current gigantic shopping malls on people's everyday life in Bangkok. Visurut Phungsoondara presented accident statistics of old transportation means such as tuk-tuks, cars, and motorcycles over the last decades, and explained the effects on the new transportation systems, like the so-called "sky trains" and the subway. Devapoj Sambandaraka talked about the right to education and free speech opened up by new communication technologies in Thai society.

As the final part of the project, eleven short films were shown as part of a special film program. *The Airport* by Patana Chirawong summarised the sentimental feelings of Bangkokians using the city's airport as a metaphor. The sentimental attitude towards the old airport shown on screen (visible), and towards the new airport, not shown (invisible), as well as the next progression of the city, showing the reflection of a young couple leaning on each other inside the old airport. *Bangkok in the Evening* (2005) by Sompott Chidgasornpong portrayed the Bangkok dwellers' distinct custom to stand completely still twice a day (8 am and 6 pm) when inhabitants and commuters listen to the national anthem. In a repetitive format, only with the sound of one of Erik Satie's well-known repertoire pieces, the film required nineteen minutes of patience from the audience, which subjectively appeared to be significantly longer than the actual duration. The sudden disturbance while in the middle of something else – jogging, exercising, shopping, walking – as well as the social impulse to stand still, has a great impact on the act of stillness. It even lets us imagine the dynamics and rushing movements before and after the

act. Strangely, when we watch the changes in contemporary urbanscapes, where a mixture of locals and tourists is standing still, it is clear to us that actually nothing changes. Through this poeticised and repeated daily act, the film hinted to a notion of the present moment as only a part of the dynamic flowing of time. This notion may provide one of the key elements of understanding what we see in "Bangkok-scapes". In *Un chant d'amour aveugle / The Blind Love Song* (2005), Philippe Lalue filmed blind Thai women on the street, singing love songs in Thai with their amazingly beautiful voices. *Life Show* (2005) by Thunsaka Pansittivorakul and *Bangkok Story* (2005) by Suankulabwittayalai Short Film Club also reveal subtle, but interesting views and exemplary thoughts on the Bangkok urbanscapes.

After Bangkok

Satisfied with the first commissioned work from Annika Ström, I decided to continue the collaboration with the artist, expecting to develop a similar series of works on mobile telephony in an Asian context in Bangkok. For video shooting and for close observations of the use of mobile phones, the artist spent ten days in Bangkok in 2005. She collected plenty of material during her stays and proceeded to edit them into a short film. But after some consideration, Ström changed her mind and decided to rather present a short film titled *the kindest artist in the world*, which includes none of the footage she collected in Bangkok. It is accompanied by a fictitious letter written in Bangkok and addressed to the "kindest artist in Belgrade". Annika Ström contorted himself into the role of fictional (real) Western tourists in Thailand who are often attracted by the city and fantasise about the country as a kind of utopia. Instead of any images about the use of mobile telephony in

Bangkok, she produced a utopian (stereotypical) image of the Finnish artist standing in a "snow" landscape, and projected this image back to a single individual from the West. Quite the opposite of her other work, her work this time had a strong impact within the exhibition, since in its denial of context and previous communications it seemed to try to posit a silent protest against the curatorial conditions. The simplistic portrait of the "kindest artist" in a white scenery gave me quite a shock when I saw it for the first time – two days before the opening of the exhibition, after over six weeks of running, sweating, and time pressure in Bangkok. It was not only different from what I expected, it just deliberately ignored the topic of the exhibition.

Reading through the correspondence between Annika Ström and me over half a year, it took some time for me to accept the totally unexpected outcome, which forced me to integrate the naïve, but forceful statement in Ström's work. Without any purpose in mind, she actually challenged the whole concept of the exhibition and flipped it over by asking for sincere acceptance of her position not as a special observer, but as one of the Western strangers.

Later, she described all the materials she collected in Bangkok were only superficial observations, which, in her view, were bound to remain pretentious. She said that this material could not allow her to reach deep enough to reveal any significant aspect of Bangkok life that would not be already be integral part of local knowledge. She continued her telephone statement by saying, "The use of mobile communications in Bangkok is far more progressed than in Sweden or in Berlin [where she was based at that time]. I felt there is nothing I can comment on. They are smart people." As mobile communication has been very powerful in major cities in Asia, I understood her feelings with remembering my own mobile phone experience in Bangkok and in Japan. But, I had to wonder what made Ström really exclude any possible insight on the issue. Her impression on "the

progressed situation" sounded like a lame excuse and made me think about the notions that she used: "progress" and "non-progress", "ahead" and "behind," combined with words like "respect" and "smart". Is anyone only allowed to comment when he/she feels sufficiently progressed (ahead/confident)? What other way of getting to know others is there that is not flawed by exoticising, stereotyping attitudes? Isn't labelling the "other" as "smart" and therefore ungraspable implying a much more rigid and self-righteous form of exoticism? As mobile telephony is so grounded in everyday life in many places in the world, I thought it could be an appropriate subject with fewer risks of being exoticised, instead offering something that is shared on a level before or beyond spoken language.

Outlook on the Final Presentation in Lund, September 2006

After the two art projects in Malmö and Bangkok, and through further exploration of my particular curatorial interest in the intersections of mobile telephony and other portable communications technologies, it is part of my concept – my hypothesis, if you will – that mobile technology has not only revolutionised accessibility in private and job-related environments, but is also deeply influencing the way in which artistic productions can be accessed and received by a larger public.

The final exhibition in Lund combines the physical space of the Konsthall and various media spaces created by portable devices such as iPods, mp3 players, and others. Together with a presentation of the two previous projects, all video works are shown on

eight Video iPods[87] – four white iPods show new art works for a site of Lund, four black show documentation of the two previous projects (in Malmö and Bangkok). The iPods present artistic communication, which partly comment the use of mobile devices, partly reflect the perceptual and social consequences thereof. I regard portable media players like the iPod as a means of image-based mobile communication adequate to present conditions.

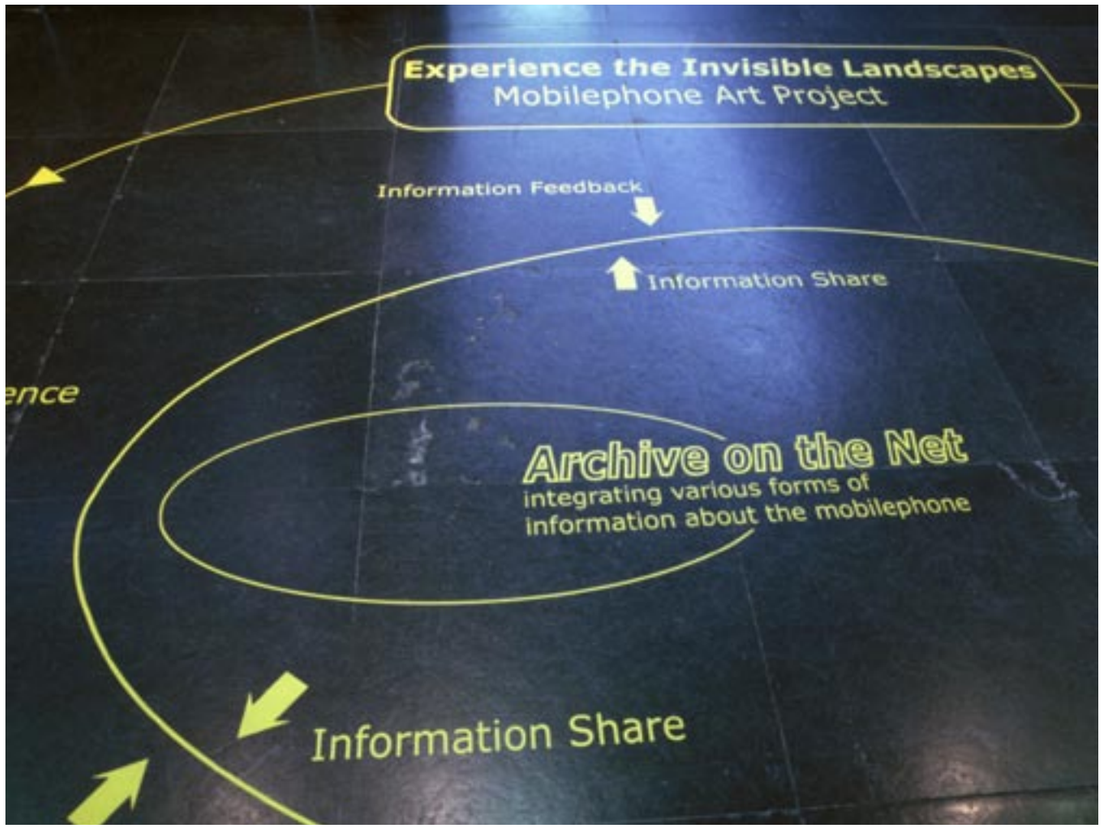
This can be read as a questioning of the exhibition space through new technologies of representation. For the art context which is usually very fixed to specific spaces, it will hold a critical quality: in order to support my hypothesis, I plan to present my curatorial contributions – and almost all artistic contributions – not fixed to the specific physical conditions of the exhibitionary white cube, but portable and controllable by each individual member of the audience. The curatorial objective of this project is to recreate a similar proximity through mobile telephony among the audience. Displacing such diverse topologies of mobile telephony into a gallery, the exhibition aims at revealing the complexities of communication spaces as well as the limits of synchronicity and perceptual evidence in contemporary lifestyles.

Video artworks shown in iPods are: *A Telephone Call* (2006) by Jimmie Durham (USA), *The Uninvited* (2005) by Judith Hopf and Katrin Pesch (Germany), *Hidden Curriculum* (2006) by Annette Krauss (Germany), *Marching Exercise* (2005) by Hiroharu Mori (Japan), *Superflat Monogram* (2003) by Takashi Murakami, and *Fasten Your Seatbelt* (2004) by Pius Sigit Kuncoro (Indonesia). In other forms of presentation, Peder Alexis Olsson (Sweden) shows

[87] Recently, attention had been directed to the question of portable screens for the presentation of art works, particularly on iPods. For example, The Escape Artists Society calls for video artworks especially for viewing on Video iPods in Vancouver, Canada in June, 2006. (http://www.escapeartists.ca) Another example is the current exhibition on Jean-Luc Godard at Centre Pompidou, Paris, "A Complete Retrospective: 140 Films, Documents: 75 films (April 24, 2006 – August 14, 2006). In the exhibition, iPods were used to show all his retrospective materials: all his films, and documents with or about him and his circle. However, in the Godard exhibition, iPods were fixed to the wall or treated as part of the installation; the audience was not allowed to control them at all. This curatorial use of iPods differs from my own at Lund Konsthall.

SMS poetry (2005) and sound poetry, *Transmitter* (2006) by Jonas Burn (Sweden), *Tokyo Dream* (2006) by Leif Holmstrand (Sweden) and *Almost There* (2006) by Maria T. Alves (USA) are streamed through localised sound speakers. Alice Creischer and Andreas Siekmann (Germany) present their research-based *Atlas on Monopoly-like Productions* and on *The Coltan Case* (2005), which refers to a mineral component essential in the construction of mobile phones. The group Rimini Protokoll (Switzerland/Germany) shows a documentation of its Mobile Theater Project *Call Cutta* (2005), which was a mobile phone-guided tour in Berlin navigated from a call centre in Calcutta, India.

Discuss the Invisible Landscape
Three day Symposium


Experience the Invisible Landscapes
Mobilephone Art Project
Information Feedback
Information Share
Archive on the Net
integrating various forms of
information about the mobilephone
Information Share

C. Curatorial Analysis of Art Practices with Mobile Telephony

In this chapter, I will analyse artworks as concrete examples from the two first exhibitions I curated within the framework of the project. These are five works from the exhibition in Malmö – *Ghostphone* by Tony Oursler, *Mobile Phone Use / Advertising* and *Street Interviews / Helsinki* by Laura Horelli, *Min Mobil* by Annika Ström, Communication Central by Henrik Andersson and *etherSound* by Henrik Frisk – and two works from the exhibition in Bangkok: *Untitled* by Shilpa Gupta and *The Kindest Artist in the World* by Annika Ström.

These seven works were selected out of the total number of seventeen, as they offer themselves particularly to a comparative discussion of those aspects of mobile telephony that are relevant here. The texts on each work consist of two sections. The first part takes a more descriptive approach to the work – notes about the appearance of the work, some remarks on possible intentions of the artist, and on its relative position within the context of the exhibition. The second part of each of the sections is dedicated to a closer exploration and analysis of the work, not trying to promote any single interpretation but proposing one possible approach from my specific curatorial interest. Each work allows for totally different perspectives on issues of mobile telephony, which do not harmonise with one another, but often seem to stand in a rather contradictory, paradoxical relation to one another, or seem to have no relation to one another at all. However, by analysing these examples, I will extract keywords that will be of important in the subsequent parts of this dissertation.

Tony Oursler: “Ghostphone” (2003)

(Transcript authorised by the artist)

Hello, hello.
Rain, pain.
bad, bad, mad.
Sorry, sorry, sorry.
Stay away, away.

Now, no, now.
Silent, violent.
Stop it.
Dead, yet, dead, yet
It hurts.

Cry… cry… cry… crawls…
Crystal, model, fondle, fear, slow fears
Slow, fears, slow
Slow…
Wa….wa… (screaming)

Everything is clear in here
Can you hear
Come near, my dear, dear and hear
Soft, soft, skin, skin, skin
Answer flutter after:
Try again,
Fire, sky net, bombshell, dark star*
(*repeat)

Hello, hello, La-la-la-la….
Critical error, critical error, critical error, critical.
Blurry texture, World.
You can’t see through me, you can’t see through me.
Blurry World, picture.
Oh. Do you have bu bu?
Bu… bu… bu…
Cush, cush, cush, cush… (noise)

It’s certain a bad happened to you about a thing.
Do you feel joy welling up inside you?
Power crush, corners hush.
Drive people rain, da… da… da…
Drop, drop.
I had a dream.
Dream, dream, dream.
Try, try, try, why, why, free, free, free…

See yourself and me.
You see, snob,
It’s me.
Mirror, terror, mirror, terror.
Don’t care.
Can’t stand it anymore.

Low, low, blow,
Blow, blow, low life.
Joy.
Come on, on, on, joy.
Where are you? Where are you?

Ho, ho, ho,
Rolling, rolling, rolling,
Down, down, down.
Bitter sweet heat.
Slop, flop.
Criss-cross, criss-cross, criss-cross.

Frost heart, heat hurts.
Melt away, away, away.
Lost, heat, hurts, hearts.
Low ego, seen it before, vulnerable flute player.
Ahhhh –
Earthbound…
Surf, sail, salt, somersault!
Summer souls, summer salt, somersault, summer swoop, summer soulssssssss…
Tic-tac, free slag, Dick Jack

I’ll be okay, I’ll be okay, I’ll be okay,
I’ll be okay, I’ll be okay.
Go away, far, far, far, forever and ever and ever.
Bu… Bu…
Bu… Gallery, gallery universe.
Oh… flow… Liquid time lasts.
Time’s up

C.1 Tony Oursler: Cognitive Dissonances in Communication

Tony Oursler, *Ghostphone* (2003)
Cordless telephone, CD player, stereo receiver, 9’50”
Rooseum, Malmö 2003

For the exhibition in Malmö, Tony Oursler has produced a new work called *Ghostphone* (2003). As its title suggests, it is an audio poetry piece, which can be listened to through telephone receivers. Coming up the staircase at Malmö Konstmuseum, Oursler’s installation greeted visitors as the first artistic work in the exhibition. Any artistic appearance was reduced to a minimum, since *Ghostphone* was presented on a support that visually merged with the “white cube” aesthetics of the exhibition space. Framed by the entrance door and inevitably crossing the viewer’s path, it came closer to an information box – thus enhancing the moment of surprise when it was actually used in the intended way.

Ghostphone is a simple installation: it displays two cordless home telephone sets on a geometrically shaped plinth. Visitors to the exhibition were supposed to approach this pedestal that had a printed label with the title on its front side, and pick up one of the phones to listen to Oursler’s voice. The streamed and looped voice track is approximately ten minutes long, one special aspect being that what you hear is actually a voice that was already recorded through a telephone line between New York and Malmö, and has then been filtered through this device a second time – providing an even greater impression of a “ghost-like” remoteness for the listener. Sometimes the voice seems to talk to an unspecified and invisible audience in a subdued but still aggressive manner, sometimes it resembles someone

addressing a child. The text consists of poetry-like phrases forming a playful chain of words in free association. As it continues, an additional voice overlaps with the first one and runs on as a parallel layer. It is this effect that transforms the character of the voice into something "psychic", oracle-like: it combines nonsensical words with irrational-sounding noises and screams. After a while, one gets the impression that "it", whatever is "behind" that voice, starts to explore the actual space around the installation over the telephone.

In *Ghostphone*, Tony Oursler succeeds to create a galaxy of imaginary space within ten minutes by combining the elements of telephone, human voice, and freestyle poetry. As it goes on, the audience has trouble following the possibly narrative text fragments and starts floating in a confusing space where sense is suspended. The title of the work already suggests a strong moment of irrationality by saying that the voice transmitted may come from a non-human source.[88] But, at least, it conveys something that is strange, awkward, ambivalent and hard to grasp – even after repeated listening the words still remain unclear, causing one to drift away from reality to another world.

Ghostphone emphasizes those qualities of telephony that might be called "uncanny", as opposed to a rationalistic view on technology. However, through the evocation of "another space", the specific surrounding space is made conscious, and listeners are naturally guided to consider the space produced by telephony. In this case, Oursler's suggestion opens barriers between everyday experience and what

[88] It may remind some of the once popular phenomenon of "paranormal voices on tape" that was "discovered" by the Swedish artist, singer and parapsychologist Friedrich Jürgenson (1903–1987) in 1959. Proving the attraction of an "auratic" quality of the telephone, Jürgenson's work on the "electronic voice phenomenon" was recently re-discovered by a new generation of sound artists, including Carl Michael von Hausswolff. Jürgenson claimed that what first seemed to be tape hiss and electromagnetic "noise" behind the recordings of his own voice were in fact sounds emanating from unknown entities, possibly even "voices of the dead". After an exhibition at Stockholm's Fargfabriken dedicated to Jürgenson's research, the Friedrich Jürgenson Foundation was set up in 2000. See http://www.fargfabriken.se/fjf/; http://www.tonbandstimmen.de.)

could be called the social memory of the listeners/viewers – which is composed of "real" experiences gained through the use of telephones in many different occasions, and "secondary" experiences such as those accumulated through the social imaginary as represented, for instance, in movies and novels. The voice in *Ghostphone*, a potentially menacing or frightening one, is clearly encoded from this mixture of different time layers. After ten minutes, the transmission comes to a sudden end with the last sentence: "Time's up", pushing the listener back to surface reality.

What then does this ten-minute experience signify? What sort of space has been created in *Ghostphone*? Why does this work create an uncanny feeling? How is the surrounding space interwoven with the influx of mediated presence, with the conscious or unconscious presence of the listeners? To get closer to answering such questions, it has to be taken into account that Tony Oursler is known as one of those contemporary artists who has most intensively examined the use of technologies of global communication. Tony Conrad has described his use of the voice as one that should be differentiated from "ventriloquism" (which comes to mind when we are confronted with his "talking heads", projected onto puppet heads) – it is a voice that can only be *received*, and thus, one could say, gives *Ghostphone* another kind of "medium specificity". The "ghostly" character of the voice is particularly prominent as there is no possibility to answer or interact. Conrad sees the telephone as part of a system of technologies: "The telephone, radio, and phonograph, taken together, configure a modern 'ghost' space in which disembodied voice has been psychologically 're-embodied;' in which the discrepancy between the location of a voice and the location of its speaker has

somehow been cancelled."[89] He is referring to a pre-historical "uncoupling" of sight from sound that resurfaces in Oursler's works and symbolically sends viewers/listeners back to a pre-cultural stage embodied in each individual childhood memory. The aggressive undertone of Oursler's voice also bears an unmistakably sexual component: "Oursler's term for this loss of consciousness (…) is 'orgasmic babble'. In its interest, he deploys the core artistic devices of the formalist toolkit – fragmentation, repetition, and reframing – as mechanisms for sexual inundation and subjugation. Any viewer whose trapped and broken spirit echoes the wails in these works is a sexual victim too, a soul whose lost unity-of-being betokens the release within them of an unmanageable sexuality, to ooze up between every shard of their shattered self."[90] For it is not only a level of rational "misunderstanding" that activates the imagination here – Oursler understands the telephone system as an apparatus of physical and psychological influence.

It thus becomes clear that among Oursler's many interests there is one to study social and personal relationships between individual consciousness and technology. For him, the uncanny qualities of the modern media experience as a "ghost medium" is a necessary "counter-narrative" to modernist and progressivist figures of thinking,[91] and it is, of course, a narrative that has also proven highly successful in other popular cultural productions.[92]

[89] Tony Conrad, "Who Will Give Answer to the Call of My Voice? Sound in the Work of Tony Oursler", *Tony Oursler*, eds. Elizabeth Janus and Gloria Moure, Barcelona: Ediciones Polígrafa, 2001, p. 159.
[90] Ibid., p. 163.
[91] "As magic, Oursler's figures do not simply perform technological services for reanimating the world, as do talking elevators or greeting cards, but instead the reoccupy the sites of personal and spiritual authority which magical forces seemed to have abandoned." (Ibid., p.166.)
[92] There are innumerable examples of this: a typical one is the a popular episode from the American TV series *The Twilight Zone* (Rod Sterling, 1959–64) called "Long Distance Call". It tells of a beloved grandchild receiving a call from his grandmother after her death – on his toy phone. In recent years, there is a very successful "new wave" of horror movies originating in Japanese cinema. This wave can be described as an attempt of "re-enchantment" of user technologies of communication. Starting from the four-part *Ring* cycle (Nakata Hideo, et al., from 1998) about a series of mysterious deaths among the viewers of a cursed videotape, *One Missed Call* (Miike Takashi, 2002) transferred a similar structure

In the following, I will analyse Oursler's work from the characteristics of the medium, the setting of the work, and the content of the sound performance in order to demystify and understand the space he created in *Ghostphone*.

"Cognitive Dissonance" in Communication

Interpretations of communication technologies as "ghostly" are not limited to popular cultural productions, but already early on influenced scientific and scholarly engagements with them as well.[93] An early example is an anecdote about the inventor Thomas Edison, who was actually a "paranormalist". As a scientist, he actually invested a lot of work into research on an electrical device for communicating with the dead.[94] According to Avital Ronell, Thomas Watson, Alexander Graham Bell's partner in research, also developed an interest in using the invention of the telephone to get into "contact" with the dead. There are other, similar examples that scientists and engineers in this past have been involved in supernatural experiments.[95] These examples take on importance when trying to understand the new communicative spaces of (mobile) telephony since they also necessitate novel non-legitimate and paranormal approaches.

of "horror technologies" onto mobile telephony (see illustration in appendix). Earlier examples include *Turn* (Hirayama Hideyuki, 2001) describes a telephone connection between the world of the living and the one of the dead; the later *Ghost System* (Nagae Toshikazu, 2002) picks up the successful interpretation of the mobile phone as a bringer of death and transposes the known story pattern to a more irritating spatial experience.
93 See Avital Ronell, *The Telephone Book: Technology, Schizophrenia, Electric Speech*, Lincoln: University of Nebraska Press, 1989, pp. 232, 243.
[94] B.C. Forbes, "Edison Working on How to Communicate with the Next World", *American Magazine* (October 1920), p. 10.
[95] See also Jeffrey Sconce, *Haunted Media: Electronic Presence from Telegraphy to Television*, Durham: Duke University Press, 2000, especially chapter 2, "The Voice from the Void," p. 59–91.

The literature on effects and logics of the uncanny in architecture – for example in Anthony Vidler's publications[96] – can be seen as a consequential reflection of a wave of works in the field of art. Mike Kelley, Paul McCarthy, and Tony Oursler as the (more or less unintentional) initiators of what could also be described as a "fashion" or a "taste" have deeply influenced the discussions following postmodern critiques of the "dark sides" of modernism. In some of their works, they suggest that a re-reading of this "dark" and oftentimes unaccounted side should be on the critical agenda of any production in the prolongation of a "counter-cultural" tradition in Western art. It seems to be following a spectacular logic of the exhibition system that "supernatural phenomena" in new media have almost become a standard aspect of recent curatorial projects. One of these was a recent exhibition called Haunted Media.[97] The exhibition presented seven media artworks dealing with supernatural phenomena: amorphous spaces in television, on the Internet, and in sound recordings. Jeanine Griffin, curator of this show, wrote that "the artworks in this exhibition work to keep one in a state of cognitive dissonance – keeping an open mind – oscillating between belief and disbelief (or at least suspending disbelief), poised between submitting to illusion and recognizing the surface, between known and unknown realities".[98] Presenting artists' investigations into such ambiguous zones, Haunted Media stated the importance of experiences of a "cognitive dissonance"[99] and opted for keeping one's mind open instead of reducing dissonances for the sake of rationality. This intermediary

[96] For example, Anthony Vidler, *The Architectural Uncanny: Essays in the Modern Unhomely*, Cambridge, Mass.: The MIT Press, 1992, and *Warped Space: Architecture and Anxiety in Modern Culture*, Cambridge, Mass.: The MIT Press, 2000.
[97] Haunted Media at Site Gallery, London; artists included Susan Hiller, Thomson & Craighead, Susan Collins, Scanner (Robin Rimbaud), S. Mark Gubb, Lindsay Seers, Patrick Ward, February 7–April 17, 2004.
[98] In the brochure to the 2004 exhibition Haunted Media.
[99] The term was first coined by the psychologist Leon Festinger in 1956, and refers to the perception of incompatibility between HYPERLINKtwo forms of cognition which can be defined as any element of knowledge, including attitude, emotion, belief, or behavior.

position between extremes well grasps the pivotal points of the contemporary condition of communicative realities in a group of artworks. However, this position having become habitual has become a sort of easy solution and is not set to explore deeper levels of understanding relations between known or unknown realities.

In The Invisible Landscapes, Tony Oursler's contribution can be regarded as representative of a generation of artistic production on the verge of becoming acquainted with the so-called "new media", and in this sense was an ideal introductory work within the exhibition – and within this chapter's analysis of artistic contributions. He was not part of the first generation of "media art", but became a prominent example of "multi-media" installation artists who also applied methods of historical research in order to fortify the arguments they put forward – and also to frustrate those interpretations who expected their work to be solely expressive, "authentic" productivity. The importance of irrational imagination as a source of a modernist self-questioning becomes apparent in what seems to be almost something of a folklore of modern and post-modern "anti-technology".[100] Taking a closer look at *Ghostphone*, it refers to elements of the social history of telephony, for example, the limited range of sensory experience that triggers a visual imaginary through the very exclusion of visuality. This work also shows how Oursler, through his creative (ab)use, combines old and new media to generate effects of the uncanny.

In its early history, telephony produced states of mental dislocation by providing new forms of expression through the use of the voice alone. Being connected cancelled the specificity of location, turning it into an enunciative matter, and opened up an ambivalent distance between the speaker and the receiver, which

100 For more on the American context: T. Jackson Lears, *No Place of Grace: Antimodernism and the Transformation of American Culture, 1880-1920*, New York: Pantheon, 1981.

shrunk or expanded according to the imagination(s) of the receivers. This setting enhances the uncanny power of the telephone as a medium, since it invites to confuse "not seeing" with "invisibility" by allowing the voice (or sound) to appear before there is any knowledge or concrete experience of its source. Uncanny imaginaries with technology are nothing exceptional to Oursler, and they have become a rather common association in the general field of electronic media – telegraphy, radio, TV, computers and wireless.[101] They are corresponding to ideas of disembodiment, teleportation, and anthropomorphization.[102] There are many fictions and myths describing spirits or voices of the dead travelling through telephones. The mentioned three forms of the uncanny have always coexisted with technology, and they continue to do so to the current state of mobile telephony. These supernatural stories have a certain convincing power because the human voice seemingly has been believed to possess an increased significance after the invention of the telephone, when it was identified not only as a mode of extending the individual range of action, but also gained a kind of surplus value: In her book "When Old Technologies Were New", communication historian Carolyn Marvin has claimed, "the wired voice of the telephone is much more than a technical prosthesis for the voice. It is an image of the voice, itself, considered as its own unique being, irreplaceable substance".[103]

Looking at *Ghostphone* again on a symbolic level of communication, Oursler uses the specific medium condition of telephony to suggest the existence of other modes of being – by flaunting the ghostly aspect of the isolated voice. Using the

[101] Sconce, *Haunted Media*, p. 10.
[102] The anthropomorphisation of technology means becoming a cyborg. For more on this, see Donna Haraway, *Simians, Cyborgs, and Women. The Reinvention of Nature*, London: Free Association Books, 1991 ("A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction", p.149); see also *The Cyborg Handbook*, ed. Chris Hables Gray, London: Routledge, 1995; Kevin Warwick, *I, Cyborg*, Urbana: University of Illinois Press, 2004.
[103] Carolyn Marvin, *When Old Technologies Were New: Thinking about Electric Communication in the Late Nineteenth Century*, Oxford: Oxford University Press, 1988, p. 193.

condition of sensory deprivation or limitation inherent in telephony, he plays out multiple schizophrenic personalities with one voice alone, fantasizing and mixing different subjectivities at the same time – a childlike persona, a mature male (father) figure, a third (mad) man, and an objective and distanced voice, sounding as if from a different being.

This psychologically tense shift between subjectivities almost suggests a loss of consciousness on the side of the speaker. The "orgasmic babble" of subjects splits any sense of unity of personality and shows up again on different levels of the overlapping voice tracks. It needs to be mentioned here that these shifting subjectivities are employed by sound editing as a simple constructive basis of the work. Changing the tone of his voice and creating noise exerts a heightened sense of control over the listeners' imaginaries. As amplifier of an "inner self", telephony is marked by a distinctive lack of objectivity.[104] This lack meets with the confined spatial situation of subjectivity and with the influence of a belief system that is a historical and cultural construction,[105] or comes from society's unconscious and has been repressed by modernity. This combination activates deep memories within the self, and, accordingly, voice and sound in *Ghostphone* formulate a special virtual site, opening up new forms to express the repressed.[106]

As well as amplifying the power of the human voice, sensory deprivation – the lack of visual orientation in telephony – can provide a space that dramatizes, exaggerates, or intensifies the emotions of speakers and receivers. As an example

[104] For "lack of objectivity", see Marshall McLuhan, *Understanding Media. The Extensions of Man*, London: Routledge (1964) 2002, especially chapter 27, "The Telephone", pp. 289–299. See also Morioka Masahiro, *Consciousness Communication: The Birth of a Dream Navigator*, Tokyo: Chikuma Shobo, (1993) 2002.
[105] Sconce 2000, op. cit., ibid.
[106] A similar analysis was found in recent study about the use Japanese young people make of the mobile phone. Ito Mizuko and Odaka Daisuke, "Intimate Connections: Contextualizing Japanese Youth and Mobile Messaging" (2005), describe the strong mobile phone use in Japan as a kind of escapism from a society with a low degree of individual permissiveness. Users seem to see the mobile phone as producing an alternative space or to constitute a voice against "the system" in contemporary Japanese society.

from contemporary art, tapping a rich source of visual evidence on intensified human expression, the artist Christian Marclay has collected and displayed various telephone scenes in classical Hollywood movies to form his collaged video *Telephone* (1995). These scenes inevitably go to the roots of the filmic medium that has been primarily considered a visual one – but which, to bridge the experiential gaps in the imitation of everyday life, always had to rely on a textual/auditory "undercurrent", a parallel sound track connecting sceneries and spaces, potentially undermining the logic of visual editing. So it is not a coincidence or personal preference that Marclay has picked intense moments of personal emotion evoked by the telephone: joy, anger, nervousness, sadness. Before they had become everyday objects, telephones were primarily used for important functional purposes. The sound of a telephone ringing indicated that something unusual, possibly even unpleasant had happened or was just about to happen. While the telephone just seems to help to release or to make evident emotions that already exist, it also plays a role as a catalyst in activating potential emotions, amplifying them within quite subjective (non-reflective) modes of communication.

The examples above suggest that popular imaginaries of haunted spaces of telephony are already well established. The haunted space of telephony often connects these techno fantasies to form a psychology of media; however, it can also be interpreted as a curious result of blending science with a utopian or paranoid imaginary, oftentimes rooted in the social conscious or unconscious.[107] Thus, Oursler is able to fully utilise the psychological effects and the social imaginaries

[107] As an interesting example of blending science and imaginary, Sconce noted that the majority of haunted voices in telephony were female. In the nineteenth century, it was the spiritualist movement that provided a political space for women to express their opinions in public where social issues of concern for women were discussed. However, these utterances were wrongly accused as acts of insanity by a scientific rationality. They must be considered a legitimate representation of the female voice, which had been repressed in society and in the male-dominated field of science See Sconce, *Haunted Media*.

and fantasies about the telephone receiver – without having to make any direct reference. A telephone receiver with a voice recording such as the one in *Ghostphone* is capable to function as a key to open up doors to all possible social memories of today and the past. Yet, what sort of repression is at work in the male "distant voice" in *Ghostphone*? The voice is rather elastic in its representation of sadness, pain, and loss. What is compressed and extended here? And what kind of space is confined in it? "Mirror, terror", "blow", "fire, sky net, bomb shell, dark star", "world, war" – Oursler's free poetic association churns out a dynamic flow of images. Together with the "psychic" voice, the flow of words puts the listener in a certain uncomfortable position, a surreal clash of the cultural and the social: that is, the voice only makes sense in part, but is never able to grasp the whole condition.

This is a "cognitive dissonance" that is clearly initiated and staged by the artist. A similar condition has been presented in other artworks, also within the exhibition Haunted Media, but what is important here is that the cognitive dissonance in *Ghostphone* does not only connect us to a fantasy world, but also a contemporary political reality – not unaffected by the onset of the war in Iraq, the unending series of bombings, and terrorism. The speaker's begins with personal impressions, then advances from expressions reminiscent of an intense physical relationship, to larger public issues: war, the world, and the universe. Word plays in free association as well as incomplete and illogical sentences formulate a wide, open space within contemporary reality. These words create an atmosphere of ubiquitous fear and worries. This is why it is almost impossible to decide whether the voice indicates unconscious fear and depression, perhaps created by the terrors and complexities of world politics, or whether it bears the mark of a traumatic experience, possibly taking its origin from September 11 (where telephone

messages left on mailboxes and answering machines had to replace the victims' final contact with family members and friends).

The simple form of Oursler's poetry-like expression might also indicate a negative view of theoretical analysis and speculation. Even though there are some clearly psychological references in his text, the mixture of different spaces in this work with its schizophrenic voice and irrational noises can basically only be accepted as it is, and is not easily subjected to an analytical mode of categorical thought. Oursler has created a new way of conceptualizing communication and consciousness through his specific way of using the telephone. It negates any easy reductions to habitual ways of thinking, or interpretations as a harmless decoration. Tony Oursler indicates that cognitive dissonance concerns communication in real life, and he pushes us to think the complexity of the act of "communication" as linked to the aspect of the uncanny in telephony. *Ghostphone*, along with the myths and fantasies around new technologies, encourages an intuitive understanding of the world, while maintaining the discomforting aspects of non-rationality.

C.2 Laura Horelli: Communication As A Space For Desire

Laura Horelli, *Mobile Phone Use / Advertising* (1999); *Street Interviews / Helsinki* (1989/99)
TV monitor, DVD player, CD player, wood box, headphone, posters
(Malmö Konstmuseum, 2003)

Finnish artist Laura Horelli presented two works in the Malmö exhibition: *Mobile Phone Use / Advertising* (1999) was a three-monitor video installation showing images of mobile phone use in a visual comparison between worldwide advertising and self-observed everyday "reality". Laura Horelli has documented the public countenance of mobile phone use in five different countries – Finland, Italy, Japan, Germany, and the United States – and also showed different video observations confronted with a collection of still images from mobile phone advertisements in these countries. The other work, *Street Interviews / Helsinki* (1998/99), was an audio work for which the artist interviewed twenty-four random passers-by and mobile phone industry people on the streets of Helsinki. She asked them about the ways in which they use their mobile phones. In total, these interviews lasted forty-five minutes and covered a wide range of topics, such as the socio-economic role that the mobile phone industry plays for Finland, questions about what could be an ethical way of using the mobile phone, and about its popular reception and misreception. In the exhibition, audio recordings of these interviews were combined with two posters reproducing short summaries.

On *Mobile Phone Use / Advertising*: An Image Machine of Contemporary Culture

In recent years, Laura Horelli has developed a way of working that is based on a research-like retrieval of visual information about specific, mostly urban sites, focusing on traces of social change that become "visible" when opposed to one another in a larger reportage-style format. With the work discussed here, she situates herself as an active explorer of social phenomena in a long tradition of social photographic reportage, perhaps most prominent in the United States, and today represented by artists like Dan Graham, Allan Sekula, or Zoe Leonard. Since she has used research methods to explore her own family history as part of a larger social history in her recent works, her interests can be described as shifting between a subjective reading of "everyday life" and the need to place this in a (visual) relation to more general historical processes. For her research on *Mobile Phone Use / Advertising*, Horelli focused on her native country, which was among the earliest to fully adapt to the social and personal structures of mobile telecommunication. For this, she used two different kinds of visual material, one deriving from the capitalist imagery of mobile phone advertising, the other from real use as observed by the artist herself. Here, I would like to analyse each of these collections of images, to then consider their combination in a juxtaposition of monitor images, and possible artistic intentions behind them.

Structural Description

Guided by an interest in the effects that the mobile phone has on conscious as well as unconscious levels of society and its individuals, Laura Horelli has focused on those parts of the reality of this medium that are marked by alterations of perception through effects of capitalist societies. *Mobile Phone Use/Advertising*, basically just a juxtaposition of images, at first glance looks rather simple, banal, somehow almost too easy; however, her observation of the visual banality that accompanies the world of mobile telephony has captured some typical issues about the field. Firstly, she found that the space of mobile communication implicates different modes of representation and different "etiquettes" in the use of public spaces, each of which seems to be related to different cultural contexts: this is reflected in the way she decided to work with their depiction. Secondly, she depicts spaces in which the mobile phone explores many kinds of everyday relationships, for example the additional "life coordinating" functions of mobile services like weather forecasts, hotel reservations, plane or train tickets, timetables, etc.; and not least the ferocious price competition among mobile service providers turns out to have developed a visual characteristic of its own. Although after some generations of the interpretation of "public images" in advertising there is the clear danger of a ritualized, prejudiced interpretation, focussing especially on mobile telecommunication advertising seemed promising for Horelli for raising important questions about how communicative space is governed by capitalist power "in" mobile telephony.

The mobile telecommunications industry has become hugely influential, not only in Europe, the United States, and other industrial countries, but also – and to a much greater extent – in China, South America, Africa, and in other "developing

countries". In order to understand mobile telephony as a global phenomenon – and in relation to Oursler's work we already saw that this phenomenality often appears as a reduced one, the visual aesthetics of advertising can be considered not as the only, but as one of the important keys, not only because of the significant role it plays in economic marketing, but also because of the specific representational practices dedicated by it to shape a particular space in contemporary societies. In other words, advertising reflects and bridges gaps between desires of capitalism and of consumers, and it shapes new cultural languages and images, with the effect of producing a new social imaginary space.

Moreover, seeing the advertising business as part of a "visual industry," it is especially interesting how a mostly non-visual medium of communication like mobile telephony can challenge the fabrication of images and communicative values related to less and less public, more and more privatized corporate spaces. Of course, even "old" telephony had to reckon with this problem, but if one, following the thesis of this project, considers the political and public order of spaces as something that under the influence of mobile media has become fundamentally "invisible", the visualisation problem certainly becomes different. It does no longer renders the object as an artefact, but tries to produce desires associated with the artefact as a mobile space of communication. Under the impression of the construction of "new media", the same visuals that once were key to rationalism and enlightenment have been widely recognized as of a solely persuasive nature; that is, they no longer grant any reliability for communicative transactions that may have been at the basis of the logic of previous capitalist cultures.

But not only is seeing no longer believing, the visual rhetoric of advertising has changed significantly, not so much through new imagery – applying iconographical methods, most of the images can be deciphered as very conservative

role models and power fantasies – but through different iconic and textual references. These can be extensively studied in Horelli's juxtaposition. It could be said that, in some sense, her work is almost indistinguishable from the "research" that an advertising agency would do to find out about the applicability of images in "public" life. But her work does not directly lead to changing a product – on the contrary, the gap between advertising and life remains blatantly open and un-bridged.

As one of the precursors for an analytical practice based on advertising, American media theorist Jerry L. Salvaggio has analyzed telecommunication advertisements in the *Wall Street Journal* between 1980 and 1982.[108] His critical observations on telecommunication show how this advertising was subject to a repetitive pattern. Already by the early 1980s, according to Salvaggio, a strong emphasis was placed on advertising telecommunication as a humane, "friendly" technology that had become as important for the general quality of life as face-to-face communications. From such an idealistic claim, advertising soon shifted to conveying the bare necessity to have the personal assistance of a telecommunicative network – to enrich and refine one's lifestyle, a role once fulfilled by art and culture. Advertisements also tried to instil a sense that telecommunication networks are already highly diffused within the "information society", so that, as a consequence of competitive consumption habits in capitalist societies, it just has to be crucial and virtually an urgent necessity to "have" telecommunication. Visual communication has also created specific new and trendy images of an advanced "lifestyle" of telecommunication.

[108] Jerry L. Salvaggio, *Telecommunications: Issues and Choices for Society*, Annenberg: Longman Communication Books, 1983.

While these analyses were done in the 1980s on advertising for landline telephony, the results still sound quite relevant in 2006. Notions like "new lifestyle", "life enhancement", and "changing society" also function as the fundament that advertising for mobile telephony continues to build on – as can be recognized in major advertisement campaigns from the 1990s until the present day.

Perspectives on Visual Culture

In her work, Horelli has used three different video channels to show habits and uses of the mobile phone in three different city environments: Tokyo, Rome, and Frankfurt/Main.

In each city, she captures people in unguarded moments, much in the way "candid cameras" operate in between open and hidden modes of filming. She clearly approaches the perspective of surveillance cameras – although mostly not from their classically elevated position, but rather at eye-level. While the viewer soon begins to question the justification for this or that shot, Horelli seems to have been particularly interested in awkward, makeshift postures of people standing or squatting in the residual spaces on the margins of public streets or passages.

Mobile phone users, at least in Horelli's selection of images, seem to abandon themselves, become quite oblivious of their surroundings, seem to shift to other mental dimensions. Two mobile phone users involved in different conversations with remote partners will get closer to each other than they presumably would under other circumstances. At times, it seems that they can even create a shared space without being aware of it. In other instances, they merely become like obstacles in a stream of other passers-by, engaged in another space-

time than that of the fast-moving crowd. They regulate their bodies' presence/absence by assuming many different postures, closing one ear with their "free" hand, hiding behind pillars and in unused staircases, abusing public sculptures as seats (since public benches have mostly been removed from inner city streets for the sake of "security"). Answering a distant call, they automatically raise their voices, an action that asks to be adapted to each new situation into which they walk, stand or sit, since talking loudly in public is still regarded as offensive or uncouth in some public spaces. The attempt to create (acoustic) privacy with a distant person via the mobile phone tends to give the respect for other people's (more soft-spoken, non-mobile-phone users') privacy a lower priority.

Even though the basic set-up of Horelli's videos seems very simple – the only irritating part being the interspersed advertising still images –, it becomes more complicated on second thought. One could easily and generally ask what is the value of an analysis that is based on random shots of people using their cell phones in public. What can we see there that would help us to understand the space of mobile communication? In addition to that, Horelli seems to repeat existing cliché patterns – by choosing more or less metropolitan areas for her observations, juxtaposing major cities from three different countries as if she intended to reveal something like a national character or cultural difference. In the work, the space of mobile telephony represents a national culture, which is also an aspect shared with *Street Interviews/ Helsinki*, which was presented next to the video installation. These questions seem justified, but at the same time revert the perspective to the viewer who is asking questions about difference and identity – since there is no systematic "outside" perspective actually pointing to them. In this way, Horelli succeeds in guiding the viewers' attention to their own way of evaluating visual information that only seems to have a "scholarly", "anthropological" character. While the

reproduction of biased perspectives can be seen as negative, Horelli prefers to take this risk into account, seemingly just ignoring it, preferring to leave judgments to the audience. Observing the beholders of Horelli's work, we could probably find a wide range of approaches to the "viewing material", each of which would also show a biased perspective. Especially since Laura Horelli's sequence and choice of images is so random, the viewers' interpretative possibilities are boundless, they are faced with their lack of *one* adequate method of reading – since after so much ritualised criticism, there clearly is no more single key to understanding such images. They have, in general, become a kind of folklore of how mobile communication is supposed to be; no longer evidence, but now source material for other advertising that uses the presumed authenticity of images of people using mobile phones to create a convincing imagery. The documentary aesthetic has long been co-opted by advertising companies to shape a space of and around commodities. It is possible that Horelli was basically interested in collecting such "folklore", but the openness of her collection deliberately allows for a variety of analytical questions – which is also what made it interesting in the context of the Malmö exhibition.

Street Interviews / Helsinki (1998/99)

Street Interview / Helsinki describes the proximity of the mobile phone in everyday life in Helsinki in the early 1990s. Every answer points to different levels of the acceptance or recognition of the culture of mobile telephony, each from an individual perspective. Seen together, the interviews sketch out the "user side" of a new lifestyle introduced by mobile telephony – its effects become visible mainly on

a national, cultural, and individual level. The questionnaire, which is treated in a non-systematic and very general way, includes questions like: "Do you have a mobile phone?" "Have you gotten irritated by the phones, just by the noise levels or anything?" "Why do you have a mobile phone?" Do you need it for business or for friends?" – "How long do you spend on the phone usually?" – "Do you only make local calls or international calls also?" The small and random database originating from these questions consists of the answers of twenty-seven persons, a majority of whom are students.

Technology as National Identity: The Shadow of World War II

In the interviews, most of the interviewees show a positive attitude towards "their" progressing national mobile telephone industry, and they apparently believe or share the "visions" that this mobile technology produces. Excessively "proud" statements like "Cell phones have become the boom boxes of the 1990s"; or "Annual sales of mobiles are faster than cars and PCs combined. And we have the personal connection", "The Future is Finnish. Ah, it's a great time to be Finnish", are not the only ones, but do appear when prompted. The statements of those interviewed reflect well that mobile telephony is a source of "national pride" for Finland, and the name "Nokia,"[109] which stands for the biggest national industrial

[109] The company was founded in 1885 in Nokia, a small town in South West Finland. It began with wood pulp, later rubber boots were added, and then in 1912 it became a cable company. For more or less uncritical "success story"-type accounts on the history, see Martti Häikiö, *Nokia: The Inside Story*, London: Financial Times Prentice Hall, 2002; Dan Steinbock, *The Nokia Revolution: The Story of an Extraordinary Company That Transformed an Industry*, New York: Amer Management Association, 2001; Trevor Merriden, *Cold Calling: Business the Nokia Way. Secrets of the World's Fastest Moving Company*, Oxford: Capstone Publishing, 2001. Some critical aspects on Nokia's policies: http://www.yle.fi/mot/kj050117/englishscript.htm.

corporation, is used in much the same way in which previously nations were addressed. On one level with the role that Sony is playing for Japan, Nokia produces more than one third of all the mobile phones in the world, and it has been one of the major industries in Finland since the 1990s. In 2003, Nokia's turnover was at 30 billion Euro, which made it the single major manufacturing industry, among other natural resources-based industries such as forest industry, power, oil metallurgy etc.[110] The history of Nokia itself reflects the change of the image of the country from "nature" to "high-tech", or, as a slogan goes "From Finland to Phoneland". The slogan well describes how the industry promotes a space of mobile telephony for the purpose of national and corporate representation. The interviews feature contributions that more or less playfully address clichés of a national identity – which primarily shows the high level of social identification with this company:

"Mobiles have even found nests in what used to be one of Finland's great social resources: masculine existential silence." "On the other hand, small talk is not one of Finns' strong points. It's easier to be in touch with others via mobile phone than face to face." "Most of all, the Finns are techies – and proud of it."

The successful representation of national identity in mobile telephony, the image of Finland as a "Phoneland" is actually quite new. Nokia successfully changed into a telephone producing company only after the 1980s. It is interesting to see that the mobile phone has been recognized and integrated into the national identity of Finns in many, sometimes even humorous ways in less than twenty years. Nokia's development was greatly supported by Finnish industrial policy in the 1980s, when the focus shifted from equitable regional development to technology and product development. The high diffusion of mobile phones within a wide

[110] Results for the year 2003, source: Finnish magazine Talouselämä, June 2004. Cf. http://virtual.finland.fi/netcomm/news/showarticle.asp?intNWSAID=28308.

range of acceptance coincided with the well-developed infrastructures of the wireless network there. Moreover, Nokia also developed by taking on the national obligations of reparation payments to Russia after World War II. The special conditions under the influence of the war eventually brought up the new mobile communication industry, which has become a representation of Finnish national identity within half a century. It is thus important to acknowledge that Finnish national identification with mobile telephony represents an extension of the history of World War II.

Listening to the interviews, it is hard to grasp the artist's focus and position behind her series of questions, although the casual mode of conversation apparently led to spontaneous answers, and the frank comments do reveal a variety of opinions about the speakers' own country. Concerning the fact that the interviews were conducted with a randomly chosen small group around the artist, it has an exemplary value collecting voices in reality, but does not go far beyond this. However, it allows to see how the space of mobile telephony contains the way we think of self and others today. The presentation of national identity in mobile technology reflects layers of negative Finnish history, which affects visions and self-interpretations. Like *Mobile Phone Use / Advertising*, *Street Interviews / Helsinki* was also produced in a quite simple manner, but here the location and time specificity with the example of Finland in the late 1990s, including the political and historical consequences around mobile telephony, evoke a great space of imagination related to the work.

Incorporation:

The Mobile Phone Becomes the Self

Analyses of the visual culture of communication technologies have not been limited to classical sociological approaches.[111] A similar topic, the culture of the Sony Walkman, provided an ideal starting point for one of the earliest case studies of the 1990s phase of cultural studies. Until then, entertainment electronics had frequently been discussed as symptoms of a society whose limited public character caused the regressive withdrawal of solitary listeners into an inner space of imagination, only fed with sound impulses. Very influential was a text by media philosopher Hosokawa Shuhei that was first published in 1981; an English translation appeared as early as 1984 and had a wide diffusion throughout Europe and the United States.[112] It did not address any direct visual components of the "mobile sound" experience; this, however, actually formed an entry point for the studies published by Paul du Gay, Stuart Hall, and others.[113] Their analysis shows how the advertising for the Sony Walkman from the late 1970s to 1980s has created a new identitarian image uniting their prospective target group as the "Tribe of Youth". Today, it can be said that the mobile phones plays a similar role to produce a "Tribe of Youth".

[111] An important, although methodologically dated recent study on the subject of the visual culture of mobile telephony was: Sadie Plant's essay "On the Mobile. The Effects of Mobile Phones on Social and Individual Life" (2001) (http://www.motorola.com/mot/doc/0/234_MotDoc.pdf.). Also: Thomas Johansson, *Social Psychology and Modernity*, Buckingham: Open University Press, 2000; Manuel Castells, Mireia Fernandez-Ardevol, Jack Linchuan Qiu, and Araba Sey, The Mobile Communication Society: A Cross-Cultural Analysis of Available Evidence on the Social Uses of Wireless Communication Technology, Los Angeles: University of Southern California 2004. Will soon be published as *Mobile Communication and Society: A Global Perspective*, Cambridge: MIT Press (forthcoming).

[112] Hosokawa Shuhei, *Walkman no Shûjigaku*, Tokyo 1981. Translated as: "The Walkman Effect," *Popular Music*, vol. 4, Performers and Audiences, 1984, pp. 165–180.

[113] *Doing Cultural Studies: The Story of the Sony Walkman*, eds. Paul du Gay, Stuart Hall, Linda Janes, Hugh Mackay, Keith Negus, London: Sage Publications, 1997.

The study of the Walkman as conducted in the 1980s and 1990s must share a lot of common ground with any advanced research on the mobile phone, not only since it is about a portable audio device for everyday use, but as such necessitates visual components that make the fragmented experience of the "new soundtrack" appear more complete. On one level, this was enacted through product design, components of which are stored as "design classics" in technology as well as art collections. But, on the other hand, the "revolutionary" design had to be framed by a number of visually attractive forms of everyday practice, all of which were to become unified to produce a new popular "lifestyle." The notion of "lifestyle", it could be argued, is here not so much a product of academic sociology but rather a by-product of the rather makeshift reception of post-modern aesthetics within 1980s advertising.

For the lifestyle of "youth culture", the Walkman has become a successful example for a unified commodity and social image. More recent forms of the Walkman, like the iPod or other mp3 players, have already been systematically "built into" the complex of other communication and entertainment technologies. They also possess a specifically enhanced data economy – i.e., more storage space, more compatibility, more possible use forms – and are currently on the verge of entering the wireless realm of net capitalism. Some forms of these mp3 players with advanced compatibilities have been combined with mobile phones – interestingly trying to revive the once successful trademark of the Walkman.

Although connectivity with the most diverse data on the net are already implemented within their technologies, and although some of these devices are now also able to record, store, and play video and photo images, the problem of mediating a primarily acoustic device visually remains largely unchanged. This makes it very easy to recognise old visual strategies used in the advertisements Laura

Horelli has collected – and all the more important to spot differences and develop a set of questions according a space portable technologies represented mobile telephony produce for a sake of proceeding an analysis. What kind of images do they try to create? What sorts of messages or associative meanings are implied? What kind of identificatory relationship is being created between customers and mobile telephones? Furthermore, nowadays there is no doubt that the entertainment and communication industries have become one of the major factors of shaping a general space of communication. It is necessary to be aware of what sort of space they are trying to formulate through their strategies of advertising.

Communication As a Space for Desire

Balancing flaws against benefits, it is not easy to decide if mobile telephony is really helping to "upgrade" or "enhance" our quality of life; still, as a consequence of the general character of advertising, most of the ads collected in *Mobile Phone Use / Advertising* promise to improve love relations and family values, achievement and efficiency in business,[114] as well as relaxation and entertainment. Among several typical imageries, sexual imagery in particular is increasing – which could be considered a typical symptom of most long-term advertising campaigns, where the technological novelty has worn off and needs to be replaced by a sort of "human touch".

On closer examination, two advertising images (**fig. 12 and 13**), which shall be discussed here in some detail, put a lot of emphasis on their combination of text

[114] Almighty accessibility might be convenient and provide the increased efficiency and flexibility for work, but such an expansion of commercial space may lower the quality of life by reducing the time and space for relaxing. This of course goes unmentioned in the ads…

and image. Both address general messages in their text, but the visuals shift the messages into the same specific field of associative fantasy. **Fig. 12** shows a woman with a black blindfold, with a man next to her apparently whispering something into her ear that can be read like a motto or a caption: "the desire to communicate". The dark and blurry background creates an ambivalent, but still private atmosphere. The two figures, showing their naked shoulders in intimate distance, accompanied by the word "desire", quite bluntly stimulate viewers to explore the imaginary space of a forbidden sexual adventure, an adventure "embodied" by a call on the mobile phone. A similar secret love fantasy that has clamorously turned public can be distinctively recognized in the portrait of President Clinton and Monica Lewinsky in **fig. 13.** Seen next to each other, these images of mobile phones and their users silently suggest that the mobile telephone can bridge just about any social hierarchical gap. The text that goes with the second one affirms such a reading saying that "even an intern can afford one" to buy and use this mobile phone. Both attempt to show the mobile phone's alleged "miraculous power" that fulfil desire to enable its owners to easily overcome social and economic hierarchies.

What are these advertisements trying to suggest to the viewer? They seem to say that mobile communication brings you an upgraded better quality of life, full of warm human touch, fulfilling your desires, regardless of economic and social status. It also suggests that within the information society, mobile telephony is a key to improve both your private and professional lives: by rendering your work efficient and successful, keeping up your private contacts, keeping your family happily together, by entertaining you, bringing you moments of relaxation and even thrilling adventures. What I randomly extracted from advertisements seems to show that the space of mobile communication is full of fantasies and desires about material and immaterial things. And, in order to satisfy your desire, the advertisings

Fig. 12

Fig. 13

Fig. 12, 13 Still images from Laura Horelli, *Mobile Phone Use / Advertising*, 1999

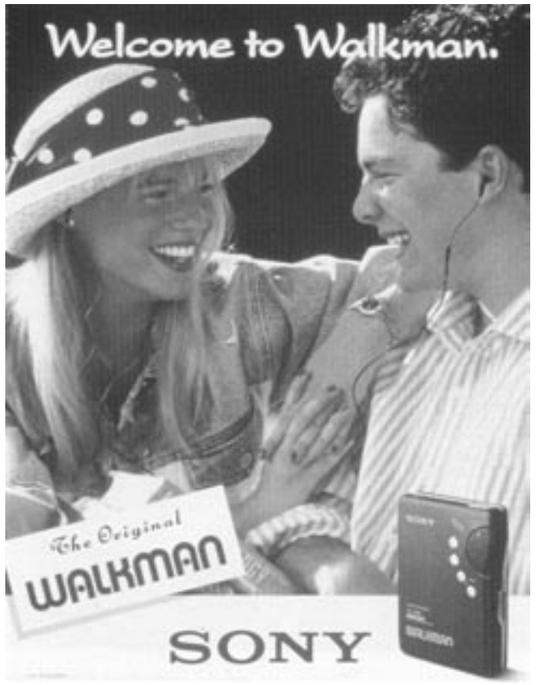


Fig. 14, 15 Walkman advertising images from the 1980s

Fig.16

Fig.17

Fig. 16, 17 Still images from Laura Horelli, *Mobile Phone Use / Advertising*, 1999

says, "You have to enter the space of mobile communication. Everything you want is fulfilled by mobile communication. Be accessible and access others!" Advertising stimulates a diversity of desires to move people to acts of mobile telephony.

In 1990s advertising, users of mobile phones often look cool, adventurous, and sexy, like James Bond types or pop stars. This kind of advertising not only stimulates the – material and immaterial – "desire to communicate," but forcefully develops it into other desires. Especially, the gradual miniaturization of the mobile phone with its tendency towards fantasies of embodiment invites us to focus on an idealized, "perfect" self-image. Advertising for the Walkman used to reflect the inner world of the user, as can be seen in **fig. 14 and 15** – or showed an image of the music listened to or a romantic, private set of moods that can be produced by it. Advertising for the mobile phone exhibits a preference to address the external world – more precisely, an outwardly transformed self-image. In the 1990s in Laura Horelli's selection of images, as can be seen in **fig. 16**, the mobile phone was attached to the skin rather uncomfortably, like a necklace, which almost seems to predict an advanced degree if not of integration, but of closeness to the body, clearly beyond "a portable magical charm, an amulet",[115] it seems to be part of a future embodiment of the phone.[116] It is easily recognisable that the images in mobile phone advertising are actually quite abstract, filled with a newly made-up language, with neologisms and phrases invented specifically for advertising.

Seeing what is happening around the technology in engineering, science, marketing, and other fields, the aesthetic strategies to present the mobile phone in advertising do not only concern its visual and sensorial design. Rather, it goes

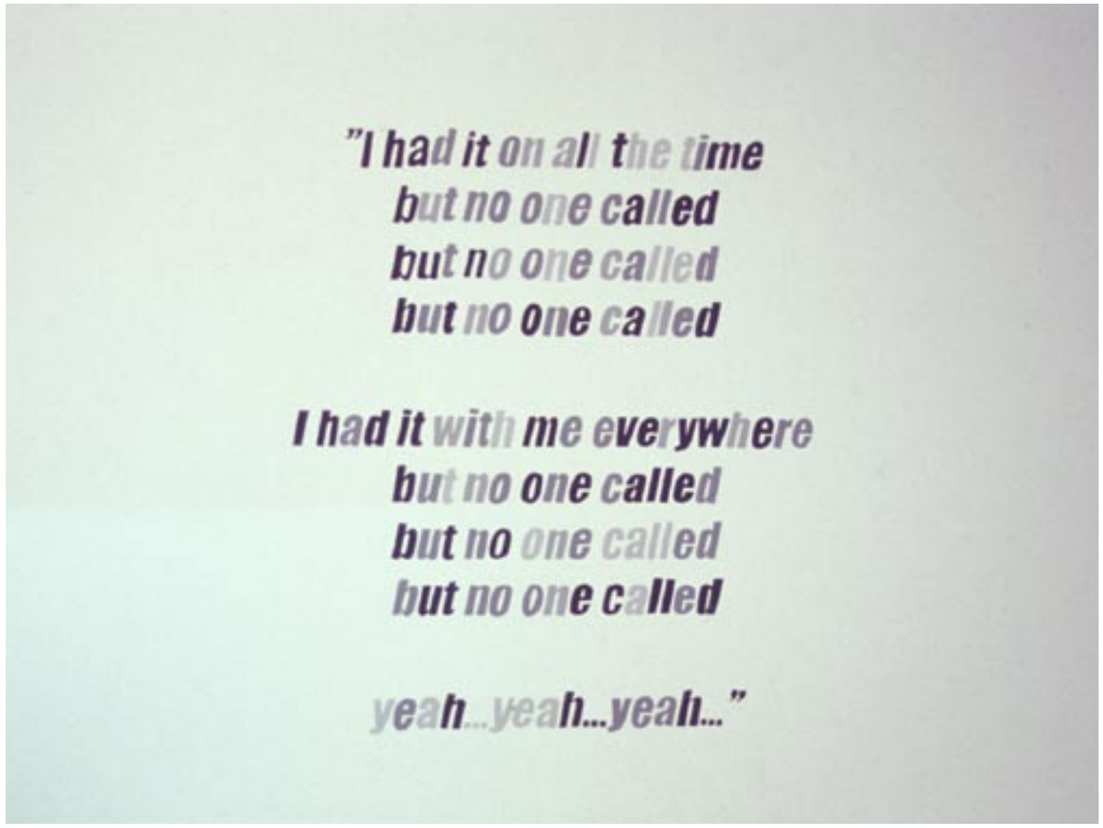
[115] Timo Kopomaa, *The City in Your Pocket: Birth of the Mobile Information Society*, Helsinki: Gaudeamus Publishers, 2000, p. 38.
[116] There are already several cybernetics research developed focusing on the embodiment of the communication technology and human body. For example, see Haraway 1991; Gray 1995; Warwick 2004.

deeper, penetrating the more general aesthetic conceptualisation of mobile telephony. The size of the mobile phone has been diminished from larger than hand-size to a device the size of a ring, in its extreme form set to become a chip implanted into a tooth. Desires explored by advertising and development of communication technologies do not remain within the realm of the visual or the imaginary. The embodiment of the mobile telephone does not only concern miniaturization or organic-style design that emphasizes tactility, flattening out of current design modes to integrate things into the skin;[117] it has much more consequences. This biopolitically relevant aspect has also been approached from the disciplines of telecybernetics and telecommunication engineering, respectively.[118] The mobile phone is about to become a part of the user.

In this futuristic perspective, it is quite understandable that advertising puts so much emphasis on the mobile phone as an addition to the user's sexual or personal charms, or the rebirth of the user with a new subjectivity. Mobile phone advertising is preparing for the coming next stage of total embodiment of mobile communication technology. The space of mobile communication produces the desire to have and to be a perfect body. In this sense, Horelli's collage of images from the 1990s captures a shifting point of the social imagination of a "rebirth" of the telephone that transcends its character of just being a medium of communication – to become a medium of life.

[117] One of the latest mobile phone designs, the "au" design project run by the producer NTT DoCoMo in Japan (Nov. 2005) is actually called Media Skin. It is not only miniaturized, but consciously designs and advertises the mobile product as an embodiment within the user. http://ascii24.com/news/i/topi/article/2005/11/02/658883-000.htm
[118] Recently, an extreme example has been the neurosurgical implementation of computer chips for a direct data exchange with a computer, being explored by Kevin Warwick, a professor of Cybernetics at the University of Reading, England. His experiments with the first extra-sensory (ultra-sonic) input for a human and with the first purely electronic communication between the nervous systems of two humans have been conducted successfully. Warwick has started to explore the possibilities of an embodiment of technology by gradually turning himself into a cyborg (http://www.kevinwarwick.com) Implementation has been tested recently by various laboratories, including a hardware called RedTacton designed by NTT to utilize low-grade electronics on the surface of human body (http://www.redtacton.com/en/info/index.html)

In this section, it has become apparent how industries visualise the space of mobile communication in advertising – through the objects collected in the works of Laura Horelli. As pointed out, this space has been imagined as filled with fantasies and desires, coinciding with the nature of capitalism to produce a desire towards a better quality of life, a desire for the representation of the nation, a desire to see the other, a desire for personal identity and another self. Each of these aspects implies layers of different issues. The desire of being another is very crucial on the level of the banal everyday – how we perform the self and how we see the other, more precisely how we long to see difference in the other, culturally or individually. The desire to be another is maybe the same as the one to be oneself – perhaps just the other side of the same coin. This is just the beginning, and it obviously remains to be seen how the space of mobile communication relates to these desires. As the technologies become global standard and powerful factors in economy, the scene of mobile communication could never separate itself from the schematism of the self and the other.


"I had it on all the time
but no one called
but no one called
but no one called

I had it with me everywhere
but no one called
but no one called
but no one called

yeah...yeah...yeah..."

where shall i put it when it is not in use?

...I hide it there when i leave the house...

...actually, one shouldn't charge the batteries with it, peeps.

"I had it on all the time
but no one called
but no one called
but no one called

I had it with me everywhere
but no one called
but no one called
but no one called

yeah...yeah...yeah..."

I never heard it peep though.

but why do you hide the mobile behind the gutter?

but, yesterday you had it behind the pillow

C.3 Annika Ström:

The Discursivity of Mobile Telephony

Annika Ström, *Min Mobil* (2003)

Photography, DVD player, speakers, amplifier, acrylic paint on wall

Rooseum, Malmö 2003

Min Mobil (2003, 7'22") by Annika Ström is a short video work reflecting the artist's observations of the use of mobile phones in and around her own life. In the exhibition, it was projected to a wall, accompanied by a photo poster, and song lyrics painted on the neighbouring walls. Ström depicts different aspects of the mobile phone in her own and her family's daily life. Prominent parts of the video are assigned to sequences depicting the artist's aged parents to reveal their rather indifferent attitude towards the device, an object that can become useless in a life that is rather isolated from society. For her parents, the mobile phone remains switched off since "no calls are expected". But the depiction of the use of mobile phones is not limited to "generation gap"-type statements of individual refusal to conform to the latest technologies at that time; by the way Ström presents it also in her own use as well as in the use of people her own age, the social construction of its central importance is relativised in a more general sense.

Other episode-like sequences include for example the unexpected moment when a ring tone invades Ström's privacy as she is playing with her son at home; we see and hear the sound of an incoming SMS at night penetrating a man's sleep, but eliciting a relieved smile – which he then photographs with the camera built

into the same device. In contrast to this, some scenes capture more subtle actions that indicate the tactile proximity of the device almost like a fetish. We are shown a shot of a gesture of tenderness: a hand gently touching the phone as if the person were reassuring himself of the nearness of a partner. This shot remains visible for just a few seconds, but, combined with similar short epiphanies, contributes to establish a specific mood that characterises the relationship between technological artefacts and their users.

The mood that is created is clearly based on filmic conventions for the depiction of moments of intimacy, as it extracts and juxtaposes one anecdotal example after another, and they are placed into an irrational sequence. The same ringtone melody played by different machines produces a repetition, but also different nuances. Combined with the repetition of a short vocal, based on a pop melody with simple lyrics, Annika Ström combines all kinds of discursive elements and thus succeeds in creating a subtle portrait of today's use of the mobile phone. The writing on the wall reads:

"I had it on all the time
but no one called
but no one called
but no one called

I had it with me everywhere
but no one called
but no one called
but no one called

Yeah…yeah…yeah…"

Her observation bears an autobiographical tendency, full of self-referential aspects of her private life. Since the mid-1990s, she has produced a number of video works, beginning with *Artist Film* (1996) and *The Artist Live* (1997). It has also been

argued that her video works are adapting modes of pop culture into the realm of video art and blur the boundaries between the two. After 1998, she has developed a typical signature style, that is, a combination of lyrics and music such as in *Six Songs For a Time Like This* (2001), in *16 Minutes* (2003), in *I Am in Love* (2004), and others. Through her style she half claims that her life is art. In a reflex-like understanding, the serialization of banalities characterizing her style has sometimes been interpreted as a product of postmodernism, as there are neither authentic, spectacular, dramatic, nor narrative parts in the work, they are marked much stronger by a certain communal mode in contemporary Scandinavian life.[119]

This judgment can only be affirmed as her working method primarily remains on the surface, and is not going into any psychological evocations of "depth". The subtlety of her informal views of banality transmits similar experiences and feelings to their audience. An important aspect of her work is its "soundtrack" character, which means that single works are normally less than eighty seconds long and looped to be repeated, they join fragmented visuals together, structure totality and determine a mode of working. In this sense, it can be said that to her sound plays a significant role by formulating a space as well as the visuals presenting a spatio-temporal situation.

Insofar as it deploys an auditive space, Ström's style is close to "ambient listening" approaches;[120] however, she presents her work in a darkened white cube (not in a "black box"): a formal, almost traditional auditorium setting. This mismatch – or at least unexpected combination – of presentation and presented

[119] Ina Blom describes Annika Ström's works as "new type of Communal response as opposed to individual reception": see "Dave Beech and Ina Blom in Conversation," *Annika Ström*, Secession, Vienna 1999, p. 18.
[120] In the 1970s, Pierre Schaeffer termed two new modes of listening along with the development of musical practices and technologies, which reflect on the changes of the culture of listening. One is acousmatic listening, that is "pure listening", and the other is "ambient listening" (as conceptualized by Brian Eno in the 1970s) that is, passive listening like a sound track.

sound proves attractive to viewers/listeners. In a way, it is comparable to the way in which she presented the space of mobile telephony in the work discussed here. She collected discursive fragments and connected, bracketed them by an accompanying sound track that works to familiarize viewers with her voice of authorship. The individual scenes and moments have no particular relation to each other, it is neither match nor mismatch, neither expected nor unexpected. However, the work manages to create the totality of one work by the sound editing in foreground and background only. Sound connects the discursive juxtaposition of fragments in order not to reduce the momentary meaning they can acquire. In a sense, Ström's is quite a sincere sketch of our lives: moments of reality are not logically connected, but offer themselves to a more intuitive perception, flowing along with rhythms, habits, obligations, or simply with the passing of time.

Observations with a particular focus sometimes attempt to transpose a prejudicial framework or a biased expectation into reality. This sort of attitude can be activated to extract meaning from banality or to break down discursive realities into logical categories. But *Min Mobil* does not try to manage to arrange moments nicely, its aim seems to present them "as they are". For example, Ström presents her parents in a bittersweet, dry, and somewhat melancholic way. Instead of being shocked by their different kind of imagination, she invites viewers to think about how such different levels of adaptation can still happen in the "age of communication". This difference is sometimes easily ignored, but, in order to understand the nature of the mobile phone, they represent equally significant fragments of everyday life. It is important to consider that divergent imaginaries of the mobile phone are constituted not only in this way, but also by larger social processes as well. The interventions of mobile telephony are not dramatic: they may be isolated, but they create a sort of intimacy. The mobile connection also

intervenes in private moments, and rarely happens when we expect it. All of these instances emerge through mobile telephony and shape the scene of contemporary communication.

In *Min Mobil*, Ström effectively uses three different kinds of sound – dialogues among her family (the artist interviews her aged parents), the sounds produced by mobile telephones (ringtones, SMS signal, and others), and the pop vocals composed by the artist. These different qualities of sound are interrelated and reconstitute the soundscapes of everyday environments. For Ström, sound is a tool for understanding the modality of the sensory preference of culture around the mobile phone.[121] Her generally "pop" topics, combined with a pop sound, create a relaxed, weightless atmosphere around her works. But the described decisions within her works may also indicate a distinctive shift or "turn" from the visual to the acoustic in general.

Furthermore, it is quite interesting to notice that her simple, brief vocals have the quality of a recognition effect that is quite similar to that of commonly used ring tones. Her use of sound corresponds to the participatory shift from a culture of "listening" to a "humming" mode, where sound logo-like melodies (heirs to advertising "jingles") two decades after the experience of "ambient listening" or "passive listening" in an age of accompanying sound, exemplified in Walkmans, car stereos, mp3 players, iPods, and mobile phones. Does this "humming" mode influence our modes of communication? Does it make the act of communication just as weightless as background music?

[121] Jacques Attali asserts that sound—music and the organization of noise—is considered as an instrument of understanding new realities, which requires to decipher a sound form of knowledge. (Attali, *Noise: The Political Economy of Music*, trans. Brian Massumi, Minneapolis: University of Minnesota Press, 1985, p. 4)

Ring Tones: A New Culture of Listening

In her video *Min Mobil*, Ström has composed her own ring tone on a home computer and plays it on her phone. The scene, only ten seconds long, nicely grasps the playful and appealing character of a ring tone that can be a very short hook or melody. The electronic sound is quite distinctive, short and simple. This nature constitutes a strong power to create presence, and you are certain to keep it in mind for a long time once you have listened to the sound in a gallery space. The snippets of sound she composes have already become her "sound logo".

Ring tones in general have an extremely strong impact, also in economic terms. Usually shorter than ten seconds, the ring tone is the most representative and invasive (if not annoying) among the sounds created by the mobile phone, mostly because of its character that is similar to that of an alarm clock. The well-known Nokia ringtone, as an example for the "high" cultural value assigned to it, was created on commission by Sakamoto Ryuichi in 1997. Famously, he quoted a catchy 13-note phrase from "Gran Vals", a repertoire piece of classical guitar music composed by Francisco Tarrega, a nineteenth century Spanish musician, and re-arranged it to become a ring tone.[122] The "culture" of ring tones is already established enough to turn into widespread trivia knowledge about differences between ring tones and their "histories". The Nokia example tells us that the short, distinctive and repetitive nature of ring tones has a much wider and more powerful impact than material reality,[123] and spreads even faster than music.[124] It seems

[122] Oliver Burkeman, "Fellowship of the Rings", *The Guardian* (August 13, 2003).
[123] "Music is prophecy. Its styles and economic organization are ahead the rest of society because it explores, much faster than material reality can, the entire range of possibilities in a given code.", in: Jacques Attali, *Noise*, p. 11.
[124] An article by Sasha Frere-Jones in the *New Yorker,* "Ring my Bell: The Extensive pleasure of the Ring Tone" (Feb.28, 2005) explains in detail how the recording industry insures that the next hit song be released as a ring tone and has it already used it as a tool for promotion, and creation of big sales together with mobile telecommunication industry including companies which sell polyphonic ring

needless to say here that this power constitutes itself under conditions of a high-level diffusion and popularity of the mobile phone. One of their roots lies in advertising: ring tones offer perfect conditions to achieve a level of extreme popularity – also because of the combined effect of alarming and persuasive sound qualities and their short duration, their ubiquitous repetition by mobile users. Then, how do ring tones affect a culture of listening, or by extension influence a scene of communication?

There are hardly any two ways to perceive these sounds or melodies. A powerfully presented ring tone will stay in people's mind, and becomes the equivalent of a corporate or an individual "sound logo." It is already a part of contemporary soundscapes where ring tones function as "personal sound logos" among users. Their playful appeal helps to popularise having a "custom-made", "unique" ring tone among users. These ring tones can be easily downloaded from the mobile telephone companies' or other websites, sometimes as either a free service or costing between approximately 50 cents and US $2.50 to $3.00 at most, or users become monthly subscribers for fees around $6.00, and they can choose as many as they like. Some cell phones contain built-in software that makes it possible to compose customized melodies (but in a very limited sound range), just as Ström did it in *Min Mobil*: on almost any computer, users can explore a huge variety of possibilities for composing.[125]

tones, and a "master tone". Popular composers and musicians compose ring tones to succeed in the market. It is quite amazing how big the ring tones industry has already grown. In 2004, it generated four billion dollars in sales around the world, and sales are increasing every year. Further details is in many articles, for example: Gemma Phillips, "Fellowship of the rings", in *The Guardian*, August 13, 2003 (www.guardian.co.uk/g2/story/0,3604,1017468,00.html) ; or, more extensively: Sumanth Gopinath, "Ringtones, or the Auditory Logic of Globalization" (www.firstmonday.org/issues/issue10_12/gopinath)
[125] A phrase for twenty-five seconds (at maximum) opened up a new space of economic spectacle. The global ring tone industry is recognised around the world. For example, according to the daily newspaper *Asahi Shimbun*, in Japan in 2005, 280 million songs are downloaded to au mobile telephones (au is one of the brand of mobile telephony of KDDI, holding % of Japanese market), which reached to the sales of 22,700 million Japanese Yen for a three quarter in the year. In general, the global ring

Users tend to choose a ring tone carefully, as it is supposed to refer to and represent their interests, tastes and senses. Among users, some index the sound as the part of the self – to them it is more than a part of personal representation, they believe in it as a means of differentiation of the self from others. Ring tones, in this sense, are personalised sounds. Moreover, the ring tones become indices of individual personality as well as of group identities. Lately, new technologies that turn mobile phones into mp3 players have given rise to a new habit to externalize ringtones as personal "themes" that can serve as territorial demarcation signals (in the "home turf") or as a venture into unknown territories (outside the familiar neighbourhood).

But phenomenologically, for the individual user, ring tones represent "the splitting of a sound from its source or the condition caused by this split."[126] According to Canadian composer and sound theory pioneer R. Murray Schafer, "[We] have split the sound form the maker of the sound. Sounds have been torn from their natural sockets and given an amplified and independent existence. Vocal sound, for instance, is no longer tied to a hole in the head but is free to issue from anywhere in the landscape".[127] As discussed in section C.1, the human voice implies a special value as a "being". Along with such a historical and cultural construction of being in electronic media, another transformation of the meaning of the human voice can be found in the ring tones of the (recorded) human voice, too. Using the built-in function of a sound recorder, voice ring tones can be quite easily produced.

tone industry is already worth somewhere between US$2.5 and US$3.5 in 2003. The U.K.-based group Informa Media predicts that ring tones will bring a profit of 4.7 billion US$ by 2008.
Music industry sees the great impact of the ringones to function as a key to produce the next hit songs. ' Indeed, with ringtones accounting for approximately 10 percent of global music sales (which were US$32.2 billion in 2003), the global music industry has already become significantly dependent on rigtones to boost profits. 'Nowadays, in addition to download from websites, a numbers of CDs are produced for ringtones. Popular composers and musicians compose the sound especially for ringtones.
[126]Quoted in Mathieu 1994, p. 223. Borrowing the term from Gregory Bateson, Steven Feld (1994, p. 265–71), calls the recombination and recontextualization of sounds split from their sources "schismogenesis".
[127] Ibid.

When a call is received, a familiar voice suddenly calls you out of a pocket, a bag, or from somewhere around your body. This quality of a familiar voice from an unexpected source evokes an uncanny feeling. Even though you know it is a replay of recordings, it feels like something animate is there. In a sense, voice ring tones further transform or twist the existential value of the human voice into something else. This disembodied voice exists as if multiplied or belonging to a spread identity, and it creates a feeling of being psychologically alive[128] in a strange mixed and inseparable feeling of familiarity and uncanny.

Trying to understand such a feeling, the Japanese robotics scientist Masahiro Mori explains the two opposite emotions as a positive and a negative familiarity, in mathematical terms on the same line, and analyzes the point where a sense of familiarity shifts to a sense of strangeness, exemplified by humanoid robots. ("The Uncanny Valley"[129], 1970) **(fig. 18)**. He says that the humanoid appearance of robots – consisting of a face, too arms and legs, and a torso – is an essential condition for people to find a sense of familiarity with the humanoid. That seems to simply suggest that a sense of familiarity increases more, as a higher degree of human likeness is achieved. However, this continues only until arriving at a "valley" on the chart, which Mori calls the "uncanny valley". The sense of familiarity rapidly declines when the simulation becomes too real, but is revealed as not real. For example, people hardly notice a prosthetic hand these days because of its perfect visual details with veins, muscles, tendons, fingernails and fingerprints. But once

[128] Using case studies, Sherry Turkle has observed that children can effortlessly accept the idea of a split between consciousness and life. By studying children's conceptions of liveness around stationary computer objects in the late 1970s and the 1980s and the creatures in computer games in today, she describes that "the focus of children's thinking had shifted to an object's psychological properties" and states an interpretation of perception, "you can have consciousness and intentionality without being alive".
[129] There is heavy criticism against the idea of the "uncanny valley," it is regarded as "pseudoscience" since it is lacking a basis for charting, and only proves the evidence of technological realization. No matter what the status of the theory is, the uncanny valley has been widely adopted in many films, animation and computer games. Masahiro Mori, "Bukimi no tani. The uncanny valley," 1970, www.androidscience.com/theuncannyvalley/proceedings2005/uncannyvalley.html.

people find out it is not a real hand, a negative sense of familiarity suddenly and strongly emerges. The appearance may be quite humanoid, but the familiarity is a totally negative one. This also applies to corpses. In most respects, corpses are the same as living human bodies. However, once we realize that we are faced with a dead body, it is immediately rendered uncanny. According to this line of thought, where in this hierarchy of listening to the authentic or the inauthentic is the voice ring tone exactly located?

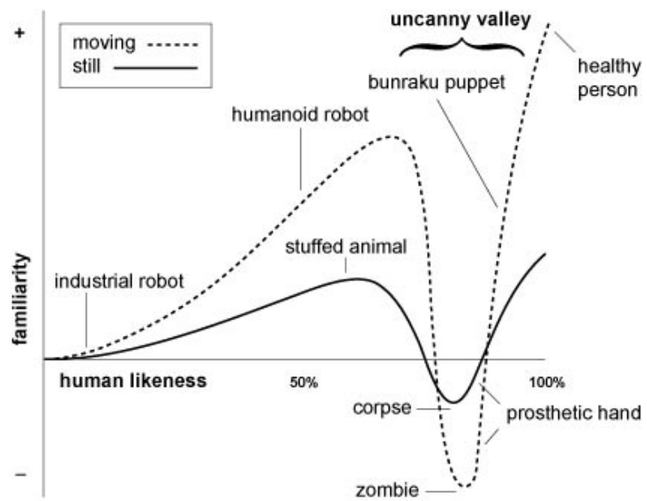


Fig. 18: Emotional response of human subjects is plotted against anthropomorphism of a robot, following Mori's results. The Uncanny Valley is the region of negative emotional response for robots that seem "almost human". Movement amplifies the emotional response.

Ring tones produce a setting where the disembodied voice gives the listener a bodily sensation that emanates from a kind of life. However, what is this kind of life we sense in any human voice? Steven Connor, an English literature scientist, has described, "the voice is the body's syntax; its uprightness, its tones, tension and extension. If it is true of human beings that language enables us to be where we are not, and prevents us from ever being anywhere but beside ourselves, then it is the

voice that stretches us out between here and elsewhere."[130] If the recorded and replayed voice is perceived as an extended version of ourselves, the voice also introduces a sort of split consciousness. Then would it possible to think that the disembodied voice, extends ourselves and creates an avatar in replaying sound?[131]

These phenomena actually indicate an obsession, an unconscious or even conscious desire for symbolically differentiating the self from the others. Besides being a notice of receiving a call or an SMS, ring tones create a mark of presence, pronouncing, "Here I am." In 1968, Andy Warhol suggested that everyone could get public attention for fifteen minutes[132] by visually exposing him/herself. In the age of mobile telecommunication, these fifteen minutes have been reduced to fifteen seconds of acoustic exposure, enacted to grab attention within a closer range.

Ring tones are considered as a mark of identity for some, and yet they are also expected to frequently change. It is no doubt the commercial industry of ring tones that strongly encourages rapid transformations of these identity marks.[133] The attitude of easy and frequent exchangeability of ring tones shows that a desire not only shifts from possession to the differentiation and materialisation of a sound, but also refers to the fact that their notion of "identity" has a different conceptual scheme from discourses like identity politics. It is grounded in the cultural assumptions of contemporary mobile telephony: attachable and exchangeable, neither constructed over time, nor transformed. The ring tone is an identity that is

[130] Steven Connor, "The Strains of the Voice" www.bbk.ac.uk/english"skc/strains
[131] Instead of connecting the avatar to sound, but a power of text language in cyberspace, Sherry Turkle examined avatars as different ways of being and split subjectivities. I will discuss the avatar in mobile telephony in the section on Shilpa Gupta and on Rimini Protokoll.
[132] His original statement in 1968 was: "In the future, everyone will be world-famous for 15 minutes." After frequent questions on the statement, later he gradually modified it to confuse people as follows: 'In the future 15 people will be famous' and "In 15 minutes everybody will be famous."(1979) It referred to a quick raise and falls (in celebrities in particular) in modern communication media in the late 1970s.
[133] According to the data of the Mobile Data Association, sales of ring tone downloads to mobile phones in 2003 have reached over £70 million, which is more than sales of CD singles. Another statistic shows that 280,000,000 songs are downloaded to *au* mobile telephones in Japan in 2005, which reached sales of 22,700,000,000 ¥ from January until September. (*Asahi News Paper*, 2005)

neither articulated politically or socially by others, but which is purchased and/or downloaded from websites "democratically" provided by the communities that form Internet capitalism. Ring tones are introducing and diffusing the consumption of sound in an extreme manner. Ring tones help to promote the association of notions of identity with sound. As Ström's audio functions as a "sound logo", *Min Mobil* makes it possible to discover a different psychology "behind" ring tones. Has mobile communication created a space that allows people to transform themselves through split states of consciousness? This discussion will be taken up again in section E.2.

Ack

N200 NOTONOMA GRUPPEN.
N201 IDROTT.
N202 KLOTTER.
N203 ENGG.
N204 MC-GÄNG.
N205 RAGIST.
N206 RAUB.
N207 SATMIST.
N208 UNGDOM.
N209 VEGAN.
N210 EU KONTROLL.
N211 VILDOLYCKA BJÖRN.
N212 VILDOLYCKA HJORT.
N213 VILDOLYCKA LO.
N214 VILDOLYCKA MÅN.
N215 VILDOLYCKA RÄDJUR.
N216 VILDOLYCKA VARG.
N217 VILDOLYCKA VILDSVIN
N218 VILDOLYCKA ÄLG.
N219 VILDOLYCKA ÖRNAR.
N248 VÅLD MOT KVINNA.
N249 VÅLD MOT BOLIS.

C.4 Henrik Andersson:

SMS – Surveillance Makes Society

Henrik Andersson, *Communication Central* (2003)

Shelf, radio scanner, amplifier, speakers, wall text, dimensions variable.

(Rooseum Center for Contemporary Art, Malmö 2003)

Communication Central (2003) is an installation work in which the artist Henrik Andersson has tapped into Malmö police radio live transmissions. During the exhibition, he scanned and streamed dialogues among the local police force from his location in a narrow corridor of a basement at the Rooseum. Visitors were placed in a situation appropriate for listening to the dialogues that resounded in the space. Next to a frequency scanner, a list of codes used by the police was placed to provide a possibility of understanding which event or crime the communicating police officers were referring to. By using the title *Communication Central*, Andersson refers to a group of that name that was arrested in the course of an infamous incident at a demonstration against the 2001 EU Summit held in Gothenburg, Sweden.[134]

Listening to the conversations between police officers, the audience in the gallery can experience a reflexive change of position; instead of being objects, they are offered the opportunity to become subjects of surveillance. By staging the

[134] Demonstration on June 14, 2001 in Gothenburg, Sweden. Eight young people, between eighteen and twenty-three years old, were sentenced to three to four years in prison for causing riots. They used text messages for passing on information about movements of the police force: and this was considered as participation in the rioting.

experience of wiretapping, the artist strongly reminds visitors of possible political dimensions of the act of sending or receiving SMS, an activity that seems to have become so banal these days, and also the difficulties in dealing with issues of surveillance and communication in contemporary juridical systems. The work also reveals the fundamental nature of the space produced by communication technology, that is, it presents surveillance and support as two sides of one act. In that space, who is the observer and who is observed? By referring to the activist group Communication Central" Andersson reminds us of the fact that "routine data telecommunication raises the danger of it being too easy to accumulate information on individuals,"[135] and unfolds questions around surveillance within the space of communication technologies.

[135] Steven Wilson, *Information Arts: Intersection of Arts, Science, and Technology*, Cambridge: MIT Press, 2002, p. 467.

Henrik Andersson: *Communication Central* (Documentation)

(see fig. 19 and 20)

There were considerable political protests in Gothenburg during the EU/US Summit between June 14 and 16, 2001. More than 50,000 demonstrators and activists had come to the city from Sweden, Germany, Denmark, and Norway in a coalition of 87 major organizations, as well as a number of small autonomous groups, such as a group of exiled Iranians, non-violence networks, "Reclaim the Streets" groups, and others. The protest revolved around four major issues: anti-globalization, criticism against EU policies of militarisation, opposition against the membership of Sweden in the EU, and pacifist and environmentalist concerns directed at US President George W. Bush. Protests against Bush were especially strong on June 14, the day the EU/US summit was held in order to discuss issues of the World Trade Organization and the Middle East. Although the protests were so strong, the activists planned to remain non-violent, using the proximity of conferences, seminars, and meetings during the summit as an opportunity for negotiation and discussion; their non-violent intents symbolised by the demonstrators' white overalls. The demonstrations were also supported by the City of Gothenburg, which provided different schools around Gothenburg as accommodation for protesters. However, on June 14, there were controversial interventions by the police to shut down Havitfeldtska School, a convergence center for demonstrators arranged by city officials. Later it was moved to Schillerska School, however, the brutal interventions of the police at Havitfeldtska School were provocative and

Fig. 19

Fig. 19, 20 Demonstration on June 14, 2001, in Gothenburg.

influenced the general character of the protests for the remaining period of the Summit.

At 11 am on June 14, police surrounded and closed off Hvitfeldtska School, where more than 650 people were present. No one was allowed to leave, nor were journalists allowed to come close. One of the problems of the event that there was no information about what was happening for the people inside, or if there were any, they were poorly distributed. About a hundred people left the school around 3 pm and received humiliating treatment by the police. Many of the people inside did not know this was happening and kept negotiating to get out. In a state of confusion, the police chief decided to end negotiations and withdrew the mandate for the psycho-tactic unit, which aimed to open a dialogue with the demonstrating organizations. At 10 pm, police stormed the school and detained approximately 500 people.

The events have become known as the beginning of the so-called "Gothenburg Riots", which escalated into more violent clashes between police and protesters on June 15, in conjunction with another anti-capitalism demonstration by 2000 demonstrators. One young man was critically injured, shot in the back by a policeman during an RTS-organised street party at Vasaplatsen. According to statistics, during the demonstration, ninety demonstrators and fifty-three police officers were wounded, 1115 people were arrested, sixty-four individual verdicts were spoken – almost none against police officers.[136] Communication Central (or Information Center) is a small autonomous collective consisting of eight young people (five men, three women, six are in couples) between twenty and twenty-two years old, located at Skapplandsgatan in

[136] As of this date, only lower ranked policemen have been accused.

Hogsbo, a Gothenburg suburb. They scanned police radio communications, got reports from activists on the streets and sent SMS messages to groups of people to avoid violent confrontations such as the one in Malmö in April, where protesters were beaten up by the police. At 1:46 am on June 15, 2001, Nationella Insatsstyrkan busted the central and arrested twelve young people: one Australian, two Danes, and nine Swedish youths. Computers, cell phones, maps, frequency tables, etc. that were found in the apartment were confiscated by the police. Later, the eight Swedish people of "Communication Central" collectively received jail sentences between sixteen and twenty-eight months, depending on their age. Non-Swedes were forcefully deported to their countries of origin. The evidence of their purported crime – complicity in violent riots – was meagre indeed: four SMS text messages. The prosecutor claimed the text messages had urged people to go to Hvitfeldtska School in connection with the police action there. The following is a transcript of text messages exchanged on June 14, 2001, taken from official investigations:

> 11:57 am
>
> Preparing arrests at Hvitfeldtska. Police saying they are too few. Mentioned 13 [name of a police unit] Go there and help. Spread message.
>
> 12:18 pm
>
> People building defenses inside Hvitfeldtska. Too few policemen. Everybody go there to help pals.
>
> 14.46 pm
>
> Confrontations at Vasaparken. Get there! Police arresting people. If you are within police lines, break out NOW. More cops coming.

At 1:46 am on June 15, the police busted Communication Central and arrested twelve people who were then present at the location. Later, the Supreme Court lowered sentences for the eight young people participating in Communication

Central. The court found no grounds in the only concrete connection between the "centre" and "the rioters" - the four text messages are interpreted as exhortative message to navigate actionsEven though there were more than four hours time gap between received SMS and the beginning of riot action, the filmed evidence by the prosecutors was not presented to the defendant. Like in other riot cases, it became clear that the police were editing images and also adding different sound. Yet, the accused were given two years in prison for "abetting a violent riot". According to the court ruling, their guilt "must be assumed" and "appears obvious".

In order to understand Henrik Andersson's work within the context of the exhibition, the preceding pages offer just a brief summary of the necessary background. In the next section, instead of investigating further details of the incident and its legal consequences, I would like to concentrate on clarifying the significance of this event for the space of mobile communication by relating it to issues of surveillance. How does the paradoxical nature of technology complicate the space of mobile communication? How can Andersson's work help us to understand surveillance-and-service nature of that space?

Henrik Andersson's work *Communication Central* is a simple, straightforward, almost didactic presentation that shows an easy possibility for individuals to scan police radio without applying any manipulation and interpretation to the resulting data. Aesthetically, this creates a strong "live" impact, as well as a sense of the physical reality of police surveillance. By mediating the actual experience of wiretapping police radio within an art context, the artist puts the audience into a similar position as the members of Communication Central themselves were. At the same time, he also transforms the audience into the agents of surveillance. Here the police, once the subject of surveillance, have suddenly become the object of surveillance. There is an obvious analogy to the ambivalence and two-sidedness of mobile telephone communications, with the significant difference that, in mobile networks, each individual mobile phone is sender, receiver, and "scanner" at the same time.

Indeed, the unfixed positions of subject and object in a complex system of surveillance is quite fundamental to the nature of mobile telephony. The audience at the museum became (also ethically) implicated in police surveillance, at the same time it can be assumed that most of the visitors carried their own mobile phones

with them, which again constantly releases signals to any number of (commercial) telecommunication centrals. That means that they are detected by network systems while they themselves are monitoring the police. Andersson's demonstration of invisible surveillance relationships charged the whole atmosphere of the exhibition, insinuating that surveillance has lost its "simple" centralised character, but instead has been entrusted to each carrier of a "private" mobile phone, a technology that even today provides millions of individuals with surveillance tools – like high-resolution cameras, GPS, sound recorders, etc. While this could ultimately lead to a paranoid vision of present and future media societies, Andersson has limited himself to observing one specific point in communications in public space. Other than his predecessors in this type of artistic installation – for example the British artist Robin Rimbaud, a.k.a. Scanner,[137] – Andersson does not directly turn the observation he shares with the visitors to the exhibition into a commodity to be primarily appreciated on an aesthetic level,[138] but keeps it in the medium of a site-specific installation. Andersson makes experienceable and discussable the type of multi-layered surveillance, which is achieved both by voluntary and involuntary actions. This directly corresponds to the reality of surveillance as part of a mass society as well as in individual privacy.

Being offered this opportunity to think about the complexity of surveillance in the space of mobile communication, I would like to further consider two questions: that of the mentioned ubiquitous mutual surveillance – surveillance in the more specific sense of security – and the question of what could possibly remain unobserved under the current communicative and technological conditions.

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[137] See B.3.2.
[138] For example, as Scanner publishes his wiretapping results as basic materials for electronic music CDs and live performances

SMS: "Surveillance Makes Society"?

Compared to other devices, with the mobile phone it is hard to distinguish if it creates situations of voluntary or involuntary surveillance, but it is undoubtedly a device designed for the purposes of surveillance – and to be subject to surveillance. Its connectivity is supplied by location-based systems within the GSM standard; telephone companies store information about time, duration, originator and recipient of each call and can find approximate geographical locations by identifying the base station – one important limit obviously being the endless amounts of data that would have to be evaluated to achieve the practical applicability of this potential "state of total surveillance".[141] Be that as it may, mobile phones are far from anonymous.[142] In fact, there is no way to avoid being tracked, once you own a functional mobile phone. Moreover – and this is one of the possible results of Andersson's piece – monitoring mobile phones can be easily done by anyone with a "scanning all-band receiver", because the system uses an analogue transmission system just like an ordinary radio transmitter. Third-generation digital phones[143] are harder to monitor because they use digital encoding and compressed transmission formats. However, it is still possible to tap telephone calls for governments, telephone corporations,[144] or anyone with access to a special device.[145]

[141] Recently, on December 15, 2005, the European Union passed the Data Retention Directive, which requires telecommunication operators to implement mass surveillance of the general public through retention of metadata on telecommunications and store the collected data for a nondescript, but potentially very long time.
[142] Each mobile phone has a unique built-in international Mobile Equipment Identification (IMEI), a kind of serial number that is always transmitted, regardless of what SIM card is used in the phone. IMEI data are even transmitted when no SIM card is inserted in the phone at all, or when the phone is switched off.
[143] See chapter D.1.
[144] Telephone scandal by Sonera CEO Kay-Erik Relander, Finland was one of the examples. Cf. http://www.theregister.co.uk/2002/11/26/more_arrests_in_sonera_snooping/
[145] For example, the so-called "IMSI catchers".

Currently, the potential of surveillance lies within the hundreds of services used in networks: the utility maximisation of the mobile telephone – the described combinations of camera, microphone and sender/receiver, expanding into the field of data storage, entertainment industries, and their economy, and office applications – escalates and silently creates an intensified mass surveillance. In collaboration with other industries – financial services, retail, transportation and health care industries – the new utility functions are expanding enormously. Conveniences are automatically leading to the accumulation of personal data, officially for the sake of an extension and improvement of service.[146] The convenience realized through the mobile phone feeds vast amounts of information to the archive. Through services, all aspects of life are being turned into data and feed a personal archive owned by others and usually not accessible to the filed persons.

Acknowledging the mass surveillance in "plastic card" systems (like credit cards or other customer or membership cards), Rachel Baker, a British artist, started the art project *TM Clubcard* in 1997. For this project, the artist has been mimicking corporate "loyalty card" programs, in this case based on the Tesco supermarket chain's card service, maintaining a website offering online registration for reward points. Baker could track down the identities behind all entered data in a special database. Her website was eventually forced to shut down by Tesco's lawyers; but

[146] One of the close examples is Upsnaps, a text messaging company who provides free directory assistance for users of SMS. The mobile phone users SMS to Upsnaps the name and location of the information they require, and will received a reply with answer. Upsnaps connected to entertainment, music, sports, information service (Airline info, weather, packing tracking), broadcast media (car radio, radio, TV) and even religion. See http://www.upsnap.com/. Another example is the new service "Mobile Suica", whose test phase was launched by Japanese Railways East in January 2006, together with NTT, DoCoMo, and Sony. "Mobile Suica" is a payment system using mobile phones for "touch-and-go" interaction on the train. Thus, consumers do not need to queue up to buy tickets, but just get on the train and pay there. "Mobile Suica" is also usable for payment at various shops (kiosks, record shops, drug stores, coffee shops), restaurants, and public vending machines. Mobile Suica: http://www.mobiletechnews.com/info/2005/02/23/115704.html

its functionality has to be read as a warning, in that it created a full understanding of what could be called a "voluntary surveillance" assisted by a corporation.[145]

Now, mobile communication is used to build an archive of personal information, now stored on different hierarchical levels – not only by authorities, but also by big corporations for the sake of surveys, control, marketing, and service. What is observed is pre-categorised or pre-targeted, what is outside of these marks, still remains unobserved. This basically just indicates the existence of value judgments in society, but it also suggests what is possibly filtered out from data archives in general.

In parallel, focusing on the standard use of mobile telephony, and "how ordinary citizens are losing control of the information about themselves, on the other which is available to anyone who pays for it", 0100101110101101.org, an autonomous group of artists, has performed a project called *VOPOS* (2002).[146] The project consisted in constantly transmitting the position of two of the members via mobile telephony, GPS, and Internet, and making the information publicly accessible. It aimed at questioning the primary function of Galileo, the new satellite system entertained by the European Space Organization, to cover the entire globe, in close competition with the American Global Positioning System (GPS), and also at criticizing the popular distribution of GPS as a built-in feature of commodities such as mobile phones, navigation systems, and transportation services. "Who uses the coordinates it provides, and what does the electronic profile that can be deduced from them reveal?"[147]

[145] http://www.medienkunstnetz.de/works/tm-clubcard/
[146] The title "Vopos" refers to the acronym of former East German police, "Volkspolizei", which has been used as a synonym for surveillance in recent history.
[147] Vera Tollmann, "The World in One's Pocket? The Net Project 'VOPOS' by the Italian group 0100101110101101.org", http://www.springerin.at/dyn/heft.php?id=32&pos=0&textid=0&lang=en.

Advanced technologies produce more opportunities for surveillance, not just for authorities but for individuals as well. They basically enhance access possibilities, allowing us to collect and block data.[148] Even if one would decide to give up one's mobile phone, personal data would still easily leak out through seemingly unsuspicious everyday acts. *VOPOS* is part of the long term project *GLASNOST* (2000), that proposes the radical concept of "life_sharing": It is a concept for volunteers to give up their privacy, allowing complete access to their computer from the internet, which means that applications, systems, desktop, archives, tools, ongoing projects, and even private mail clients are accessible. Flipping over the concept of protection against general condition of surveillance, the project intends to produce total transparency of individual information – thus making surveillance ultimately ineffective and senseless.

"Transparency" is often emphasized in advertising, or in communicative space in general, but this project really presents "transparency" under open conditions. This is a quite provoking experiment around issues of "privacy" and its protection. By pushing the boundaries to an extreme, it challenges the concept of privacy and intellectual property, beyond ideas of "open source" accessibility of data and the state of being in the era of digital networking. "Life_sharing" is a concept that is designed to show the impossibility of understanding contemporary communication spaces using notions of "private" or "public", and to enforce a change of our perception to a different level. As the concept of privacy was and is an

[148] One interesting mobile phone project brought a different approach to the ideology of connectivity, since, in contrast to most other projects, it pronounced a "denial of service" and rather focused on "disconnectivity": "Bubl Space" by A. Elsenaar and T. Stolk (2004) is a device designed to create a phone-free zone around the user, thus proposing quite a negative approach to the mobile phone by reverting the user/victim scheme in telephone networks to the possibility of an alternative, aggressive behavior pattern. In a sense, "Bubl Space" produces a small barrier shielding off radio frequencies of mobile phones, and creating a digital territory of its own. Another project, called *Nose* (2005) scans for Bluetooth signals from the mobile phones on the surrounding streets and then randomly informs their owners with a message saying they are being observed.

"artificial" by-product of modernism and industrialisation, it seems plausible that it has started its transformation in the post-industrial era of digital communication. Current frequently used expressions – "invading", "blurring", or "interacting" with boundaries – are considered possible signals for a phase of transition. "Life_sharing" also has not only the potential to be a tactics of appropriating tools for social control in the pervasiveness of surveillance, but can also be interpreted as a new mode of networked being.

It could even be said that "life" as a continuous process of animation keeps producing information, whatever that may be. It is difficult to decide how qualified information can be extracted from the gigantic accumulations in which everything has already been sorted into prefixed categories. Here, the collection and accumulation of information is what matters; the evaluation does not.

Communicative Space and the Creation of Facts of "Liveness"

Collecting data through communication space may not be limited to basic tag information, but possibly goes beyond that – when it comes to interacting with live situations in order to extract data. As mobile telephony has become a staple of popular cultural productions, novelties that create new communicative possibilities are awakening power fantasies that result in genre depictions in science fiction or comedy, ultimately providing comic relief in the face of the uncanny qualities of new technology, and making it more acceptable, while artists often focus on extract specific critical aspects of technology. *Samurai Cellular*, part of a Japanese series of

fantasy episodes,[149] is one such fiction, and will be discussed here as an example for the mechanisms of integration active in genres of popular culture (see image spreads in the appendix). This twenty-minute episode is based on a well-known history of revenge for loyalty originally situated in the seventeenth century – fusing this central anecdote with the possibilities created by contemporary mobile communication. The historical incident is that a samurai, Oishi Kuranosuke, and his comrades take revenge for the unjustified punishment of their master, Asano Takumino Kami, who was ordered to commit hara-kiri and to disperse his feudal clan. In the version of that story in "Samurai Cellular", Oishi finds a mobile phone that has fallen in his path – seemingly out of thin air – and starts to be interviewed by it about a big revenge plot for the coming future (his future!) by an unknown person on the "other side" – as it turns out, an mobile network operator from three hundred years later. Until this fact is revealed, the miraculous talking object invades Oishi's life step by step: when pondering his life in a temple, in bed with his lover, in the middle of discussing revenge with his fellows. In the story, the mobile phone voice's frequent questions and inquiries force Oishi to answer in detail, and only this gradually navigates the cowardly man to take bold historical action, and in this version it is actually the mobile phone that makes him a "historical figure".

This short story is based on a lot of bizarre assumptions – the successful transport of the mobile phone to the past, the mobile phone works beyond dimensional time-space limitations, everlasting batteries, and many others. But the fictional setting can also reveal the phantasmatic nature of mobile telephony and its constitution of a data space much more clearly, present it more vividly than common descriptions would. Firstly, it is an absurd idea to interview a hero from

[149] "Yo nimo kimyo na monogatari - Eiga no tokubetsuhen (Tales of the Unusual)" (2000, Suzuki Masayuki).

the past using a mobile phone, but this exaggeration significantly emphasizes the "live" character. Technology here does not reproduce a recorded past, or some backward reminiscence, but helps to create an important moment of presence by producing information "live" from the unconscious mind of the surprised samurai. The unknown voice from the future apologises for the intervention every time, saying that all this happens for the sake of precise information. But what can notions like "precise" or "detailed" really mean here? If those were the priorities, wouldn't it make more sense to use wiretapping or video surveillance?

But here it is the spontaneity and authenticity of the samurai's reaction that is taken into account – even if the category of authenticity had just been taken to an absurd degree. In this episode, "liveness" is interpreted as the most important feature of mobile communication, and this "liveness" is created in spontaneous dialogue, through interaction. Through communicative interventions, actions are influenced. This power of creating "liveness", an interactively constructed present represents a manipulative fantasy about the device. By privileging direct and easy "personal" access, mobile users are supposed to constantly create a "live" situation together. Eventually, *Samurai Cellular* even flips over the story from the mode of a humanistic comedy into a sort of critical comment on current media practice. The last scene bursts the scale of person-to-person communication by showing the operator who has been communicating to Oishi as part of a gigantic office – like a call-centre, filled with thousands of colleagues doing the same thing: like an army of Benjaminian angels of history, they create history by calling back to the past **(see fig. 21 and 22)**. The fictional narrative succeeds to make its visual setup appear in stark contrast, as the depiction of the data collection starts from humanistic and subjective actions but is eventually transformed into one huge digital archive. A couple of lines of text on a computer monitor in the last scene symbolises the

Fig. 21

Fig. 21, 22 Video stills from final scene of "Samurai Cellular"

reduction of all the complex layers of meanings and experiences both in process and results, which cannot be encoded to digital data. The operators may have been observers, but what is not contained in the sentences they type into the digital history book, evaporates into a space between zero and one and stays unobserved.

Information gathered by the already mentioned "extra functions" and by new gadget applications for the mobile phone currently are currently showing a great deal of progress.[150] These "tools" are often and easily misused and exploited for voyeurism[151] – voyeurism and surveillance being based on similar impulses. Paul Virilio called the banalisation of surveillance the "democratization of voyeurism"[152] on a global scale. He points out the risk that only specialists – military, political police, marketing investigators, and other automated information collectors – may take advantage of surveillance. On the other hand, researchers and artists Steve Mann, Jason Nolan, and Barry Wellman have discussed possibilities of a "sousveillance" held against that of "surveillance":[153] empowering the individual to revert the gaze of surveillance back to the observers (authorities) – making it possible to resituate panoptic technologies of control over individuals to an inverse surveillance of (previous) observers whose authority was based on their power of the unidirectional gaze.

[150] Examples are not only high-resolution still/video cameras, but also automatic voice recorders for all conversations, enabling even the playback of a fake background noise during a conversation. Another is a night filter for phone cameras developed by Japanese company Yamada Denki, where the X-ray specs originated in a military context and were designed to produce reconnaissance pictures at night.

[151] The 100 add-on will turn camera phones into X-ray specs that can see through clothes. Originally, this effect has quickly been exploited by voyeurs. Night-filters are the latest device used by Japan's obsessive voyeur community. It can be bought on the Internet and fitted to high-end phones. The cameras effectively give users night vision by picking up on heat to create outline pictures. Because bodies are hotter than clothes, the pictures produce an image of the body without the clothes.

[152] Paul Virilio, *The Visual Crash*, Cambridge: MIT Press, 2002, p.109

[153] The inverse panopticon is composed out of the French words *sous* (below) and *veiller* (to watch). See "Sousveillance: Inventing and Using Wearable Computing Devices for Data Collection in Surveillance Environments" by Steve Mann, Jason Nolan and Barry Wellman.

As we can see in extreme cases of personal empowerment that are represented by "hackers", it is possible to retain a view on "sousveillance" as a counterforce. In fact, these arguments are still based on the binary concept of public and private, basically opposed to understanding the nature of networking as "free flow". In the digital realm of "hackers", it makes no sense to trace boundaries, even though a corresponding transformation of our perception under real conditions will still take time – if it happens at all. In his *Hacker Manifesto 2.0* (2004), McKenzie Wark wrote:

> "Hackers create the possibility of new things entering the world. Not always great things, or even good things, but new things. In art, in science, in philosophy and culture, in any process of knowledge where data can be gathered, where information can be extracted from it, and where in that information new possibilities for the world are produced, there are hackers hacking the new out of the old."[154]

As said here, personal empowerment can be used to create alternative data mappings, which can also be useful for promoting critical thinking and reflection. But moreover, it formulates a new mode of being in networks, seeking and creating new possibilities in "free flow". As networking systems and technologies can be considered as extensions of the body, this also affects the concept of the self and the other, now marked by a different sense of boundaries. New possibilities of information may open up new space and a new mode of selfhood. I will further discuss the network mode of being in mobile communication spaces in chapter E.

[154] http://www.newmuseum.org/more_exh_open_source.php

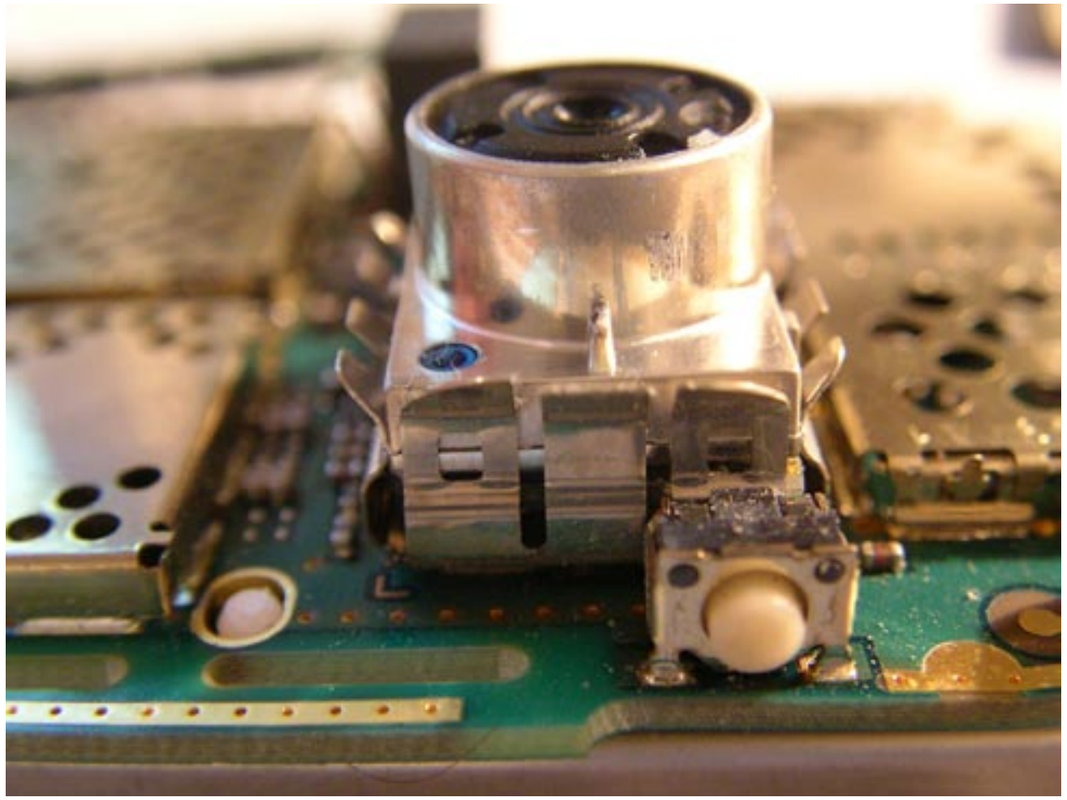

Fig. 23 A camera lens attached to the mobile phone

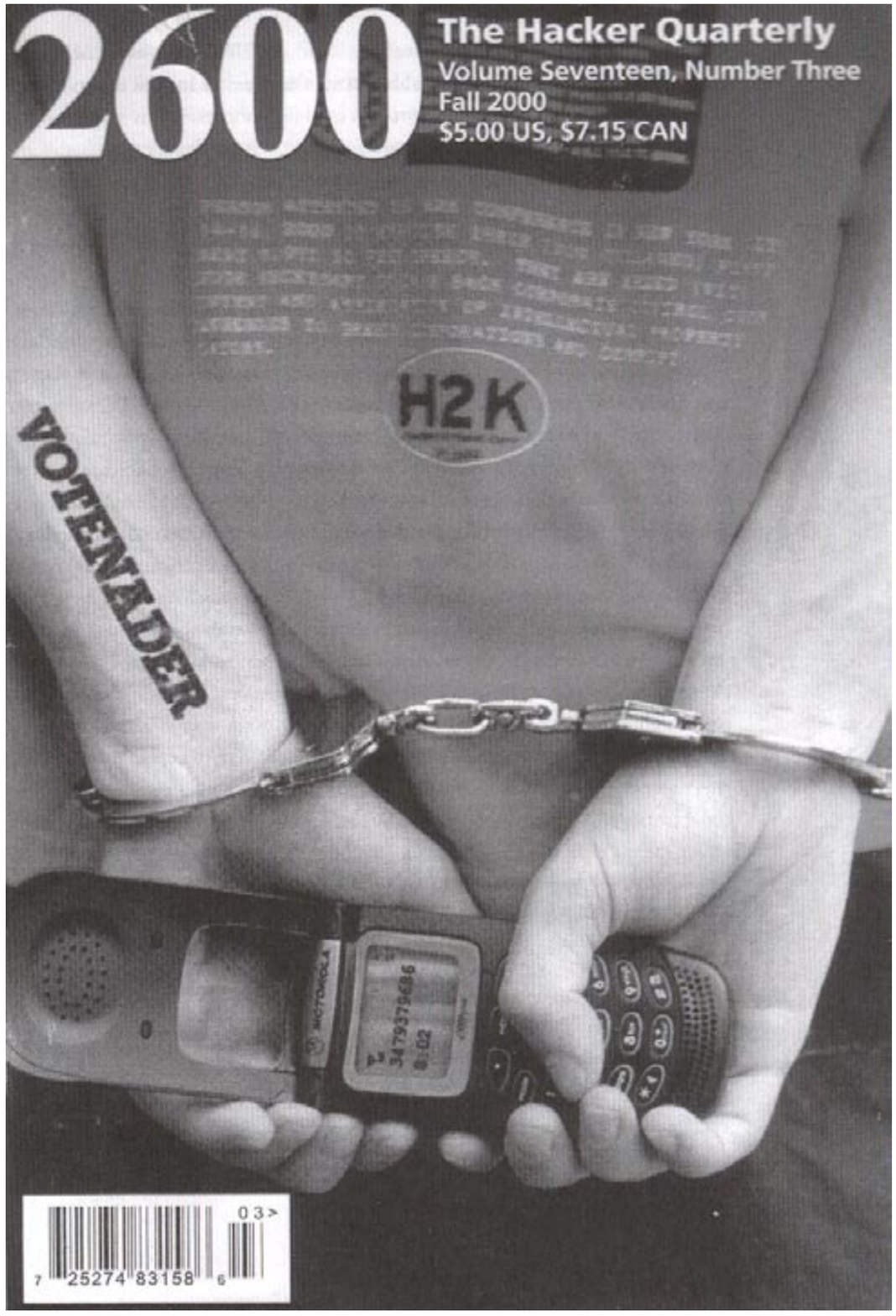

Fig. 24 Front Cover of 2600 Magazine, vol. 17, no. 3, Fall, 2000

A New Model of Citizenship

The construction of a "free flow" in mobile communication space gives it the potential to play an active role in social spheres, to empower individuals by the effect of text messages on political actions in public space, for example. Especially, the text message holds a considerable potential to quickly and effectively distribute information on the basis of speed, reliability, and even the rudimentary expression of individual style;[155] SMS texting is also capable to hold and concentrate a recipient's close attention by its short length (less than 160 characters) and its simplified mode of expression. The high adaptability of the mobile phone with its integrated use of SMS texting has been seen as especially powerful in political contexts such as demonstrations and election campaigns, enabling individuals and groups to challenge power geometries of contested places through the implementation of bike-reporting, telephone chains, and so on.

A well-known example for the political influence that mobile communication has recently had was the movement to replace President Estrada in the Philippines in 2001. It was brought about by virtual contacts among political demonstrators who, by exchanging SMS text messages, succeeded in establishing an alternative media stratum. Through their texting, a very strong informational undercurrent was created in the realm of the public opinion, eventually achieving the replacement of President Estrada. Mobile phones were used to provide and exchange reliable information among spontaneous gatherings of people who had been strangers to each other just a moment before, bypassing the unilateral

[155] Endre Dányi, Miklós Sükösd, "Who's in Control? Viral Politics and Control Crisis in Mobile Election Campaigns", in: Kristóf Nyíri, ed., *Mobile Democracy. Essays on Society, Self and Politics*, Vienna: Passagen Verlag, 2003; Endre Dányi, Miklós Sükösd, "M-Politics in the Making: SMS and E-mail in the 2002 Hungarian Election Campaign", *Mobile Communication. Essays on Cognition and Community*, ed. Kristóf Nyíri, Vienna: Passagen Verlag, 2003..

information structure of mass media. In his essay "Mobile phones, identity and discursive intimacy", Raul Pertierra has described the spatio-temporal condition as the emergence of a special kind of political "intimacy".[156] Similar interactions happened in the South Korean presidential elections in December 2001,[157] the 2002 Hungarian election campaign,[158] the Spanish elections on March 14, 2004,[159] and others.

Electronic communication amplifies the interrelativity of what could be called a "mass mind". Referring to these cases, speed proves to become more powerful and influential in a network communication era. Howard Rheingold says, "Whenever a technology enables people to organize at a pace that wasn't before possible, new kinds of politics emerge",[160] or, as Marshall McLuhan put it much earlier, new technologies always influence our configuration of life. Applying their words to present conditions, it could be said that texting has created a mode of diffusing information that also implies specific notions of presence. The fact that new technology equals new speeds of information transmission actually does not matter, only the fact that it happens "live", which can at times signify power. Other political events have been exemplified elsewhere to indicate the potential of those

[156] Raul Pertierra, "Mobile Phones, Identity, and Discursive Intimacy", *Human Technology* 1.1 (April 2005), pp. 23–44.
[157] Roh Moo-hyun won the South Korean presidential election by the effective use of new media technologies. Alternative information on the website and an extensive mobile phone campaign made a counter balanced to mainstream journalism which support the opponent, and led him to win the race. http://www.smartmobs.com/archive/2005/07/06/shin_dong_kim_o.html
[158] According to M. Sükösd and E. Dányi, the higher diffusion of the mobile telephone compared to the that of the internet contributes to political mobilizations, vividly reflecting the atmosphere of the parliamentary election campaign in 2002. See "M-Politics in the Making: SMS and E-mail in the 2002 Hungarian Election Campaign," *Mobile Communication: Essays on Cognition and Communication*, pp. 222–223.
[159] The Spanish government officially prohibits political demonstrations within 24 hours preceding the voting, but activists managed to circulate millions of SMS and E-mails, which eventually resulted in the defeat of the Popular Party, which had been expected to win. http://www.iht.com/articles/2004/03/22/flash_ed3_.php
[160] Ibid.

social relations made possible by the use of mobile phones.[161] Through the new pace of interaction, the potentials of current public spaces can be gathered and can grow from a fragmented existence into another kind of public sphere.

From the comparison of an episode like the *Samurai Cellular* with political demonstrations in the Philippines, in Spain, Korea, and Sweden (*Communication Central*), it becomes clear that "immediacy," based on individual communicative interaction, deeply affects mobile communication space where social imaginaries can emerge, and, together with the speed of group diffusion, can very spontaneously escalate personal action to the dimension of a temporary public sphere, replacing previously complicated chains of command and structures of communication by one systematically organized act.

There is still no way to guarantee a specific use of the existing networks, there are only technical means to preclude the diffusion of mobile information within the reach of a source of disturbance. The aforementioned manipulative character can be used by virtually everyone, which means that all surveillance relations become potentially bidirectional. The resulting concept of a "sousveillance" (or even "co-veillance") could be instrumental for discussing new models of citizenship, new models of a public sphere, or even a new ethics of privacy. But at least at the present stage, it seems improbable that it should better the problems of post-industrial mechanisms of social control. Considering personal use of the SMS, in one way, new media divide the unified physical and public space and let a thousands of matrices of 'public spectacles emerged. Mobile communication technologies may produce rather small, but overlapping public

[161] In events such as the massive lay-off protest of workers in the petrol and machinery industries of northeastern China in2002, the "rally for peace" outside the U.S. Embassy in Beijing 2003, or demonstrations during the 2004 U.S. Republican Convention in New York.

spheres divided by topics, interests or new temporal hierarchies. In fragmented but inter-related public spheres, the changes of conditions might be understood as the creation and infiltration of "flat hierarchies" – hierarchies spontaneously controlled by the power of subjectivity within networks.

The space of mobile communication requires a new ethics, as it deals not only with data flow – specific personal data are being extracted from it. On the other hand, information coming from the side of the "individual" engenders a different sort of trust and contains potentials to grow a temporary public sphere by individual initiation, which is neither corresponding to a top-down model nor to a professionalized public sphere. Seemingly, technologies can function in both ways: by growing and fragmenting spaces.

C.5 Henrik Frisk: Paradoxes of Communication[162]

Henrik Frisk, *etherSound* (2003)

Computer, speakers, Internet server

Malmö Konstmuseum, 2003

etherSound is an interactive sound installation by the Swedish musician Henrik Frisk. In the exhibition, it was displayed in the open hall between the first and second floor of Malmö Konstmuseum. In this work the audience is invited to participate in the creation of new sound events by sending text messages from their mobile phones. The title *etherSound* was intended to open up a mediated, ether-like surrounding space through the audience's participation. The idea of making *etherSound* a piece that required active participation from the public grew out of early discussions surrounding the development of a general concept for my curatorial project The Invisible Landscapes. *etherSound* was first imagined by Frisk as a resonant body that derived its control from "non-active participation", an almost unintentional impulse fed from the public, more specifically from data about *any* activity in the GSM network surrounding the exhibition space. Facing difficulties with information security, it became clear that mobile phones could successfully be used in order to let the public interact with the sound much more directly. *etherSound* integrates the mobile phone as the most popular among the new communication tools and opens a specified participatory channel to the public. The principal idea behind *etherSound* was to design a special kind of musical instrument that could be

[162] This section was developed based on a paper co-written by Henrik Frisk, published in "Organised Sound", *International Journal of Music Technology* 10.2 (August 2005), pp. 121–27.

played by anybody able to send an SMS from their mobile phones – and to interact in an improvisational mode that let the participants experience that they were, through their messages, influencing a sound continuum pre-constructed by Frisk. This provided the participating visitors with an experience of what it is like to improvise in an electronic space that is sensitive to certain patterns of change – not knowing exactly what the specific "requirement" of the situation was (apart from the fact that it had to have the format of an SMS text message), and also not knowing which reaction would be elicited by which action.

In the version displayed as part of The Invisible Landscapes, all messages sent to a specified number were received by an Internet server, and parsed for content, the phone number it was sent from, and the date and time it was received. This information was written into a database that was queried at regular intervals by a computer running a control and text analysis application[163] and the sound synthesis software (Max/MSP[164] running a Csound orchestra[165]). For every new message, the data was downloaded, processed, and analysed by a controlling program, turned into control signals, which were then sent to the sound synthesis engine. Every message generated one "sonic object" – a new melodic sequence particle that would last for up to two minutes. The response was very direct – any SMS received would result in an immediate and perceivable change in the sound. *etherSound* was tried out in two different modes: as a stand-alone, interactive sound installation, and as a vehicle for improvisation. In the latter version, one or several performers improvised along with the sounds of the installation while the audience contributed actively to the performance by sending text messages.

[163] Written in Java: J2SE 1.4.2 2004; J2EE 1.4.1 2004.
[164] David. Ziccarelli, Max/MSP, Manual. Cycling 74, IRCAM, http://www.cycling74.com/products/maxmsp.html, 4.2 edition.
[165] Richard Boulanger, ed., *The Csound Book, Perspectives in Software Synthesis, Sound Design, Signal Processing and Programming*, Cambridge: MIT Press, second edition, 2000.

In this work, the mobile phone is the interface to the sound production and the spatial and temporal distribution of sound events. The way the mobile phone is used here – as a text-only input interface – is rather limited; much of what follows evaluates the advantages the mobile phone has, despite these limitations. If the only purpose of "etherSound" was to allow users to input text that would be transformed into sound, installing a computer with a keyboard that would allow visitors to post messages on site would conceivably be technically less complicated. Another solution, more dynamic than the one chosen, would have been to implement a voice interface that allowed for true "real-time" interaction similar to that of the "Auracle" project (Jason Freeman, Chandrasekhar Ramakrishnan, Kristjan Varnik, Max Neuhaus, Phil Burk and David Birchfield, 2004). Although this last option was considered, such a solution would have necessitated a technical and financial framework that was beyond the scope of this occasion.

Experiences of that project introduced different relations between the artist and the audience from the traditional model and raised questions on the definitions of "interaction", collectivity and creativity through participating in the project. Throughout the project, I also tried to think about what such an implementation of public participation could possibly lead to. While running *etherSound* as a process of production, phenomena of "participation" were examined and analysed; the conceptualisation of the project also sought to reflect upon the power of co-operative practice and its relation to participation and creativity, openly assuming that concepts of "interactivity" – especially those applied to forms of data exchange on the Internet – at least seemed questionable and worthy of discussion.[166]

[166] On the critical notion of "interpassivity," see Robert Pfaller, ed., *Interpassivität: Studien über delegiertes Geniessen*, Vienna: Springer: 2000; see also Slavoj Zizek, "The Interpassive Subject," http://www.egs.edu/faculty/zizek/zizek-the-interpassive-subject.html

Complexities of Participation

The notion of "participation" has been widely discussed in the context of contemporary culture.[167] In the visual arts of the 1950s, Marcel Duchamp opened up space for the "art coefficient," i.e., the relation between what is intended and what is not contained in the artist's intentionality. In this way, space is also "made" for the spectator: "All in all, the creative act is not performed by the artist alone; the spectator brings the work in contact with the external world by deciphering and interpreting its inner qualification and thus adds his contribution to the creative act."[168] As a consequence of this insight, among others, the happenings and performances of the Fluxus movement were theorized as spectator "participations", spaces were turned into event spaces.[169] There were early examples of participatory works in the art context with a distinctly political potential even in the late 1960s – works like Hans Haacke's *MOMA Poll* of 1970 (an earlier version existed in 1969) come to mind. In the late 1970s, a strong critique of the cultural institutions originated in the United States and Europe, and there were still strongly discussed connections between the factor of social class and the "consumption" of art.[170] When the question of authenticity was raised by theorists in the 1980s and the concept of site-specificity came into focus as opposed to "white cube" practices, it influenced attempts to broaden audiences that were otherwise marked by the

[167] More recent work on the vast topic of participation and public art include: Suzanne Lacy (ed.), *Mapping the Terrain: New Genre Public Art*, Seattle: Bay Press, 1995; Erika Suderburg (ed.), *Space, Site, Intervention. Situating Installation Art*, Minneapolis: University of Minnesota Press, 2000; *Art for Change: Loraine Lesson. Works from 1975–2005*, Berlin: Neue Gesellschaft für Bildende Kunst. 2005; Miwon Kwon, *One Place After Another. Site-Specific Art and Locational Identity*, Cambridge: MIT Press, 2002.
[168] Marcel Duchamp, "The Creative Act", in: Robert Lebel, Marcel Duchamp, New York: Paragraphic Books, 1959, pp. 77–78. (Session on the Creative Act, Convention of the American Federation of Arts, Houston, Texas, April 1957).
[169] See *Happening & Fluxus*, eds. Harald Szeemann, Hanns Sohms, Cologne: Kölnischer Kunstverein, 1970.
[170] Paul DiMaggio and Michael Useem, "Social Class and Arts Consumption: The origins and consequences of class differences to the arts in America," *Theory and Society*, 5.2 (1978). Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste*, transl. by Richard Nice, Cambridge: Harvard University Press, 1979.

development of the first "mega exhibitions" and the deployment of more democratic mass media and television. In the 1990s, departing from a critique of the privatisation of formerly public spaces, artists and theorists found very different approaches to discuss issues of democracy and to answer to changes in Western societies, but also on a global scale. The proximity of artistic practices to a globalizing model of service industries opened another focus on the importance of social exchanges and their representation. One discussion that has been conducted with some intensity in recent years was initiated by the French theorist Nicolas Bourriaud.[171] In his view, the emergence of a "new public art", embodied by the practices of artists like Rirkrit Tiravanija, Philippe Parreno, or Pierre Huyghe, practices grouped under the term of "relational aesthetics", were applied to an activation of social services, to banal daily events, and to community-based art, a step that made everyday "participation" a central issue for cultural production. It has to be stressed that the above mentioned art activities suggest strongly diverging interpretations of the notion of "participation". This implies that there is a necessity to constantly reinterpret and differentiate the use of many different phenomena under this term. The principal questions that are also raised by a work of interactivity like Henrik Frisk's are: What does "participation" mean in the age of the networking and mobility? Who can be conceived of as a "participant"? What are the factors involved in the production of "participation"? Are there any spaces for "interactivity" – where is a degree of interaction that could actually be called "navigation"? Or, is "interactivity" actually "interpassivity"?

[171] Nicolas Bourriaud, *Relational Aesthetics*, Dijon: les presses du réel, 1998 (engl. 2002), and its debate in *October:* Claire Bishop, "Antagonism and Relational Aesthetics," *October* 110 (Fall 2004), pp. 51–79. Liam Gillick, "Contingent Factors. A Response to Claire Bishop's 'Antagonism and Relational Aesthetics'", *October* 115 (Winter 2006), pp. 95–107, and elsewhere: Walead Beshty, "Neo-Avantgarde and Service Industry", *Texte zur Kunst* 59 (September 2005). (See also http://www.textezurkunst.de/NR59/neo-avantgarde-and-service-industry.html).

With the growing popularity of communication technology and mobility, the definition of contemporary culture is undergoing many transformations. Georges Bataille conceived that a definition of culture is deeply related to the way society chooses to annihilate excess energy.[172] Applying his words to network society, surplus is observed in the phenomenon of the excess volume of communication through new media – which eventually produces new space. Can we look at communication as a potential area for the emergence of a new culture that differs from pre-existing categories and class hierarchies? Characterised by the desire for conviviality and the usage of networked devices, in a sense, communication has already become a fabric of production, created by the collective rather than by a unique individual. Instead of an inherited cultural capacity in society, the flow of communication has a strong impact on the cultural sphere, mutates recipients and stimulates creative capacity. Although, to a large extent, much of the need for communication and the need for new tools for communication is created by economic interests, it can be argued that communication, in a certain sense and under certain conditions, can be considered as a dense soup of possibilities where a "new" production of culture can emerge. This, of course, has to be discussed in perspective of recent debates on the social changes effected by "immaterial labor"[173] and the varying definitions of "cultural producers" or "cultural entrepreneurs". A critical limit in the discussion is attained wherever the production of art and culture and its representation is primarily viewed from a capitalist perspective.

[172] Georges Bataille, *The Accursed Share*, vol. 1, New York: Zone Books, 1989, p. 106.
[173] Discussion on "immaterial labour" has become important issue, especially in communication technologies. See Maurizio Lazzarato, "Immaterial Labor", *Radical Thought in Italy: A Potential Politics*, eds. Paolo Virno and Michael Hardt, Minneapolis: Univeristy of Minnesota Press, 1996. Michael Hardt and Antonio Negri, *Empire*, Cambridge: Harvard University Press, 2002.

Collaborative Music

Collaborative musical compositions and sound art have been realized in a number of ways and with different objectives. There are especially numerous examples in the very active field of art and music.[174] Today, and since more than a decade, it has become impossible to talk about these collaborations without thinking of a strong trend in which there is a rhetoric at work aiming to convince audiences and consumers of a "return" of collective modes of production as a sign of authenticity. After its "infection" with electronica and their history, with the traditions of Western improvisational practice and the "deconstruction" of male-dominated forms of expression, e.g., rock music as the most successful paradigm in popular music, has experienced a shift: from the charismatic singer/songwriter genius to bands with names like Workshop or Animal Collective. Their example may serve to show that "collaboration" as a simulacrum of ethical communion has pervaded even the most "authentic" genres in popular cultural production. This may remain an episode, but it makes sense to see it as one of the consequences of previous "user techniques" (in music as well as in communication technology) that are implemented in compositional and organizational softwares – applications largely remained "uncollaborative" and confined users to rather not so progressive, "networking" or "utopian" looking environments as cave-like studios and workstations with monitor screens – seemingly still modelled after the workbenches in early industrialism. Progress movements in popular culture promised an open

[174] In the project Norge et lydrike: Norway Remixed, the curatorial idea was "to bring the whole country together through sound", so "the local branch offices of the broadcasting corporation" were supplying sound material "in order to secure authenticity" and "actively counteract speculations of centralization" (Rudi 2003). // The Interactive Dance Club, Ulyate and Bianciardi define the goals as follows: (i) "to allow group and individual participation", (ii) "create a compelling social environment", and (iii) to 'deliver the euphoria of the artistic experience to 'unskilled' participants" (Ryan Ulyate and David Bianciardi, "The Interactive Dance Club: Avoiding Chaos in a Multiparticipant Enviroment," *Computer Music Journal* 3.26 (2002), pp.40–49.

space of communal activity, but technological developments did not acknowledge any necessity to consider this utopia of production, but rather concentrated on shared spaces of consumption, as, for example, in house and techno cultures with their club spaces that – after their origins in 1970s U.S.A. and their worldwide spreading in the 1980s – saw a significant increase in popularity in the mid-1990s, when the production and consumption of music and sound tended to become indistinguishable. This was engineered with new "interactive" and "networking" software that promised to connect authors in the most remote parts of the world in the same productive moment of "synergy".

Though their respective aims are different, most collaborative projects share an intention to create a "soundscape" [175] that can communicate a sense of communal effort and solidarity. The definition of "soundscape", neutral as it may sound, has to be problematised much in the same way that ambivalent notions of "ambient" have been circulating in the 1990s. The question has to be raised if artists referring to these concepts are aware of their specific interaction of space and consumption that seems ideally suited to illustrate the creation of a "social effect". Emphasis on the "effect" side seems appropriate since "soundscape" and "ambient" are in their majority affirmative continuations of modernist principles of capitalist space.[176]

In the presentation of Frisk's reaction to the concept of the "soundscape", the attempt was made to introduce an awareness of the political and potentially

[175] The notion of the soundscapes was introduced and developed by Raymond Murray Schafer, from the 1960's onwards. Schafer (*1933) is a Canadian composer, writer, music educator and environmentalist. His *World Soundscape Project*, which concerns acoustic ecology, is one of this best known pieces. In addition to introducing the concept of soundscape, he also coined the term "schizophonia" (1977). See also Emily Thompson, *The Soundscape of Modernity. Architectural Acoustics and the Culture of Listening in America, 1900–1933*, Cambridge, Mass. / London: The MIT Press, 2002.
[176] Brian Eno, "Ambient Music", *Audio Culture: Readings in Modern Music*, eds. Christoph Cox and Daniel Warner, New York: Continuum Books, 2004; David Toop, *Ocean of Sound. Aether Talk, Ambient Sound and Imaginary Worlds*, London: Serpent's Tail, 1995; Diedrich Diederichsen, "Ambient: Definitions," *Daidalos* 68 (June 1998), pp. 139–142; Mark Prendergast, *The Ambient Century. From Mahler to Moby – The Evolution of Sound in the Electronic Age*, with a foreword by Brian Eno, London: Bloomsbury: 2003.

exclusive aspects of music making already in the curatorial concept. By letting a large number of individuals supply the input, these works attempt to create a fabric of references that can be valid for a large number of visitors. In other cases visitors are invited to actively participate in the familiar environment of a dance club. But instead of merely responding in this environment the visitors are invited to influence the music and imagery they are responding to, individually or collectively. Action performed is not the only end result but also the initiation of the next process.

Making music has traditionally been limited to physical space. Through the Internet there is an active virtual space that has been explored for collaborative work in sound.[177] To invite even non-professional performers to collaborate in music-making is a complex matter, but also an agency for opening up a creative process, and participation is a step towards interpretation and perceptiveness, or as Jordà puts it: "the best way to understand and appreciate any discipline [...] is by 'doing' and being part of ".[178] The main intention behind the collaborative element of *etherSound* was to let the desire to participate be the driving force, and the challenge therefore was to design an interface that was as open as possible to anybody who wished to take part. However, the democratic ideology of acts of "participation" requires careful examination. The open initiation through SMS text message as an attitude of "being a part" and "enjoying it" in a certain sense may also deprive the subject of its dignity. What does individual participation mean? While *etherSound* encourages the active participation of the subject through mobile telephones, the initiation could be understood that it paradoxically treats the act of participation as a

[177] William Duckworth, "Making Music on the Web," *Leonardo Music Journal* 9 (1999); Sergi Jordà, "Faust Music On Line: (fmol) An Approach to Real Time Collective Composition on the Internet," *Leonardo Music Journal* 9 (1999). Alvaro Barbosa, "Displayed Soundscapes. A Survey of Network Systems for Music and Sonic Art Creation," *Leonardo Music Journal* 13 (2003), pp. 53–59.
[178] Sergi Jordà, "Fmol. Towards User-friendly, Sophisticated New Musical Instruments", *Computer Music Journal* 26.3 (2002), pp. 23–39.

way of getting input data from external sources. As the participating subjects are never informed and have no way to know the relation between their specific act of composing an SMS and its effects on the sound, the substitution of the skill to play music is, in a way the substitution of the signifier for the subject as well.

An experience to participate in *etherSound* also led to another set of questions. What does interaction mean when there is only a pre-programmed set of codes to be "explored"? How interactive are we in the interface of the pre-programmed? What sort of exchange (of ideas and thought) can be there? What kind of potential for enriching experience is there through such an interface? The initiation of participation might keep the subject within a range of actions in line with ideological elements of democracy. What is the real dynamic there?

Unreflected uses of the notion of "interactivity" have long become fashionable and highly marketable. There is already some argument on questioning the use of the notion of 'interactivity' in new media. Slavoj Zizek argues the notion of "interpassivity"[179] as a counterpart of "interactivity". He describes the context and asks:

> "how cyberspace opens up possibilities for the large majority of people to break out of the role of the passive observer following the spectacle staged by the others, and to participate actively not only in the spectacle, but more and more in establishing the very rules of the spectacle. Is, however, the other side of this interactivity not interpassivity? "

The subject is autonomous, and simultaneously part of a relational ontology. I would subscribe to raising the question about degrees of "interactivity" and to use "interpassivity" instead. I think Zizek's critical insight has a point; however, it is a

[179] Slavoj Zizek, "The Interpassive Subject" http://www.egs.edu/faculty/ziziek/ziziek-the-interpassive-subject.html

bit too quick to come to the negative conclusion about acts of "interpassivity". Taking an example of the progressive attitude of Western academics in contemporary political issues such as Bosnia, Yugoslavia, Cuba, etc., Zizek points out that the "interpassive act" is a supplement of shoving their own progressive duties onto others. Zizek follows the notion of subject as the very notion of a "pure" activity of (self) positing. I would question his use of "pure" as an ontological property, in a sense of being. Furthermore, what is also problematic is his attempt to transfer the model of being that was developed in "non-cyberspace" into cyberspace, where the conditions of being are categorically different. Sherry Turkle, a media theorist and psychologist who has studied concepts of self-consciousness in cyberspace, wrote that people express multiple and often unexplored aspects of their selves. Through manipulating avatars, there are plural subjectivities as conditions to be changed at will.[180]

The space created by portable gadgets is also a mixture of real and network spaces, implementing changeable self-descriptions and concepts of subjectivity. Thus, it is important to take into consideration that this space is more complex since different levels of subjectivity and different kinds of engagement exist. The paradoxical concept of "interpassivity" emerges whenever one tries to engage with others. The conditions, interfaces and intentions behind "interpassive" acts do need to be studied here. What do the notions of "participation" or "interactivity" open up?

In the context of *etherSound*, the audience was expected or "supposed to" participate in a process of manipulating sound, which would eventually produce a new "piece" of music. Such an invitation might represent a strong temptation for the audience. Shifting the point of view to the other side, would it be possible to

[180] Sherry Turkle, "Who Am We?" (1996), http://www.wired.com/wired/archive/4.01/turkle.html

think that the attraction of participation lies in the satisfaction of the artist's and the organizer's "will to power", by an impulse of trying to affirm one's own acts to some degree through the implication of others? This might be a too self-critical view, but the participation of unknown persons could also be interpreted as the alternative format of an artist's superego. In this sense, the meaning of "interpassivity" should not be searched for in creativity or the making of a new piece of music; maybe it lies somewhere else. All these questions call for more attention to the user-interface relation.

The Gift of Communication

It has been suggested that young people's (specifically teenagers) use of text messaging and mobile phones themselves can be interpreted as a form of *gift-giving* in a sense similar to that described by Marcel Mauss: "We will contend that these gifts are exchanged in performances that have specific meaning in young people's daily lives and are played out with the intent to cement social relationships."[181] In other words, text messages have a meaning to the sender and the recipient that transcends the actual content or meaning of the message. This is in more than one way in accordance with how the messages sent to *etherSound* have been used. The content of the message as such is not transparent in the resulting sound object, only the general outline of it (the length, the composition, the number of syllables, etc.) and every message is "rewarded" with sound; the gift is always returned. This aspect of "reward" meant to stimulate the curiosity of audiences and encourages

[181] Alex S. Taylor and Richard Harper, "The Gift of the Gab? A Design-oriented Sociology of Young People's Use of Mobiles," *Computer Supported Cooperative Work*, 12.3 (2003), pp. 267–296. For the notion of the "gift" in an anthropological perspective see the seminal work Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies*, W.W. Norton 1924 (1990).

them more to participation in the project, but I would say that etherSound the audience to be trained or knowledgeable in contemporary music and computer in order to have a satisfactory exchange or understanding between the act and the streaming sounds. To further development, the meaning of the returning of the "gift" in the temporal aspect of *etherSound* needs to be more carefully considered. Can the return be pre-supposed by anyone beforehand?

There are two time-frames at play in *etherSound* which bear immediate significance to this question, and they are described here, borrowing terms from Curtis Roads' table of temporal hierarchies in music:[182] (i) The "meso time scale" which constitutes the single message and the resulting sonic events; the mapping between the message and the sound is linear and relatively consequent; (ii) the "macro time scale" which is the time from when the installation was started to when it ends. It is within the meso time scale that the relation between the object and the participant is established, and it is in the dynamics between the meso and the macro time scale that the "returning of the gift" has crucial significance. It constitutes a receipt of the contribution; a sonic confirmation that the message has been received. This kind of immediate response is important in order to avoid a sensation of exploitation in the participant: their time, energy and, in the case of sending text messages from mobile phones, their money, are not used to fulfil our own opaque objectives hidden to the participant, but result in a palpable response with a value of its own. This is the main reason a clear causality between input and output in the meso time scale is aimed for. Therefore, some effort has been invested in making each sound object a closed-form musical composition in its own right. However, as soon as the sound object begins to play back, it transmutes into a player in the macro time scale, in which there is no preconceived musical form but

[182] Curtis Roads, *Microsound*, Cambridge: MIT Press, 2001, p. 3.

where the indeterminacy of collective efforts is the main factor. It should be noted that the relation between the closed form of the meso time scale and the indeterminacy of the macro time scale seems problematic, and that this should be an area of further development.

In the age of mass information, consumerist ideology, and market segmentation strategies, individuality is marginalised. As Laura Martz asserts, "the spectacle steals every experience and sells it back to us, but only symbolically".[183] Along with curiosity it is an incitement for wanting to participate, provided that the action invested results in a perceivable stimulus. The clear causal relation between the action invested and the sounding result is a way of giving the participant an experience of involvement that ultimately could lead to a wish to further explore the causality of input and output. But, is there any possibility left to assume that the individual expression among the general public can be seen, or that the wish to exercise influence has not vanished? What can be the import of individuality in the context of improvised collaborative work? If individuality taken too far can pose a problem, what is the nature of this problem?

Technology and Understanding

Concerning the ideology of "broadening of the audience", Mary Jane Jacob has argued that public participation in the public art of the 1990s never achieved this.[184] Her arguments have a point, but in order to evaluate the processes at work in Frisk's

[183] Laura Martz uses the term of the "spectacle" with a reference Guy Debord's *Society of the Spectacle* (Debord 1967 (1992)), which is meant to include notions of the commodity, art as commodity, mass media and entertainment industry (derived from Adorno).
[184] Mary Jane Jacob, "Unfashionable Audience", *Mapping the Terrain*, ed. Suzanne Lacy, Seattle: Bay Press, 1995, pp. 50–59, here: p. 59.

project it is necessary to consider the social dynamics of new communication technologies. As already stated, mobile communication is no longer a luxury reserved for the privileged classes, but is accessible to most citizens at least in the Western world. But it may also be proposed that luxury today is to be *not* accessible, a luxury that only the socially secure, upper classes can afford.

About fourteen years ago, in the early times of E-mail communication, it was already observed that the nature of the medium had effects on group dynamics: "Advances in computing and telecommunications technology are changing how people can meet and make group decisions. Technological changes help people cross physical, social, and psychological boundaries and have secondary effects on group behaviour and decision-making. Experiments show that compared with face-to-face meeting, a computer-mediated discussion leads to delays; more explicit and outspoken advocacy; 'flaming'; more equal participation among group members; and more extreme, unconventional, or risky decisions."[185]

Whether this is also true for SMS communication is a matter of speculation, but it suggests that the means of communication has far-reaching consequences that need to be considered carefully about designing interactive interfaces for public art – what does interactivity really mean? Which level of involvement does it refer to? As Taylor and Harper suggest, advanced technology is designed for the consumer market. The cellular phone already used in some circles for social interaction indicates that the mobile phone is indeed well suited as an interface for interactive artworks. Can it lend itself well to the purpose of public interaction, and may it also help to counteract the tendency of art to turn to the already initiated? What Walter Benjamin called the "advent of the mechanical reproduction of art," has, according

[185] Sara Kiesler and Lee Sproull, "Group Decision Making," *Organizational Behavior and Human Decision Processes* 52.1 (1992).

to DiMaggio and Useem, along with other things, "resulted in a tendency for culture interests to diffuse across class lines".[186] Benjamin writes: "Around 1900 technical reproduction had reached a standard that not only permitted it to reproduce all transmitted works of art and thus to cause the most profound change in their impact upon the public; it also had captured a place of its own among the artistic processes."[187]

What will be the impact upon the public of the new tools of distribution of text, audio and images and what will be the role of the present day technological devices used for communication within the process of production? It may not be possible to answer these questions for many years, but there is an interest to evaluate and experiment with the use of these tools within the realm of experimental expression in science and arts.

It may be assumed that consumer market technology, for economic reasons, is designed to be accessible to as many people as possible within the target segments assigned by production companies. The vast popularity of the mobile phone, despite its technological level of complexity, coupled with the recent price drops of service charges, suggests that this is true for mobile phones. However, it should also be noted that certain segments of Western society (notably senior citizens) and the developing countries are still excluded from and largely ignored by this "communication revolution". This taken into consideration, the dynamics of mobile phone usage and accessibility nevertheless seems to be of a different class than that of traditional cultural consumption. If this holds true, the challenge to construct an interactive interface to an artwork based on the use of mobile phones may in some way open a new structure for the production of space.

[186] Paul DiMaggio and Michael Useem, "Social Class and Arts Consumption"; Pierre Bourdieu, *Distinction*.
[187] Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," *Illuminations*, New York; Schocken Books, 1968

Reconsidering Participation

Even though *etherSound* is not site-specific in the traditional sense, it may still be regarded as such in a sense, for it follows the logic of the neutral space in the network. The phone is limited to a virtual space, and *etherSound* exists within this space as delimited by the group of people interacting with the installation at the very moment that interaction takes place. As a result, the context is not the gallery space, but the curatorial idea that delineates The Invisible Landscapes.

As already discussed, the emergence of mobile communication, the Internet and the technological devices that are used to interact in these networks, may have the potential to change the nature of (social) interaction. Interaction takes place as an extension of everyday acts. At its best, it does not matter if it is manifested and glamorized as a single, unique and individual voice. It is not strained and it is not performed in a pedagogic mode, but rather follows a pop cultural mode. It abandons the idealised image of the rational individual and puts emphasis on the collective in a typical Durkheimian fashion. It can be said that this new form of interaction, consisting of clusters of anonymous random acts, empowers a new structure for creative corporeality, never fixed within predetermined conditions, but more reminiscent of a flow. It should be suggested here that it holds potential as a new coefficient of an autonomous agency of participation.

The boundary between public and private in mobile phone communication is certainly not a straight line and is not easy to define. If we take into consideration the fact that it is always possible to track the location of a mobile phone, we may even go so far as to say that privacy ceases to exist the moment one's mobile phone is turned on. But mobile communication also opens up a certain kind of private interaction, in the work domain as well as in public spaces. In their article, Taylor

and Harper[188] have listed a number of circumstances where the public infringes upon the private, and vice versa. It may be suggested that the space of mobile communication cannot be distinguished as private *or* public anymore, but circumscribes a space with its own set of attributes. Taylor and Harper write: "The phone and its contents, if you like, allow young people to differentiate themselves from family or household relations as well as cement their own social networks. The phone allows the young person to withdraw from the world of the home, for instance, and establish a micro world' through the system of exchange that young people employ."[189]

Active public participation also raises a series of questions about authorship. Who is the composer and who is the performer? Who is the originator? Who commissions the piece? In *etherSound*, the creator of the piece can very well be said to be the one who commissioned it, *and* the participants, supplying the input, the originators and the curator as orchestrator. Or, the curator may be perceived as an originator, the audience as the performers, and the creator as the patron. But, under pre-programmed conditions, does the composer still remain the composer? That said, it seems impossible to impose pre-existing roles on participants. Ultimately, the hybrid role created by different levels of involvement should be held in a state of flow in Frisk's work. The coefficient of plural roles within one individual appears and disappears in a subtle and sensitive balance, which, in every performance, will be different. This implies a kind of "onceness" that is created by the new coefficient brought about by SMS participation. Experiences made in the presentation of *etherSound* at a music festival testify to the difficulty in achieving this – and of the

[188] Taylor and Harper (2003), see footnote 14.
[189] Ibid., p. 292.

importance of context.[190] Musical performances are surrounded by old and established traditions, which imply a rigid definition of the author. However, since the roles of the players involved in *etherSound* are interchangeable, confusion arose as to what the music consisted of, which in turn resulted in some performers doubting the validity of their participation. Participating in *etherSound* through SMS is an action started from an individual initiation at the "bottom level" that influences the whole. The whole process will further lead participation to an unpredictable outcome. It indicates situational power and the multitude (not the individual) as new input factors. There is no obvious author to credit, and this opens up to a new form of "authenticity", even in relation to contemporary culture.

As has been noted before, the content of a given message is not revealed in the public sphere except as an abstract series of sonic events, and the audience is not informed of the interrelation between the message and the sound event it generates. This unknown relationship between the SMS and the sound composition coupled with an expectation of reflexivity, in one way, stimulates the imagination of the participants and navigates them towards a more careful attention to, and translation of, the sound. This is consistent with Guy Garnett's analysis that: "(...) music can be roughly considered to be sounds made with aesthetic intent, or even sounds listened to with aesthetic interest. The former gives more weight to the role of the creator, while the latter formulation tends to privilege the listener."[191] The content of text messages is not only a result of a compositional process, but initiates a space of public participation; in that sense there is nothing to "understand" in *etherSound*: that is, unless you participate.

[190] Elektrisk Helg, arranged by Ars Nova, held in Malmö, Sweden, in April 2004.
[191] G.E.Garnett, "The Aesthetics of Interactive Computer Music", *Computer Music Journal* 25.1 (2001).

If one does participate, understanding the resulting sound is not dependent on an insight into the history of art or of electronic music; following the idea of the "telematic" piece, "(...) the observer in an interactive telematic system is by definition a participator. In telematic art, meaning is not something created by the artist, distributed through the network, and received by the observer. Meaning is the product of interaction between the observer and the system, the content of which is in a state of flux, of endless change and transformation."[192] However, again, the role and the meaning of participation need to be questioned, if there is really nothing to understand.

Having discussed the effects that portable communication devices can have in the context of participatory music, it should also be mentioned that this is primarily true of the Western world. Access to technology and its uses can easily be taken for granted, but for certain groups, even in the Western world, it is still not self-evident how a mobile phone and all its options are operated, and this indicates the danger of a new kind of class hierarchy based on the familiarity with and access to communications technology.

In the Western world, this technology has already coalesced into our private and professional lives and has become an almost indispensable tool for social communication. Participation can per se open up the work to groups of people not familiar with contemporary sound art; a participatory interface built around the mobile phone may contribute in some degree to neutralizing the class hierarchies in arts consumption.

Henrik Frisk's project attempted to show that the cellular phone, and its owners' ability to send text messages from it, as an interface for public participation. From a practical angle, the mobile phone as a medium is widespread,

[192] Roy Ascott, "Is There Love in the Telematic Embrace?," *Art Journal* 49.3 (1990), pp. 241–247.

comparatively simple to use, it is private, and it is surrounded by a large framework that makes it easy to integrate it into a participatory work. However, it has become a catalyst to open up a new set of questions on public participatory: on the meaning and the role of participation in a different structure of "interpassivity" and subjectivity in this form of communication, on a space where things happen beyond modernist computational aesthetics, on pre-programming as a control of *jouissance* through the other. All this suggests that digital mobile communication is not about straightforward communication from A to B, but rather about paradoxes of communication.

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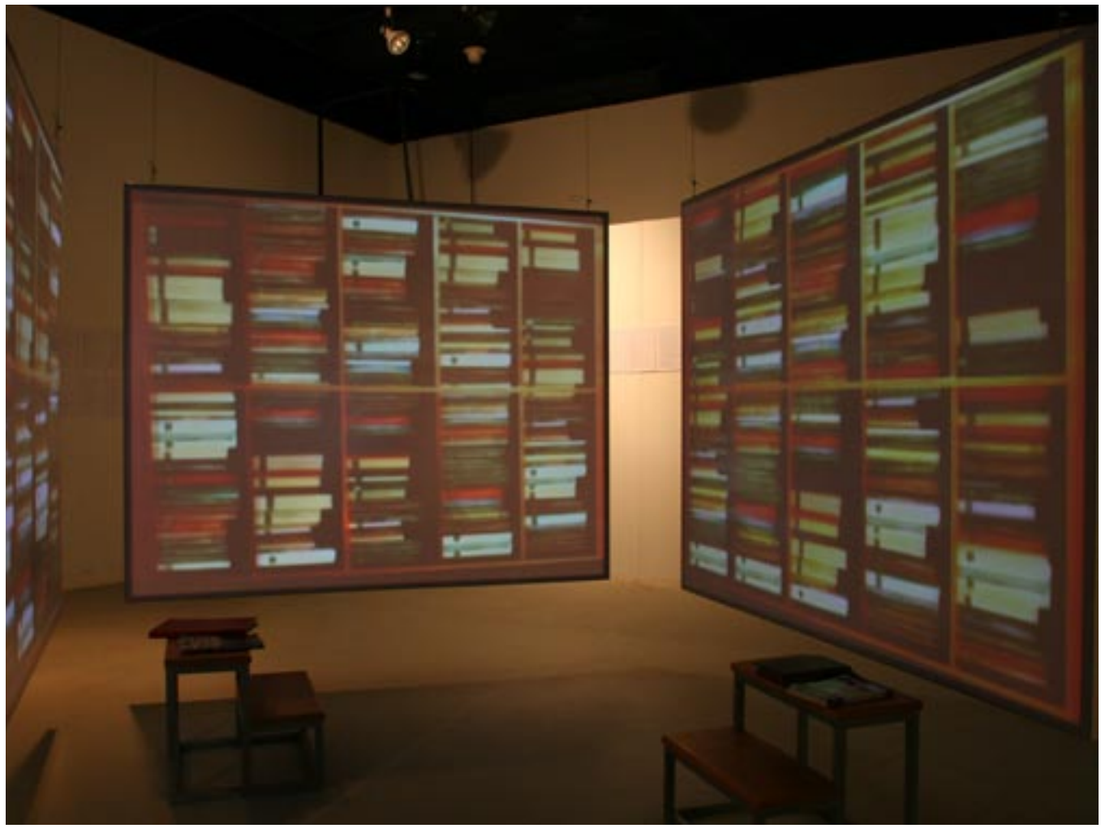
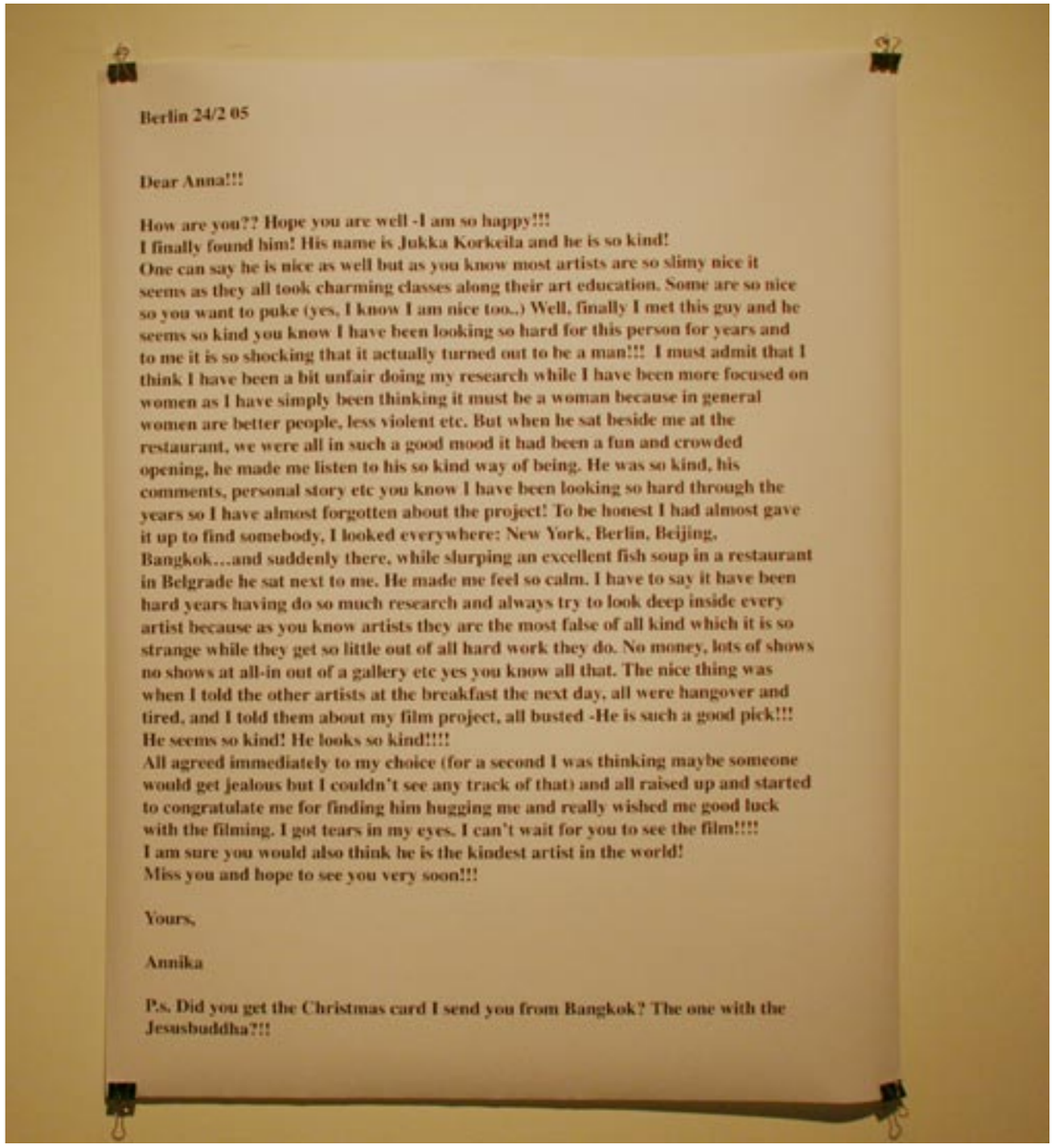




Berlin 24/2 05

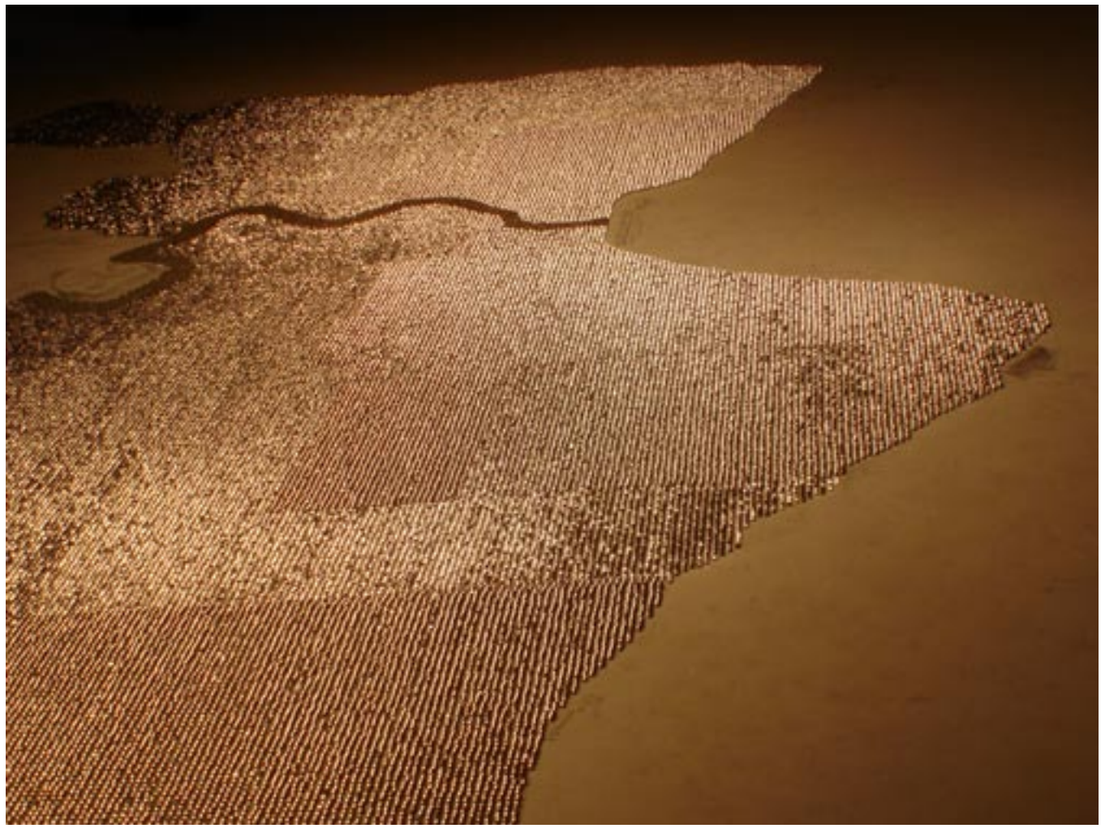
Dear Anna!!!

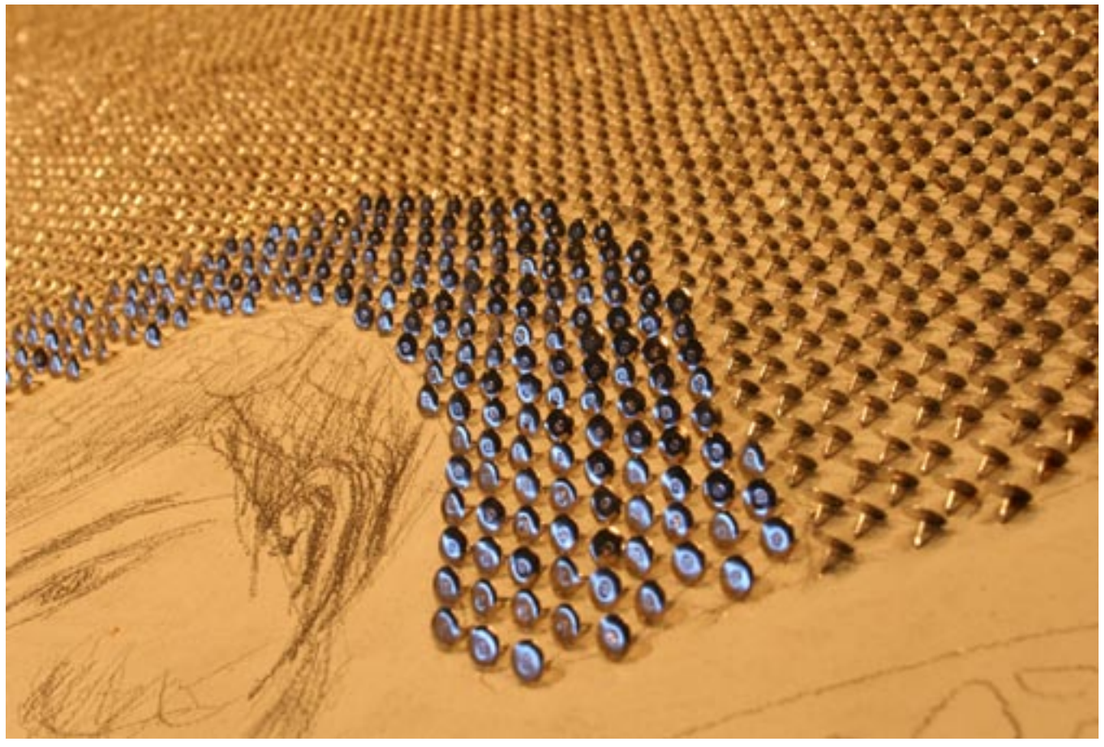
How are you?? Hope you are well -I am so happy!!!
I finally found him! His name is Jukka Korkeila and he is so kind!
One can say he is nice as well but as you know most artists are so slimy nice it seems as they all took charming classes along their art education. Some are so nice so you want to puke (yes, I know I am nice too..) Well, finally I met this guy and he seems so kind you know I have been looking so hard for this person for years and to me it is so shocking that it actually turned out to be a man!!! I must admit that I think I have been a bit unfair doing my research while I have been more focused on women as I have simply been thinking it must be a woman because in general women are better people, less violent etc. But when he sat beside me at the restaurant, we were all in such a good mood it had been a fun and crowded opening, he made me listen to his so kind way of being. He was so kind, his comments, personal story etc you know I have been looking so hard through the years so I have almost forgotten about the project! To be honest I had almost gave it up to find somebody, I looked everywhere: New York, Berlin, Beijing, Bangkok…and suddenly there, while slurping an excellent fish soup in a restaurant in Belgrade he sat next to me. He made me feel so calm. I have to say it have been hard years having do so much research and always try to look deep inside every artist because as you know artists they are the most false of all kind which it is so strange while they get so little out of all hard work they do. No money, lots of shows no shows at all-in out of a gallery etc yes you know all that. The nice thing was when I told the other artists at the breakfast the next day, all were hangover and tired, and I told them about my film project, all busted -He is such a good pick!!!
He seems so kind! He looks so kind!!!!
All agreed immediately to my choice (for a second I was thinking maybe someone would get jealous but I couldn't see any track of that) and all raised up and started to congratulate me for finding him hugging me and really wished me good luck with the filming. I got tears in my eyes. I can't wait for you to see the film!!!!
I am sure you would also think he is the kindest artist in the world!
Miss you and hope to see you very soon!!!

Yours,

Annika

P.s. Did you get the Christmas card I send you from Bangkok? The one with the Jesusbuddha?!!





krai-krai- kor-len -guitar- dai
เอนนีวัน แคน เพลย์ ระนาด

krai-krai- kor-len -guitar- dai
เอนนีวัน แคน เพลย์ ระนาด

VALID THROUGH 30 DAYS WITHOUT VISA
BANGKOK

BANGKOK
YOU I LOVE

DO NOT PANIC
YOU ARE
BEING WATCHED
SEX AND RELIGION
UNDER CONTROL
SMS <START> TO
090 500 524
TO BEGIN
MOBILE EXPERIENCE
13 March - 15 April, 2005
Lak-ka-pid - lak-ka-perd:
The Bangkok Invisible Landscapes
www.in-betweenartproject.com

DO NOT PANIC
YOU ARE
BEING WATCHED
SEX AND RELIGION
UNDER CONTROL
090 500 524

C.6 Shilpa Gupta: Intimacy Through Mobile Phone Communication

Shilpa Gupta, *Untitled* (2005)
Poster prints on cotton cloth
House Rama Theatre, Bangkok, 2005

Exploring the "invisible" side of the city within the context of the Bangkok exhibition, Shilpa Gupta's work "Untitled" (2005) questioned the conditions of information spaces in contemporary network culture and referred to the ambiguous lines of public and privates spheres. In the exhibition, she installed three printed banners on the wall of the café at House Rama, a movie theatre situated in a shopping mall complex with game centre, pubs and restaurants. At the same time, smaller versions of these posters were distributed in galleries and alternative art spaces in Bangkok. Both banners and posters invited mobile phone carriers to join in an SMS dialogue with the artist by composing a message to a specific number.

Shilpa Gupta's work that she continued by answering to the mobile phone numbers collected confronted participants with the transparency of their privacy: she sent them a series of provocative messages on issues of surveillance, network existence, and urban transformation under conditions of contemporary capitalism. A total of thirteen SMS was sent over a period of approximately twenty days; some of them were sent immediately after the reply, some after a daylong pause. As the exchange of the SMS between the mobile phone carriers and the invisible artist continued, it started to construct an unusual sort of proximity between the two sides, which could almost be perceived by the message recipients like the working of an "inner voice". The SMS constantly reminded them of the urban surveillance

aspects of mobile networking technology, and – by virtue of their site-specific messages – of the accelerated capitalism connected with the process of the continuing urban development of Bangkok shopping malls – conditions visible in the immediate surroundings of the mobile phone users. Through this strong sense of surveillance, Shilpa Gupta's piece also re-valued the idea of a physical space created by electronic network systems.

Manual for *Untitled* (2005): An SMS Art Project by Shilpa Gupta

When you receive <START> sms from user
Save the number in Contacts as Entry 1 (number), … Entry 6, and so on.
This will make it easier
In replying back and continuing with the project.

(1) DAY 1
First SMS to be sent immediately on DAY 1
getting <START> SMS
Good Afternoon, Good Morning, Good Evening
– depending on time of day
Good Afternoon!
Your request has been processed
And you have been
Enrolled into dis
Experience.
Do_Not_Panic.
To stop rcving sms
From this number,
Reply with <I QUIT>
sms at any time.

(2) DAY 2
…,'.:
Complete this
Sentence " I Love
to send sms
because,,,.:.
Reply now! The
Best Reply will win
The mobile phone
handset from which this
sms was sent!

(3) DAY 6
"I can now be
Intimate with you"
Is the winning reply
to the competition
"I love to sms
Because….".
Congratulations to
The lucky winner!

(4) DAY 10
Do Not Panic
While you Shop
We Watch

(5) DAY 12
Welcome ☺ This
Zone offer you
Freedom to Dream.
Actions to be
Regulated.

(6) DAY 13
!Attention!
You have been
Located in Area
ZONE 33. This area
Has been marked for developing a
New shopping mall.
Should your home
Be relocated to a
another area by
the States? Reply

< Yes > / < No >

(7) DAY 13 (immediately after SMS No.6)
!Error! Your
response Not
Required!

(8) DAY 13 (a few hours after SMS No.7)
Shopping Mall is an
Air-conditioned
Safe Zone. Greed,
Want & Desire
SECURITY
PERMITTED Here.

(9) DAY 16
** === <Thought of
the Day> ===***
The Mobile Phone
Technology was
developed to Assist Military
Training – Do Not
Panic. You Are
Being Watched.

(10) DAY 17
=== FOR YOUR
WELL-BEING===
Exercise Tip of the
Day! Stretch your
Hands forward –
LOOK STRAIGHT.
Cross hands at
elbows – DON'T SEE.

(11) DAY 18
=== FOR YOUR
MIND-BEING===
DON'T See.
DON'T Hear.
DON'T Speak.
Today is the State
-Corporate Merger
Birthday

(12) DAY 20
Stay Alert
You may be asked
to evacuate. This
ZONE is being
Converted to Tourist
Zone, Prostitution
to be permitted
only within 2 kms.

(13) DAY 20
Kindly Exit
through the nearest
Door.

SMS Art Projects

The project intended to motivate participants to start with an exploration of the city of Bangkok that was familiar to them – from a critical perspective mediated through an SMS text dialogue with the artist they had never met in person. Gupta set up an unexpected combination between the casual, ostensibly neutral mode of media (SMS) and critical content in order to produce a strong impact of the texts, and tried to bridge concrete experience (individually repeated daily acts) to an abstract level (invisible infrastructures and communication systems), which do exist but are not easily perceived or imagined in the banality of the everyday.

Limits and difficulties[193] in the realisation of the work led me to reassess different aspects of the notion of "accessibility" of mobile telephone users, which produce new layers of space (and meaning) on two levels: "accessibility" as in the relation between individuals that is achieved by a combination of medium and content, and "accessibility" as in different levels of infrastructure – a functional connecting system. The former was derived from a close observation of the artwork, the latter arose through the (ultimately positive) difficulties with organisational structures. In the following, I will analyse Gupta's *Untitled* (2005) under the mentioned aspect of accessibility.

[193] It must be mentioned that the project was not fully realised because of unexpected difficulties with international roaming in pre-paid card systems as well as glitches in the communication between organizers and local project assistants. Accordingly, my analysis on the work has to be limited in comparison with the intended functionality. Due to the technical difficulties, the scope of reactions remained limited – which in no way precludes an interpretative approach to the conceptual structure of the work itself.

SMS Art, A Short Description

In order to sketch out a background for the specific approach of this work, some other works and projects should be mentioned – works with the SMS messaging technology as their medium. Quite numerous projects have already been realised in the relatively few years since the end of the 1980s and the beginning of the 1990s, in which the use of SMS technology (including portable pagers) became popular.[194] One famous example for the interactive use of SMS instructions to influence a public display was *BlikenLight* (2001), an installation by the network-critical collective **Chaos Computer Club**, where people were able to play a game of Pong by controlling computer-coordinated lights in the then abandoned Haus des Lehrers on Alexanderplatz, Berlin. Hello, Mr. President (2001) was a project by **Johannes Gees**, in which messages collected via SMS and the web were displayed on the side of a mountain through laser projection – with the intention to directly address US President Bush on the occasion of the G8 meeting in Davos, Switzerland,[195] a mixture of political concepts of private and public in which public participation and representation were invited – using the familiar juxtaposition of the individual and inaccessible power-that-be concentrated in one person in order to show the mobile's (symbolic) potential to overcome this gap. *Poetrica* (2003) by **Giselle Beiguelman**, *etherSound* by **Henrik Frisk** (2003) and *SimpleText* (2003) by **Jonah Brucker-Cohen**, **Tim Redfern** and **Duncan Murphy**, in which people were invited to contribute visuals, text collages or sound interventions via SMS and MMS, *Text*

[194] Alex S. Taylor and Jane Vincent: "An SMS History," *Mobile World. Past, Present and Future, Computer-Supported Cooperative Work*, eds. Lynne Hamill and Amparo Lasen, New York: Springer Science, 2005.
[195] Similar uses of the mobile phone can be seen in many participatory projects, where anonymous SMS text messages can be sent to an electric/LED billboard to publish a personal message in public. A part of the examples are Storyboard at Valentines (at Gallery 39, Cardiff, Feb. 2006) by Stephan Caddick, Berlin underground SMS project (2003), *SMS Guerrilla* (2004), in which the mobile phone connected to a portable mini projector to be able to show any images of the mobile phone display in public. *Musical/Devices* (2002) and *Phonetic Faces* (2003) by J.B.Cohen

Adventure (2005) by **Chris Evans**, *Amodal Suspension* (2003) by **Rafael Lozano-Hammer** which combined a private intervention with a game in public urban conditions.

These are only a few examples, but it can be stated that these projects generally aimed at expanding the reach of individual texts beyond the usual territory of mobile phones. They generally used mobile calls or SMS as control devices for participatory actions, or as a tool for publicising or "amplifying" individual voices. These projects are very attractive because of their entertaining aspects that allow them to speculate about the quality of the "private voice" or stimulate a desire of exposing the self in public as a contemporary trend: A minor voice can, temporarily, be enlarged to a public scale through a familiar and easily accessible act – even though the technology that enables this "power transmission" remains invisible. The projects use the potential of the SMS System to grant anonymity; but once the messages are transposed to a larger scale, they quickly adopt the presentation mode of communication and transform into a medium of personal exposure. In other words, SMS lose their "natural" intimate mode of communication, which has incomparably strong power compared to other media to capture collective public attention. To create a spectacle by SMS, in a sense, is setting up a different level of space, which has already transformed into something else. Compared to these projects, Gupta's project deliberately refrains from deploying spectacular visual effects. *Untitled* does not enlarge its audience and keeps within the limited public of a private sphere. It shows that SMS has the power to open up structures for critical messages without a shift to the spectacular.

Taking a closer look of the work, it can be observed that the artist has taken advantage of specific qualities of SMS to effectively reach any audience. The characteristics of SMS refer to a set of interesting textual strategies have been already analyzed in the course of the early 1990s. According to the analysis of text-based

communication in **Computer Mediated Communication** (CMC), an earlier stage of simple text-based communication, specific qualities can be pointed out. As media scientist Kumiko Aoki says,

1. CMC reduces discriminatory communication patterns based on physical and social cues such as gender, race, socio-economic status, physical features, etc.
2. Standardized textual communication provides the user with a great control over the presentation of his/her image to other people.[196]

The cited paper is rather old and refers to only to the use of CMC, but the analysis still applies and seems highly adaptable to SMS communication (SMSC), as the two forms of communication share all major qualities except portability and length of text.[197]

Applied to the qualities that become important in Gupta's project, dialogue becomes playful, but also remains focused and directed, and it can achieve this by presenting a different topic each time, which allows for the audience to extend their imagination and knowledge of the invisible artist. At the beginning (until DAY 2), the artist played the role of a host for a lottery game and started the dialogues off in a rather easy and playful mood. But as the dialogue continued after DAY 6, this shifted with an SMS declaring, "I can now be intimate with you", by which Gupta pretended to share the views and experiences of her audience, then gradually changed the subject of the conversation into a more critical direction, as when she started to write texts on surveillance. From the declaration that she shared the readers' views on the rudimentary discourse about surveillance, she navigated the

[196] Kumiko Aoki, "Virtual Communities in Japan", Pacific Telecommunication Council (1994)
[197] Later, CMC was further examined further by Sherry Turkle in different formats, such as MOO or MUD, concerning its psychological effects and relationship to multiple personas.

attention of the audience to look for specific aspects in their surroundings, such as shopping malls, prostitution areas, and other urban specificities, in order to question the balance of these developments that have created modern capitalist Asian cityscape.

In the context of CMC, "anonymity is complete and identity is freely fictionalized in the structure of communication."[198] Mark Poster (1990) also contends, "computer conversations construct a new configuration of the process of self-constitution."[199] Understanding and utilising the nature of the medium, by switching between small talk and critical issues, SMS conversation also implies a new self-construction. Seeing in Shilpa's dialogue, the artist freely encompassed a dialogue on the level of constructed imaginaries, far from any existential engagement. Once the invention of the telegraph – and its use – managed to produce a public space that would allow women to discuss social issues, regardless of their social background; in a similar way, SMS may function as a kind of interactive telegram. It might imply a high potential to create a space or platform where social issues can be openly discussed, even with less familiar persons – since it happens under the conditions of flexible subjectivities that can be described as typical for the use of mobile telephony in general. Furthermore, the sense of control in the SMSC can be stronger than it is the case with CMC. The proximate nature of the device allows the two participants to control not only the direction of the contents, but also their timing. This becomes clear, for example, when the artist initially sends a provocative message immediately after a response, or sometimes waits for a few hours before answering (DAY 13). This higher degree of control by direct accessibility and timing is fully achieved by the use of SMS in its present state,

[198] Ibid.
[199] Mark Poster, *The Mode of Information: Poststructuralism and Social Context*, Chicago: University of Chicago Press, 1990.

and of course also makes it possible to send out messages on critical social issues. Parallel to our taking pleasure in the conveniences of the networking age, people experience a constant need to be conscious and discuss the meaning and effects of their acts of digital communication – along with their effects on political, social, physical, psychological, and other spaces that may lie beyond categorization. SMS in mobile communication opens up a new space for performing multiple personae – in proximity.

In her work *Untitled* (2005), Shilpa Gupta tried to open a new channel for communication within the art context. She adapted the SMS format to create accessibility to the concept itself and to its content, in order to examine critical contents more closely through a casual mode of communication. This attitude of the artist is quite suggestive for thinking about diverse ways of communication technologies as an active creation of collective and social imaginaries. Can a concept like "intimacy" play a key role in opening up a new structure of exchanging thought on critical issues? Is it really "intimacy" that is the growing quality within mediated communication? What do we really mean by "intimacy"? The notion is quite in circulation, maybe even overused, but it also makes sense to take a careful look *how exactly* the notion is used. In the following, I would like to reconsider the validity of this notion.

On "Intimacy"

The notion of "intimacy" is quite often found in research texts and essays on the mobile phone, and it seems to have become one of the key words for understanding the phenomena of mobile telecommunication. The British sociologist Kate Fox has also proposed that mobile telephony functions rather like a vocal grooming to feel "intimacy" and re-affirm individual users' sense of belonging to their social network.[200] Some researchers suggest that the connectivity of the mobile telecommunication does not create communication, but something else: connectivity; and some of them tend to believe this connectivity could be understood as the mechanism of a "new intimacy". On the other hand, instant communication feeds the illusionary character of being connected, and ultimately leads to overestimating and idealizing the notion of "intimacy". This in turn bears all signs of an addictive, non-sustainable attitude. New "intimacy" has to be constantly updated, and requires us to be "in touch" all the time. Its "immediacy" presents us with a sense of illusionary emancipation, but simultaneously exerts control over individual schedules by implementing unlimited social interactions. Eventually, this means domination of social control by an increased speed of communicative acts.

In discussions about mobile telephony, the usage of "intimacy" is based on a number of different interpretations – political, social, media-related; there are debates on internationalised, social, and personal intimacies.[201] It could be assumed

[200] Kate Fox, "The Role of Mobile Telecommunications in the Twenty-First Century," retrieved on January 22, 2004 from http://www..sirc.org/publik/gossip.shtml.

[201] According to the Oxford dictionary, "intimacy" means close familiarity or friendship; closeness, exemplified in 1) a private, cozy atmosphere 2) closeness of observation or knowledge of a subject. Intimacy emerges in association with friendship, love, sharing relationship and deep understanding (Lynn Jamieson, *Intimacy: Personal Relationships in Modern Societies*, Cambridge: Polity Press, 1988) The notion of friendship is a culturally produced and socially constructed norm throughout history. In the Western European context, it goes back to "philia" in Greek times, which received a more political

that this is partially due to the historical transformation of the notion of intimacy itself, and the specific meaning it has taken on in modernity. But, considering the diversity of contexts in which it is addressed – these typically include "visionary" or "manifesto" type essays in popular magazines – it seems more likely that it is quite often used without any specific reference, rather as a surrogate or stand-in term used to conjure up a positively charged, stylised state of closeness within a social situation or network. Although it is not certain if mobile phones create any sort of "new intimacy", they are obviously functional as support media for already existing intimate relationships. However, little is known about the specifics of their adoption and their use in the "obliteration of distance"[202] – and the conceptual limits of this. Still, a number of recent theoretical proposals on the social character and function of mobile phones have proposed the concept of a "new intimacy".

In the context of my study, it is of particular interest because it can be seen as a rather two-sided or even ambiguous qualification that can offer clues to the present state of the discussion on mobile communication and the implications for its perceptual and imaginary "image", its scientific and/or popular description. On

meaning in Aristotle, starting a philosophical tradition continued to Jacques Derrida (*Politics of Friendship*, 1997), with the social conception of more personalized and emotional relationships in the Renaissance, then changing its concept to that of the romantic movement in the seventeenth and eighteenth centuries. However much the emergence of a new capitalist society in the eighteenth and nineteenth centuries changed human relationships, it emphasised acts and achievements, instead of the prevalent role of kinship. As a result, romantic intimacy as a concept became more popularly accepted, making marriages into more isolated, "intimate" spaces, thus creating a further separation between private and public realms. In a sense, after all privacy with intimacy is a characteristic production of Western modernity, which is a "civilizing process" in the sense of Norbert Elias. It is this historical sequence of meanings that seems to be extended into the present when it can be observed that the psychologised description of human interrelations as "intimacy" uses more conceptual strength to stress positive aspects rather than to highlight motifs of competition or social struggle that could also be referred to with the same word. In short, what we encounter in contemporary theory mostly seems to be an unquestioning use of the concept of "intimacy" as an idea of harmonised social proximity that also reinforces other consumer myths of the free market – desires that operate by envisioning closeness, being in touch, belonging to the rest of society while screening out "real" divisions and methods of social distancing and exclusion. The (mostly urban) ideology of intimacy – as explored in the works of Richard Sennett (*The Fall of Public Man*, New York 1974.) - is actually more instrumental in the production of differences.

[202] A concept phrase dear to art historian Aby M. Warburg, used when he referred to the effects of telegraphy and telephony in his seminal lecture on the American-Indian "Images from the Region of the Pueblo Indians" (transl. Michael P. Steinberg, Cornell University Press, 1997).

the one hand, "new intimacy" as a concept could already seem questionable because of its presupposition of something "new", and, what's more, something "new" within the realm of human interrelations. On the other hand, it can function as a symptomatic conceptual realization of ideologies that continue the tradition of generalized assumptions related to so-called "mass media". Especially when considering their mostly scientific-journalistic origins, positionings like these allow for insights into the operation of the balance between power interests: between science/technology, economy, media, and the "public at large", in this case the mass of individual mobile phone users, involved, as it were, in a continuum of network communications. It is with notions like this that the commodification of a new technological generation and the fabrication of their product continuity is made functional, with "new intimacy" working as a buzzword, suggestive of emotional involvement and controversy that is frequently part of descriptions of consumer behaviour. However critical one may be of the role that media theories in this narrowed sense have taken over, or are still taking over, we can suppose here that their indicative character is sufficiently confirmed and reinforced by the reciprocity and frequency of references that is being created between the individual theorizations.

Starting with the question what kind of communicative mechanism mobile telephony actually has, in comparison to previous forms of telecommunication, it could be said that sight isolates, while sound incorporates with its changeable mixture of imagined reality and "real" reality. The mobile phone may create an experience of "presence", combined with the detachment of a mental self and a diminishing sense of physical attachment to a given location. But the precise character of this experience has yet to be articulated in a more detailed fashion.

The notion of "new intimacy" has well circulated among mobile phone researchers. Also in 2002, Leopoldina Fortunati discussed transformations of the meaning of "space" and "place" through an emergence of "an itinerant 'cellular' intimacy". She argued that the ubiquitous character of the mobile phone is creating a social space *within* existing network spaces – instead of creating a new location. She went on to assume that a "'nomadic' intimacy" diminishes what she calls "place intimacy".[203] She introduced the term of "nomadic" intimacy with a vision of it having unpredictable social consequences, but her adoption of the notion in the context of the mobile phone bears a strong resemblance to other rhetorics of cultural pessimism, especially those mourning the loss of integrity of an alleged previous state of "direct communication", or those who bemoan the generally declining state of communications in post-industrial societies.

The frequent use of this notion is reflecting an increased popularity that was also highlighted by on the conference The Global and the Local in Mobile Communication: Places, Images, People, Connections (2004), conducted by Kristof Nyíri at the Institute for Philosophical Research of the Hungarian Academy of Sciences.[204] Significantly, there was one whole section of this event organized under the title Mobile Communication and the New Intimacy.

However, on reading the papers given at the conference, most of seem to use similar references, leaving a precise articulation of meaning to the imagination of the readers. For example, in her essay of the year 2001, Anna Rotkirch introduced the expression "internationalisation of intimacy" to refer to a particular use of the mobile phone: in her exemplary study, these were migrant domestic

[203] Leopoldina Fortunati, "The mobile phone: towards new categories and social relations," in *Information, Communication & Society*, 5 (4), pp. 513–528.
[204] Series of conference on the mobile phone "Communications in the 21st Century: The Mobile Information Society", organised and conducted by T-Mobile Hungary Co. Ltd. (Formerly Westel Mobile Telecommunications, Hungary) and the Institute for Philosophical Research of the Hungarian Academy of Sciences; 2000 and onwards.

workers living in Helsinki.[205] She was able to show how the mobile phone contributed to make it possible for migrants to maintain distant relationships with "back home", and also helped them to establish and to develop a network within their own social circle under aggravated language and living conditions. This is a case where the mobile phone is expanding networks of intimacy – not so much "internationally", but rather as a collateral effect of the globalised movement of labour.

Raul Pertierra described the emergence of a special kind of political "intimacy" in his essay "Mobile Phones, Identity and Discursive Intimacy"[206]: In the year 2001, virtual acquaintances among political demonstrators in the Philippines who by using SMS messages succeeded in establishing an alternative media stratum. Mobile phones were used to provide and exchange reliable information among spontaneously gathered people who had been strangers to each other just a moment before, bypassing the unilateral information structure of mass media. Similar political acts have also been exemplified in other sources to indicate results of the intimacy of social relations made possible by the use of mobile phones, too.

Other studies show more interest in the media aspects of mobile technologies, which fold the virtual space into the physical. In other words, their focus is on "the effects of the experience of 'self' in space and time, by altering the 'nature' of both"[207] – to suggest the emergence of new individual relationships – "new intimacy". For example, Lin Prøitz explains that repetitive and constant examination behaviour – endlessly checking up on each other by mobile phones – is creating intimacies among the youth of Norway, which lead an autonomous

[205] Anna Rotkirch, „The Internationalisation of Intimacy: A study of the chains of care", 2001.
[206] Raul Pertierra, "Mobile Phones, Identity, and Discursive Intimacy", *Human Technology*, 1.1 (April 2005).
[207] Nikhilesh Dholakia and Detlev Zwick: "Mobile Technologies and Boundaryless Spaces: Slavish Lifestyles, Seductive Meanderings, or Creative Empowerment?", paper presented at Home-Oriented Informatics and Telematics, University of California, Irvine, April 6-8, 2003

existence apart from the intimacy created in face-to-face relationships.[208] She declares the intimacy created via mobile phones as different in as far as it seems to function only as „mediated presence".

The diversity of uses of the mobile medium gives it the potential to play a role of agency in social/public to personal/private spheres. With this high adaptability of the mobile phone in mind, it seems crucial to articulate what each notion of "intimacy" actually means. In a political context, such as activist groupings, would it be possible to replace the notion of "intimacy" with the formulation of a new public sphere? Or challenge the power geometries of places? Does "intimacy" simply consist in the imagination by the deprivation of visuals? Maybe with something that Manuel Castells chose to call the "second public sphere"? The notion of "intimacy" implies a particular mode of emotional behaviour. Therefore, to refrain from unreflectedly psychologising a more general discussion on the mobile phone, it would be better to seek out other terminologies.

With her analysis of the mobile use of migrants, Rotkirch introduced a particularity of the mobile phone in 2001, which until then had not been taken by many other researchers, at a time when questions around the technological capacity of the mobile phone attracted most attention. Despite this, the notion of "internationalised intimacy" must be seen as quite ambiguous and certainly not as a precise description of the phenomenon. Furthermore, it is often quite difficult to distinguish if the effects are caused by the *mobile* phone in particular – or by telephony or other electronic communications media in general. The addiction to the use of mobile phones – both calling and texting – escalates the desire for control and enhances the activity of interlocutors, but possibly only speeds up the

[208] Lin Prøitz: "Intimacy Fiction. Intimate Discourses in Mobile Telephone Communication amongst Norwegian Youths", in: Kristóf Nyíri (ed.), A Sense of Place: The Global and the Local in Mobile Communication, Vienna: Passagen Verlag, 2005, pp.191; 200.

construction of "intimacy" through the intensity and density of interactions and the increased availability of individuals. Constant telephone communication has for some time been a typical part of teenage behaviour, no matter whether the phone is wireless or not. Phenomena of mediated intimacy are nothing new. Thus, it is required to carefully re-examine previous arguments and discussions on new meanings of "intimacy". But is the nature of "intimacy" really transforming? Does the mobile phone work as a mechanism of "intimacy"? Or, is the discussion on "new intimacy" an attempt to capture different processes of establishing relationships through mobile phone technology, and just proving unable to do so? Or does it widen the significance of different kinds of relationships?

Although concepts of new "intimacy" seem to be well accepted and circulated, and although they may spontaneously sound convincing when related to individual experiences of disturbance in "old" intimacies, there is still sufficient reason to question and examine the use of the notion of "intimacy" here. As briefly mentioned in the previous paragraph, the notion of "intimacy" implies a personal subjectivity understood as an emotional state that is difficult and problematic to generalise. Actually, at second glance, it is quite far from precise: where is the boundary between "intimacy" and "non-intimacy"? How do we define a relation of "intimacy" outside of pure rhetoric, especially in a mediatised space? Whatever phenomena can be observed created through the use of mobile phones, they must be analysed with a rather non-emotional approach – which brings us to face a paradoxical situation.

To refer to an artistic perception at this point, an insightful observation on the mobile phone use can been found, for example, in *Min Mobil* (2003) by Annika Ström. Her three-minute video work describes two aspects of proximity: one is the fetishism of the device as a tangible object and its physical closeness almost as an

"extension of the body". The other is a questioning of the relationships created by mobile phones, revealing how the elderly people face and reject the kind of mediated relationships they bring. Another example is a mural painting by Kay Løker: *It Is Not About Technique* (2003) visualises the multiplied mirror image of a forest to use a metaphor of intensity of exchanged information and to create an empty density in a space.

Assumptions about emotional states that are supposed to be the expression of large groups within different societies have a strong potential to become the foundation for mass ideology. The neutrality of a scientific perspective is the result of conventions agreed upon by other groups of science practitioners – and not a universal given pertaining to "science itself". Therefore, "intimacy" is merely a proposition that presupposes a not further specified closeness that is congruous with emotionality in general. Considering this point, in "Mobile Communication Society" in 2004, Manuel Castells argues that mobile telephony does not create any "new" or "neutral" space, since what is actually addressed is not closeness, but simply the connectivity to a person on "other side" of a medium. He explained that "mobile telephony blurs spatial contexts and timeframes rather than transcends, which is a life style defined by moving communication patterns in which organizational context and social practices are often mixed."

To describe these phenomena, Castells uses "the emergence of new social landscapes", "the second public sphere" (2004), whereas others have introduced the notion of "new kinds of bounded places" (Ito and Ota, 2003), "the conversational space" (Palen, Salzman and Young, 2002),[209] "secondary space"

[209] Leysia Palen, Marilyn Salzman and E.Young, "Discovery and Integration of Mobile Communications in Everyday Life", *Personal & Ubiquitous Computing* 5 (2001).

(Michael Hulme, 2004),[210] "shared, telecommunicative place" (Ruth M. Rettie, 2005),[211] and "phone place" (Ruth M. Rettie, 2005). However, a spatial approach to mobile telephony also has a critical aspect, since it limits a scene of mobile communication within existing notions of the spatial imaginary. Thus, in the next chapter I would like to propose critically discussing spatial approaches from the viewpoint of control – being controlled and controlling space – rather than psychology.

[210] Michael Hulme, "Exploring the implications for social identity of the new sociology of the mobile phone" a paper presented at the 4th Mobile Communication Conference at the Institute for Philosophical Research of the Hungarian Academy of Sciences, Budapest.
[211] Ruth M. Rettie, "Presence and Embodiment in Mobile Phone Communication", *Psychology Journal* 3.1 (2005), pp.16-34.

Bell

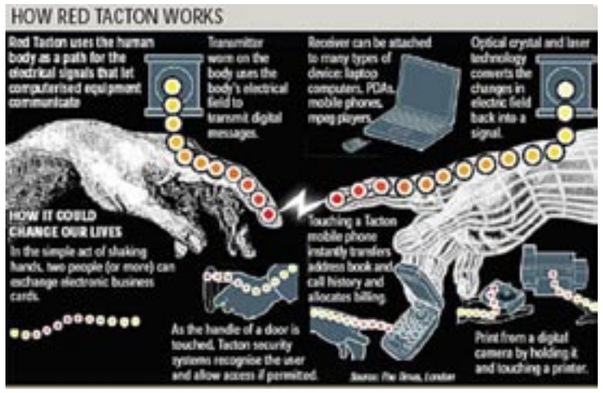
PUBLIC CELLULAR
PHONE SHOP

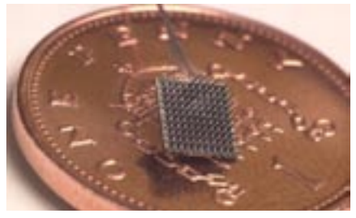
Phone
Phone

福康快捷酒店
便民公话
BIANMINGONGHUA
Sprite
雪碧
可乐

चलता फिरता STD PCO
STD
PCO
STD
ISD
INTERNATIONAL CALLS
rainbow
ISD PCO
चलता फिरता
STD.PCO
STD.ISD
चलता फिरता
STD PCO

MICKEY'S
LLAMADA


HOW RED TACTON WORKS
Red Tacton uses the human body as a path for the electrical signals that let computerised equipment communicate
Transmitter worn on the body uses the body's electrical field to transmit digital messages.
Receiver can be attached to many types of device: laptop computers, PDAs, mobile phones, mpeg players.
Optical crystal and laser technology converts the changes in electric field back into a signal.
HOW IT COULD CHANGE OUR LIVES
In the simple act of shaking hands, two people (or more) can exchange electronic business cards.
Touching a Tacton mobile phone instantly transfers address book and call history and allocates billing.
As the handle of a door is touched, Tacton security systems recognise the user and allow access if permitted.
Print from a digital camera by holding it and touching a printer.



العملاق
Yes you Can
mobile phone and
Razor line and mobile
number and User guide
No Deposit
خط مشحون
١٢ دينار
فقط ١٦ دينار
خط مشحون
١ دينار
بأربعة دنانير فقط
يوجد لدينا
أرقام فاست لينك
مميزة وبأسعار مميزة
العرض القاتل
جهاز موتورولا
T190
عربي + رجاج + يعمل
على جميع الشبكات +
خط فاست لينك
العرض الذهبي

Marshall

E-TIME
C5R

手机加油站

HUTCH
Recharge Zone

Anycall

D. Alternative Media Analysis With Mobile Telephony

After analysing the imaginary dimension of the artworks in the exhibitions of The Invisible Landscapes, there is one other major factor to be considered: the invisible gap within visibilities – the way in which rhetorical imageries in theories of technology and statistics are rendering abstract the social imaginaries about the daily use of mobile communication. This chapter starts from a brief summary of the historical development of wireless mobile telephony systems and the corresponding technological discourses – in order to understand the general directions in what is laid out as technological progress by the industry that produces hardware, applications and periphery. This will be followed by an analysis of a collection of visualisations of worldwide mobile phone use, aimed at clarifying the differences between technological and individual imageries, imaginations, and fantasies.

Departing from such an understanding of the different uses of mobile technology, I would like to consider other improvised uses unintended in their original design that are actually emerging as "creative abuse" of technology in the daily life of users. These effects are, to a certain degree, already expected and even supported by developers in the communications industries. Harder to calculate are unpredictable complexities of space that are triggered in the specific types of subjectivation linked to mobile communication, which, at least today, seem to be beyond statistics and technologically expected developments in generational steps; those I will try to delineate at the end of this chapter.

D.1 Between Imaginary and Actual

A Brief Description of Wireless Mobile Telephony

The mobile phone or cell phone is an electronic telecommunication device, which is one of today's four principal means of telephony.[212] At the present state of technology, most mobile phones use radio waves to transfer signals to and from the cell phone, which connect to a so-called "cellular network" – a radio network made up of a number of radio cells. According to an essay by W.R. Young published in the *Bell System Technological Journal* (1979), the "cellular" concept was first articulated in an unpublished work of 1947 by D.H. Ring of Bell Laboratories. [213]

Theoretically, radio cells are hexagon shaped fields covering an area where telephone service is provided. Within this system, large geographic areas (representing the coverage range of the service provider) are split up into smaller cells to cope with phenomena of signal loss and with the large quantity of other active phones in the area. Each cell site has a range of three to fifteen miles that overlaps with other cell sites. All of the cell sites are connected to one or more cellular switching exchanges, which can detect the strength of the signal received from the telephone, connecting the signal to a base station which functions as transmitter from the main station controller.

[212] There are four principal means by which end users operate telephone systems:

1. Traditional fixed telephone, the so called "landline" telephone, which uses specialised physical wire cables connected to a single location.
2. Wireless and radio telephones, which use either analog or digital radio signals
3. Satellite telephones, operated through telecommunications satellites
4. "Voice over Internet Protocol" (VoIP) telephones, using broadband Internet connections, for example "Skype". (http://www.oemji.com/topics/shopping/mobile_phone_network?p=41)

213 W. R. Young, "Advanced Mobile Phone Service: Introduction, Background, and Objectives", *Bell Systems Technical Journal* 58 (January 1979). Referring to the biological cell, the notion of "cell space" started to be used in media studies, where it indicates accessibility to wireless Internet; the term seems to have been coined by David S. Bennahum, in: *MEME Electronic Newsletter*, 1998.

As the telephone user moves from one cell area to another, the exchange automatically triggers the release of a stronger signal from the handset that makes it switch to a new radio channel. The main station controller (with the exception of satellite phones) is in turn connected to a public switched telephone network (PSTN), which is the central component of the network subsystem. It connects the mobile radio signals to telephone networks and handles all the information of mobile subscribers – registration, authentication, location updating, handovers, and call routing – to the roaming subscriber. Mobile phones use cells because radio frequencies form a limited, shared resource. Cell-sites and handsets change frequency under computer control and use low-power transmitters so that a limited number of radio frequencies can be re-used by many callers with less interference. [214]

Imaginaries of the Wireless

The term "wireless" communication often evokes an illusory notion about the technological nature of connections. As can be seen in **fig. 25**, it is clear that wireless connections form only a small part of the whole system. Most of the actual data communication takes place through material wires: after a signal is transmitted from the computer or cell phone to an antenna via electromagnetic waves, the actual connection is mostly a "wired" one. Only when using satellite technology, the "wireless" part has the majority. This gap between imagination and representation of the Wireless Era can also be seen in the use of the term "cell" for wireless radio. In electronics, a "cell" is theoretically defined as a hexagon shape that entirely covers a service area **(fig. 26)**. If one looks at an actual wireless radio cell map **(fig. 27)**, however, its layout shows chaotically overlapping square fields that are shaped

[214] See the Wikipedia entry under http://en.wikipedia.org/wiki/Cellular_network,

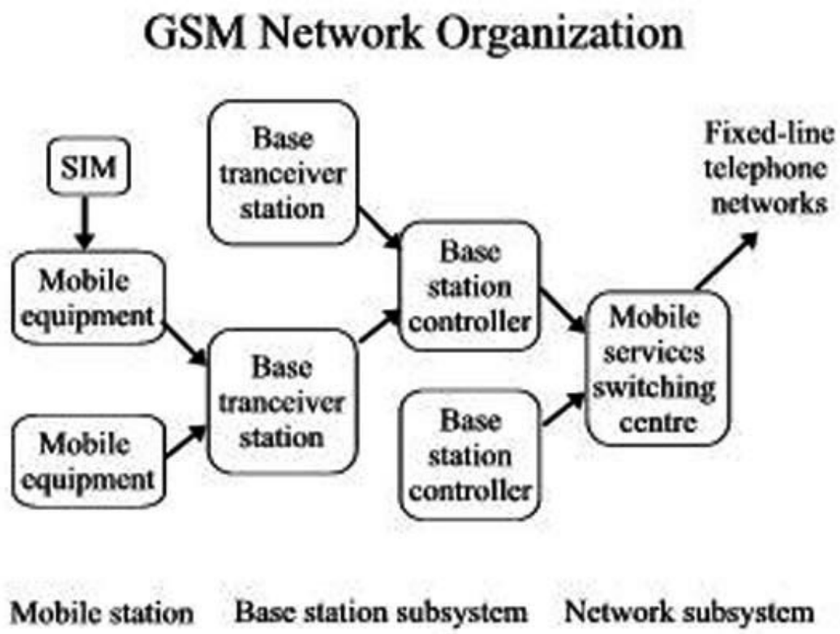


Fig. 25 Structure of a GSM Network System

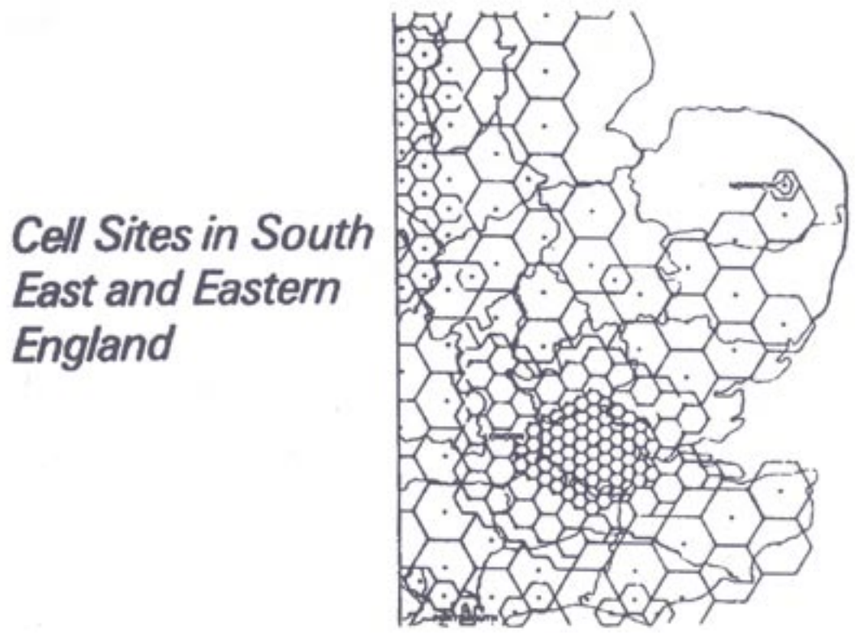


Fig. 26 Cellular radio base station in South East England: The diagram, taken from the early days of cellular radio in the UK, shows how the system operator (Racel Vodafone) develops a "cell-plan" to cover the country, including a greater density of small cells in urban areas. Two levels of cell-splitting are shown, the smallest cells being "cornered-excited."

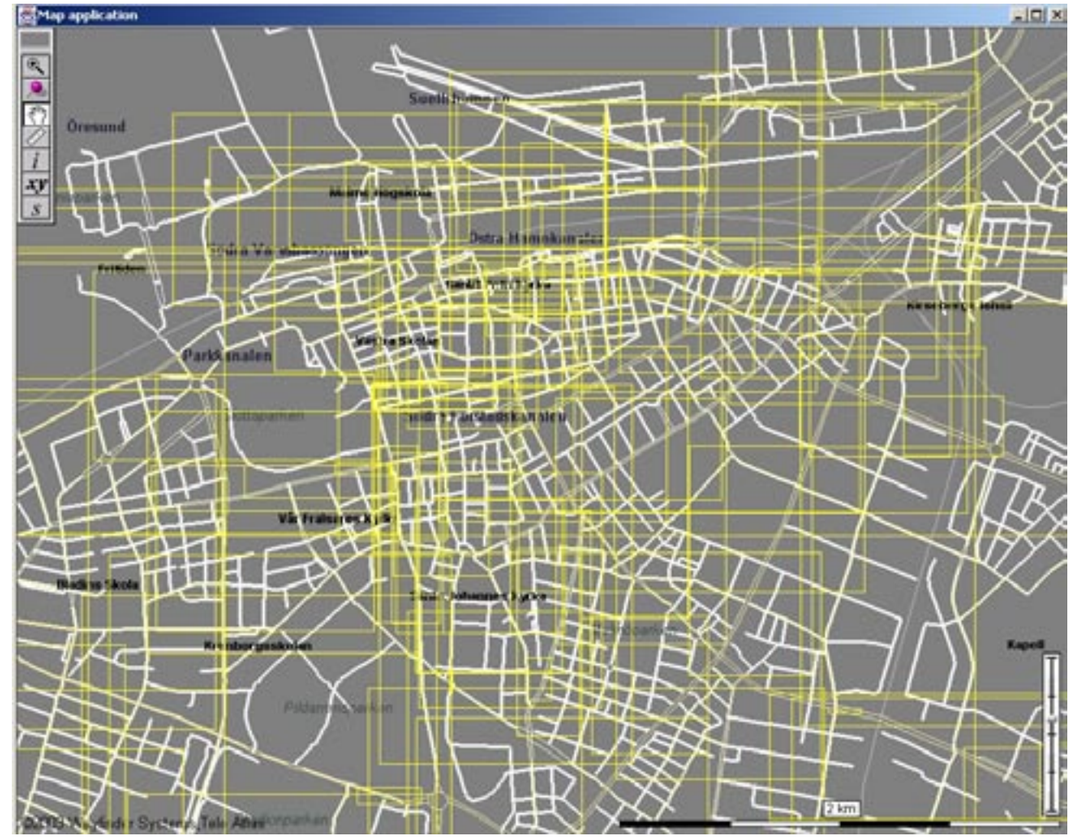


Fig. 27 Image of the actual cell layout in Malmö, as of December 2003. Yellow, overlapping rectangles indicate cells.

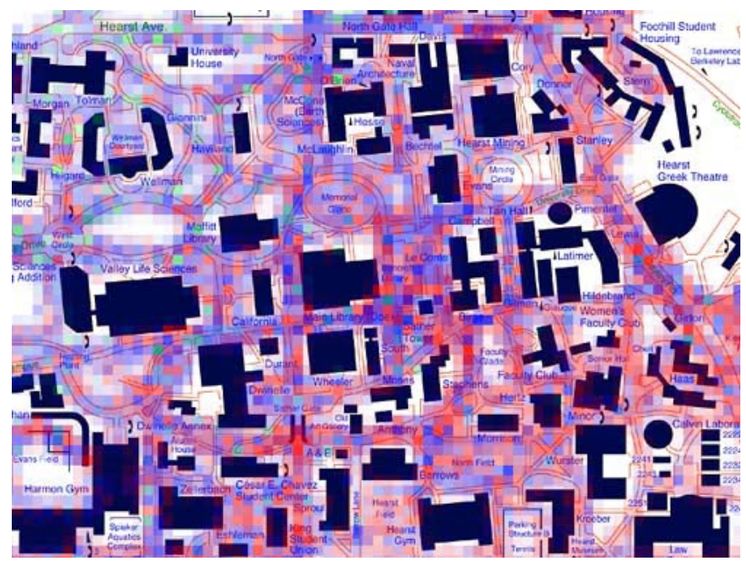


Fig. 28 Electrometric mapping of cell phone signals across Berkeley Campus, 2005. (After Professor R.J. Honicky, University of California, Berkeley)

nothing like hexagons – which are only approximations, as well. Apart from its specialised use in electronics, the word "cell" evokes the image of an organic, biological unit – which, as a side effect, alludes to a "naturalised" existence (and growth) of networks and telecommunication. The irregular shapes and sizes of the actual cell fields reinforce the doubt that the hexagon can be considered an adequate description – it merely seems to be a symbolic form, one that surpasses the orthogonal reduction of the modernist square module, combined with an intra-modern metaphor that was already used by Buckminster Fuller in his geodesic domes, for example.

The importance of a symbolic visualisation like this lies in the forming of a strikingly simple, yet systemically complex public image for a new technology, one that deeply influences the interrelations in the different societies where it is put to different uses. The hexagon of the cell represents the symbolic order of a principle of surface enlargement, but also simply offers two more sides to which other hexagon sides can connect. What the image of the hexagon shares with that of the square is its ability to form "overall" structures, from the square-based raster to the hexagon-based honeycomb. This development implies a symbolic movement from the artificial to the natural. Mobile telephony has been given a powerful imaginary representation that emphasises the quality of the technology that is considered most important: Universality / ubiquity and sociality / connectivity. The combination, ubiquitous connectivity, is the total formula that is being reproduced on all levels of representation, even though they frequently get into conflict with experiential realities.

Ubiquitous connectivity, transferred to the concrete social everyday, is a sufficiently universal ideology to nurture the phantasmatic projection on "accessibility" emphasised by enterprises that promise "seamless" connectivity beyond context, space, and geography. In reality this is, of course, always a negotiation with its temporal flexibility and organisation. Mobility certainly represents a big step towards the ideology of the "seamless connection".

But what does "seamlessness" actually refer to, and what does it imply? In the near future, a technological development like the "handover" between different networks will be facilitated further.

Mobile communication networks are frequently presented as autonomous and allowing for better temporal organisation, and direct connectivity and ubiquity is imagined as creating a less hierarchical situation. This stimulates an image of the mobile phone as the (symbolic) tool of equality and a form of democratic, non-hierarchical empowerment. However, from the perspective of network architecture, it is not non-hierarchical at all, and is organised in layers of transmissions within the power structure of computer systems.

From another point of view, mobile telephony, as well as other location-based information systems such as GPS and other satellite transmissions, are technologies that tie users to an invisible data space, and less to objects or buildings in their surroundings. The invisible architecture of the network transforms the physical space into an information space, both by the extraction and the augmentation of data. The "invisible landscapes" created by electromagnetic waves have been termed "Hertzian spaces"[215] and "radiation architectures".

There are some projects that address this gap between imaginary and actual or try to differentiate spectacular imaginaries from actual ones. Some designers, computer programmers and artists have tried to visualise or otherwise make invisible aspects of networks available to experience through interactions by mobile phone. For example, the London-based artist **Usman Haque** has designed the interactive piece *Sky Ear* (2004) to show the amount and shape of invisible electromagnetism that pervades our environment. *Sky Ear* consists of a thousand helium balloons containing several dozen mobile phones and sensor circuits that respond to electromagnetic fields, particularly those of mobile telephony radiation. As part of this project, people were able to call the mobile phones floating up to a

[215] Anthony Dunne, *Hertzian Tales*, Cambridge, Mass./London: The MIT Press, 2001.

hundred meters in the air above them, and to listen to the mixture of electromagnetic sounds and other noises that they transmitted. The phone calls affected the local Hertzian topography, causing field change feedback to sensors that changed the colour of the glowing balloons and poetically create a ripple of colour light in the night sky. Among other things, this project "showed" that mobile phone calls and text messages invisibly affect new and existing electromagnetic fields.[216]

Recently, another similar attempt was done in more site-specific sense by **Carlo Ratti, Andres Sevtsuk**, and **Sonya Huang**, a group of students working at the Massachusetts Institute of Technology. As part of the exhibition M City: European Cityscapes (Kunsthaus Graz , October 1, 2005 – January 8, 2006, curated by Marco De Michelis), they presented the project *Mobile Landscapes* in a collaboration with the local telecommunications company Mobilkom Austria, which traced mobile phone traffic according to volume and geographic location in Graz, and visualised the traffic intensity in real time. They also rendered and displayed the location of those volunteers among the M-City exhibition visitors who allowed their mobile phone to be tracked during the exhibition.

These projects succeeded in presenting the invisible and inaudible in a perceivable manner and draw spectacular and aesthetically pleasurable value out of it. However, as Mitchell has critically pointed out, what we need to keep in mind about these invisible landscapes is that "scientists and telecommunication engineers have long been familiar with these landscapes, but designers have only recently begun to give it the attention it deserves."[217] They have actually started attempts to visualise contemporary issues of technology, to develop an aesthetically attractive presentation – not much has happened in

[216] http://www.haque.co.uk/skyear.php. – With a similar approach to Hertzian space, Rafael Lozano-Hemmer realised the large-scale interactive installation, *Amodal Suspension* (2003) around Yamaguchi Centre for Arts and Media. In the installation, people could SMS each other using a cell phone or web browser that was connected to the address www.amodal.net. However, rather than being sent directly, the messages were encoded as specific sequences of flashes and sent to the sky with a network of twenty robot-controlled searchlights. Cf. http://www.amodal.net

[217] William J. Mitchell, ME++. *The Cyborg Self and the Networked City*, Cambridge: The MIT Press, 2003, p. 225.

the way of any critical approaches. Many designers are providing spectacular experiences through the visualising of invisibility (or making the inaudible audible). Reading previous critical descriptions (authored, among others, by designers) as textbooks – or as image resources to be used for powerful, but ultimately arbitrary presentations of computer graphics. Still, these projects may play a certain part in making a wider audience more aware of the invisible dimensions of mobile network system. But at the same time, by boosting progressive-regressive fantasies, they inevitably propose and represent another new type of technological pleasure and entertainment and keep the audience from becoming aware of possible critical aspects of the invisible, i.e., hidden uses of communication technology. At the present state of things, the degree to which the majority is informed about radiation dangers, possible and actual infringements of their privacy and citizen rights, or the scale of economic globalization epitomised by the "seamless mobile network" is catastrophically small. It may be true that the information campaigns about the use of nuclear energy or genetic engineering have, at best, created public pressure on politicians and has not significantly changed the "path of progress", but in the case of mobile technology the informational character of the technology seems to provide an unprecedented opportunity to discuss effects of globalisation – by entering into a wider discussion on the fabrication of networks and knowledge.

After a necessary assessment of technological developments that lie at the basis of any structuring of networks, in the following I will compare visions and directions in the development of mobile telephone network systems and the actual use of mobile phones.

Technological Development: From 0G to 3G

Cellular networks were first introduced in the early to mid 1980s (1G = first generation). Earlier mobile phones operated without a cellular network (0G), such as the first mobile telephone service, which dates back to 1946 and was introduced by AT&T (single-cell, manual operation). Until the mid- to late 1940s, most mobile phones were still so large that they had to be permanently installed in vehicles as car phones. With the invention of the microchip, miniaturization became possible, enabling the current size of handheld mobile phones.

In the same generational scheme, 2G digital mobile telephony marks the current technological standard. 2G technologies can be divided into two types, TDMA (Time-Division-Multiple-Access) based, which is used worldwide, and CDMA (Code-Division-Multiple-Access) based standards, which is used only in the United States, Japan, and Korea, depending on the type of multiplexing[218] used. GSM (Global System for Mobile Communications) is a variation of the TDMA standard and has been developed as a pan-European collaboration, representing a platform used by the majority of digital mobile subscribers in the world today. GSM was introduced in 1989, and on July 1, 1991, Radiolinja, the first GSM network, was officially opened in Finland. In October of the same year, the first European roaming call was made between the Finnish provider PT and the British provider Vodafone.

The most significant difference to previous mobile telephone systems is that the radio signals that 1G networks have been using were analogue – while 2G networks are digital. It is important to note that both systems use digital signalling to connect the radio towers to the rest of the telephone system. The digital 2G system offers a higher and more

[218] "Multiplexing" is a communication technique by which two or more independent messages or information-bearing signals are carried by a single common medium or channel. See http://www.answers.com/topic/multiplexing

effective compression of voice data, allowing it to pack more calls into the same amount of radio bandwidth and increasing the call-handling capacity. The digital systems were also designed to emit less radiation from the handsets. This meant that cells could be made smaller, so that more cells could be placed in the same amount of space for better connections. Currently, what has widely been developed as 2.5G is an intermediary state between 2G and 3G cellular wireless technology services, enabling high-speed data transfer over upgrades of the existing 2G networks. They offer greater capacities and better voice quality than previous technologies. Digital systems have introduced many additional multimedia services, packet switching for access to the Internet (E-mail, surfing, and data transactions) as well as MMS for photo-messaging and video messaging.

When it comes to the relation between imaginaries and reality on the sound aspect of the digital system of mobile telephony, what is crucial is that the system reduces the spectrum of sound information conveyed. This means that we hear a voice more clearly, but the voice talking on a digital cell phone has a smaller tonal spectrum. So, without really noticing the difference to previous voice transmitting technologies, the voice in mobile telephony is much less "natural" than the one we hear in "face to face" communication. Today, sound that we think of as "normal" is in fact quite frequently digitalised for "clear" sound quality; this, at the same time, can also mean that the sound we here can be easily manipulated and controlled.[219]

Another example of the gap between imaginary and reality: the digital system with the frequently discussed ambiguities of copying or cloning it has raised. In the context of mobile telephony, the personal telephone number has becomes a unique identity number. However, in analogue systems, but not in any digital system, it is possible, to have two or more "cloned" telephone devices that are using the same phone number. In the previous generation, one could have a "copy" telephone, to be used as a backup in case of damage or

[219] I will explore further aspects of sound in daily life in Chapter E.

loss. One could even permanently install a handset accessible over the same number in a car or in any other remote place for one's convenience. Instead of carrying the handset everywhere, plural phones with the same number were at the users' disposal. However, this was abused for many fraudulent purposes, and in digital systems "clone phones" are no longer allowed.[220] As one of the consequences, the telephone number has become more like an identity number attached to one person, but the mobile phone itself has become more like a portable office, as performance and connectivity have been upgraded in the courses of technological changes and generally increased diffusion.

3G enhances the ability to transfer both voice data (regular phone calls) and non-voice data (downloading information, exchanging E-mail, instant messaging). The International Telecommunications Union (ITU), an organisation of both governmental and private institutions developing new, shared technological standards, has proposed the third-generation (3G) wireless standard since 1985; today, standards are still shifting between 2G and 3G.[221] Since spectrum-licensing fees were collected many years before any income could be expected from telecommunications operating in the 3G system, and since enormous investments are necessary to build the 3G networks, many telecommunication operators got into great financial difficulties, which greatly delayed the 3G roll-out in all countries.[222]

3G technology is presented as an opportunity to set up one single, unified world standard incorporating all current digital wireless network architectures, a step that promises a high degree of commonality worldwide. In addition to its universality, 3G is designed to allow transmissions of very large data quantities, and also focuses on advanced service

[220] http://www.answers.com/topic/2g.
[221] The decision of the European Parliament and Council of Ministers on December 14, 1998 suggested that operators in Member States must cover 80% of the national population by the year 2005. The first country that introduced 3G on a wider commercial scale was Japan. In 2005 about 40 percet of subscribers use 3G networks only, and 2G is on the way out in Japan. It is expected that during 2006 the transition from 2G to 3G will be largely completed in Japan, and upgrades to the next "3.5G" stage.
(http://www.answers.com/what%20is%203G%3F)
[222] Japan and South Korea, where such spectrum licensing fees were avoided, are exceptions, since priority was set on developing national IT infrastructures.

quality through increased bandwidth and flexibility. It can provide a better sound transmission quality comparable to that of a fixed landline, and allows for the integration of multiple devices, such as mobile phone, cordless phones, and satellite.

The new technology has also led to an increased research on intermedia convergences of all kinds of portable devices with many different applications. In recent years, multiple tasks and connections can be managed simultaneously; it is, for example, possible to browse the Internet while talking on the phone. A mobile phone using a 3G network with broader bandwidth allows for faster data downloads and "face-to-face" video calling, and a wider range of multimedia services. It can also be an open architecture to facilitate technological upgrades of different applications. However, considering experiences with the use of 3G-based mobile telephony in Japan, where the new technological standard was adopted very early and almost fully implemented nowadays (due to the privilege of not being forced to pay fees like other countries), the real-life usage of 3G-based video telephony amounts to only a very small fraction of all services used. The major progress in the amount of data transmitted on 3G networks has thus not led to the expected higher acceptance of video applications, but has rather strengthened the customer demand for music downloads. A general tendency for future generations will undoubtedly affect the ever-increasing use of wireless data networks, but there is still uncertainty about what sort of actual demands and needs emerge to transmit such data in the use of mobile telephony.[223]

[223] A standard beyond 3G is already being discussed: assuming that 3G deployment spans the 2000–2009 period, 4G would refer to whatever is deployed in the 2010–2015 period. Typically, this means at the least a new air-interface with higher data transmission rates.

The Gap Between Actual Use and Imagined Development

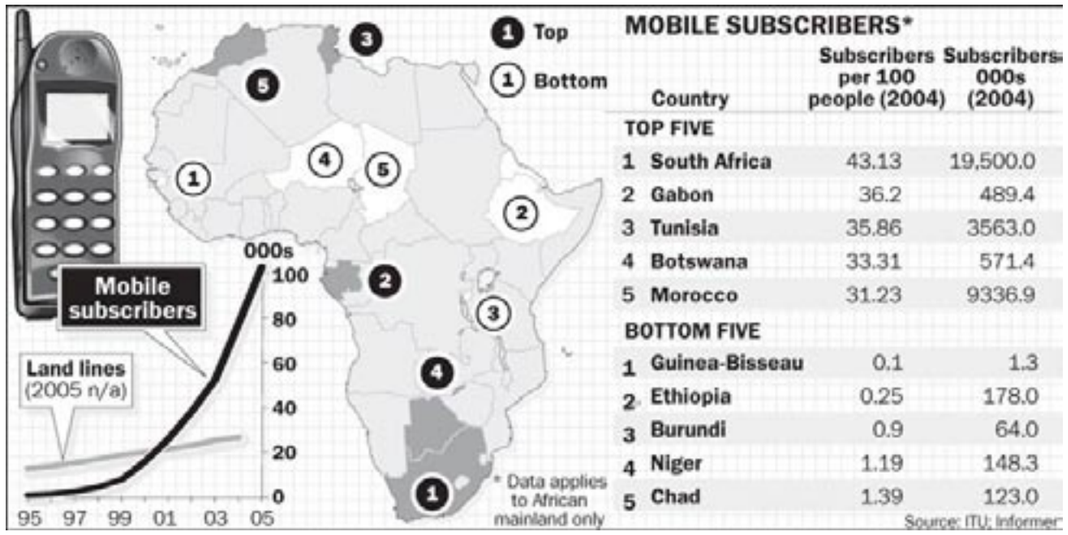
Gaps between the imaginary and the actual surface not only in the infrastructure, but can also be seen on the level of the daily use of mobile networks. The general public's imagination and perception of (mobile) networks is mostly influenced by metaphors that are very difficult to relate to actual physical conditions. For my argument, a point such as this is of crucial importance, for it exemplifies the fluidity of notions and images around or connected to communication technologies. In much of this study, I have tried to point to possible interconnecting channels between different imaginaries based on the same objective conditions – the notion of the landscape is one of them. While, historically, it has been a central property of artistic languages to maintain a level of imaginative precision that had to remain able to switch between different categories to keep their stance autonomous, today these necessities have taken root in the everyday imaginaries of increasing portions of a "connected world". My research endeavour was and is guided by the attempt to analyse the historical precedents and the present state of artistic languages connected to these social and spatial imaginaries. Throughout the nineteenth and twentieth centuries, especially the visual repertoire of natural sciences and technology that has claimed supremacy in explaining the shape of the world. But it is hard to deny that in the course of modernism and modernity, the universality of these visual concepts has always been heavily criticised and called into doubt – as being subjective on the level of a mostly Western scientific community.

The official depictions of the development of "worldwide networks" include a number of frequently repeated statistic trends: later generations will bring bigger data transmission rates, greater speed, and higher storage capacities. This will enable mobile telephone users to profit from more and more functions. The mobile phone becomes a

powerful multi-purpose small computer – for calling, for surfing, for recording sound and images, for downloading, for playing games, for listening to music and, importantly, lately also for many office applications like Excel and Word. Many statistics from ITU and other authorities point to the high diffusion rates of mobile network systems **(fig. 29)**.

Usually these statistics are designed to show the rapid diffusion and development of mobile phone use by showing increasing mobile subscription numbers and diffusion rates. These numbers point out one progressive aspect in the scenario of mobile communication, however, they do not cover the complexities in reality at all. What numbers and spaces are not included, not represented in those numbers? Is it only a negative assumption that the statistic impulse behind them is strongly connected to marketing imperatives? It is always important to keep in mind that the development of technology and engineering, including mobile telephony, ultimately is rooted in politics, or more precisely the military and communication industries. However, opposed to such a narrow delineation of the reality of the mobile phone medium, people worldwide have actually developed a great variety of (ab)uses of pre-installed and implemented applications – their use is much more complex than could be expressed in the quantitative discourse of the market diffusion of technology.

In the visual introduction of this chapter, I intended to explore alternative ways of using mobile telecommunication in daily use. As becomes apparent, diverse "smart" alternatives emerged and are still emerging. For example, telephones have become mobile in ways much different from the casual practice of the possessed accessory: they are being attached to carriages and vehicles (Morocco), temporary phone boxes (Lagos), bicycles (Tibet), or trailers (U.S.). Or telephones become attached to serviceable persons carrying a sign and a mobile phone, walking around for public use (Ulan Bator, Mongolia; South/Central America). Mobile phones are fixed in public phone boxes or just on a makeshift folding table under a tree (Congo, Cameroon) where landlines have not been



MOBILE SUBSCRIBERS*

Country	Subscribers per 100 people (2004)	Subscribers 000s (2004)
TOP FIVE		
1 South Africa	43.13	19,500.0
2 Gabon	36.2	489.4
3 Tunisia	35.86	3563.0
4 Botswana	33.31	571.4
5 Morocco	31.23	9336.9
BOTTOM FIVE		
1 Guinea-Bisseau	0.1	1.3
2 Ethiopia	0.25	178.0
3 Burundi	0.9	64.0
4 Niger	1.19	148.3
5 Chad	1.39	123.0

Fig. 29 Mobile Subscribers in Africa in 2004

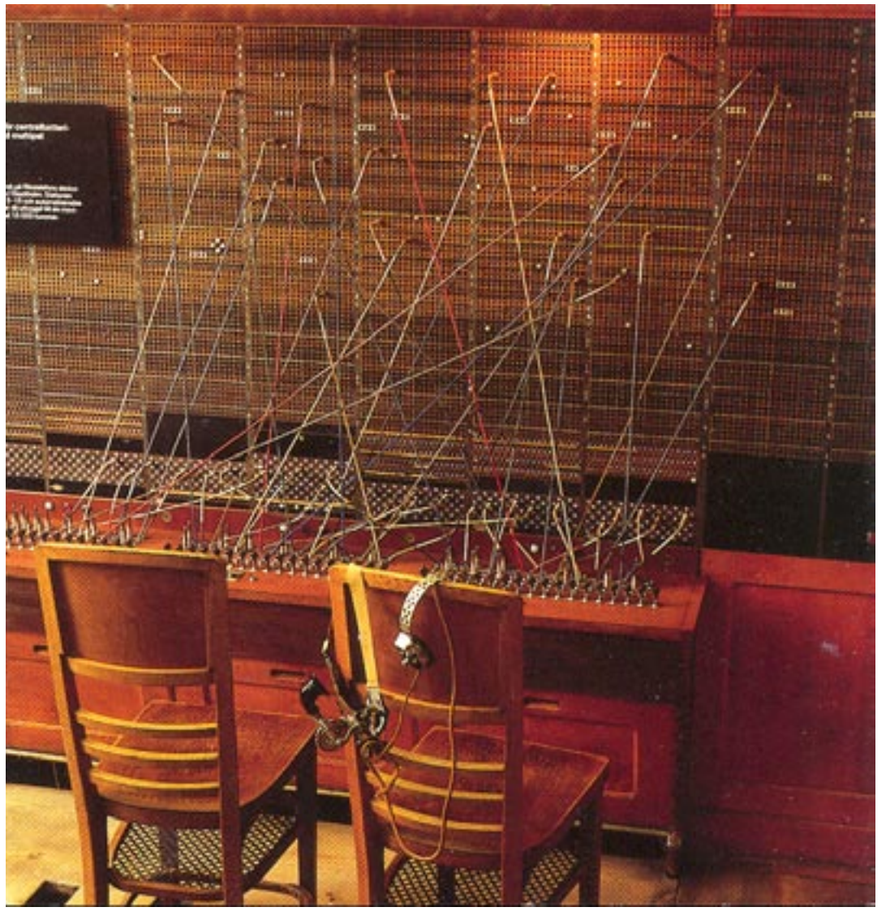


Fig. 30 Image of point-to-point connection in a classic telephone system.

introduced to permanent infrastructure, or where it is too expensive to construct or use them privately.

Alternative uses of the mobile phone are thus by no means limited to the "developing" countries. For example, the British sociologists Alex Taylor and Richard Harper report how call-credits of mobile phones are exchanged between teenagers in the United Kingdom. In their study, Sarah, a British school girl, explains that "she pays for her friend's brother's credit not for selfless reasons, but simply because he is implicated in her social network which she wishes to sustain."[224] Offers of credit cannot only be exchanged when it is running out, they can be reciprocated as symbols of friendship, as is shown in the example. The use of the mobile phone is also seen as a sort of alternative currency, sharing among close friends and users and owners that are not necessarily identical all the time **(fig. 30)**.

However, the socially complex use as it can be observed in reality no longer fits simple point-to-point models. The numbers and conditions of use disappear in official statistics that aim at pre-categorised targets and carry them out with a pre-fixed purpose. The scenarios of mobile communication that are now emerging seem to represent something that requires a new kind of imagination never developed before. Developing imaginaries and arguments should not be limited to the results of statistics or abstract theories, for they do not explain all the different ways and conditions of the use of networks already visible in the most fleeting visual examination of our surroundings. In an associative chain of similar sounding expressions, one could say that the cell phone is not necessarily a "self-own," it is something that is accessible and usable by more individuals than just one single owner. Nor, are the users necessarily the same as the subscribers. Some may use their mobile phones only as portable data storages, not as network devices. They may check phone numbers in the

[224] Alex S. Taylor & Richard Harper, "The Gift of the Grab?: A Design Oriented Sociology of Young People's Use of Mobiles", *Computer Support Cooperative Work* 12 (2003).

address database of their mobile phones, but eventually make calls on public phones. Or, on the opposite extreme, one user can, of course, own more than one cell phone. How can we account for such contemporary conditions around the uses of mobile phones? These complexities increase as the mobile phone is becoming wearable and ever more embodied. How do we understand the cell phone, when it actually becomes a "self phone," when the radio cell becomes embodied as a real, biological cell?

Despite the degree of miniaturization, what is interesting is the seemingly exaggerated development of accessories for mobile phones. For example, some mobile phones' straps and mascots are much bigger than the mobile phones themselves: some users, apparently especially young females, are attaching all kinds of trinkets and brand accessories in a clearly excessive manner. Such over-decoration with "talismans" is a symptom of an emotional overinvestment in a technological object, to the point that it negates the mobile phone as technology, instead celebrating it as a fetishised "magical" or "spiritual" object.

Mobile phones are fully personalised artefacts[225] carrying huge amounts of private data: private and official network contacts, personal communication records, personal images, videos and music. Like the tamagotchi from the 1990s, they require a great, continued amount of attention from the user: charging, cleaning, updating (and of course paying). Personalisation and investment of attention enhance the mentioned spiritual aspect of the mobile phone as a unique portable object with multiple communication functions.

While the animistic perspective on mobile phones mainly seems to regard the attention ultimately invested by the self of the owner or user to him- or herself, the mobile phone also has a strong functional potential in the representation of the self to others. For example, the mobile phone is seen as a luxury good, which symbolises a certain social and

[225] As the mobile phone is such a personalised gadget that it becomes difficult to be dumped both psychologically and in terms of information

economic status in some contexts – generally in public or in some countries where the diffusion of the mobile phone is still not general. Maria Thereza Alves, in her work *Almost There* (2006), has shown that today in Brazil, the principal object symbolizing a better standard of living has shifted from the car to the mobile phone. There, fake mobile phones circulate in the exchange of power connected to the symbol. Alves's anecdote signifies the representational power of the device and explores the imaginaries behind this technology. Returning to the overload of accessories attached to the mobile phone, both examples can also be interpreted as a desperate call for attention, not from the self but from the other.

Excessive accessorising can also be understood as a counter-movement opposed to the embodiment of technology. It marks the opposite to the phenomena of physical integration of the mobile communication technology. In this sense, the diminished size of the mobile telephone cannot be argued simply from the viewpoints of miniaturization or object design. The gaps between data from statistics, abstract theories, and from reality need to be acknowledged. They are also indicative of shifting metaphors in the visualization and depiction of sociological facts. In the next section of this chapter, I would like to further explore the sense of spatial metaphors in mobile networking communication, combining this with an account of the critical aspects spotlighted by some of the artworks I have included in two of the exhibitions.

D.2 Power Relations in Mobile Connectivity

Mobile communication and mobile information spaces represent typical examples of an alleged "fluidity", a quality that makes it possible to effortlessly change back and forth between spaces separated by economic and/or socio-political boundaries. The promotional, marketing discourse of "accessibility" suggests a stronger empowerment beyond contextual, special and geographic conditions. As mentioned before, "accessibility" is a term frequently used in the context of mobile telecommunication, mainly indicating two significations – one suggests that mobile telephony customers are actually enabled to participate in a simultaneous network of global reachability, the other one points to that social/contextual accessibility which, potentially levelling social and hierarchical difference, always involves the negotiation of the individuals' temporal flexibility. Both senses of "accessibility" are expressed in the phrase of "seamless" connectivity, emphasised both in media theory and in advertising campaigns of mobile phone companies.

The ideology of "seamlessness" applied to forms of communication that surpass geographical distance reminds us of other expressions developed for the discussion and promotion of media networking in the 1960s – expressions such as that of the "global village" used by Marshall McLuhan (1964), which set out to propose an existence beyond geographical boundaries.[226] Introducing the notion of a "nonplace community," Max Weber contested that the traditional concept of "communities" binding the individual should be replaced by a concept of "communities of accessibility".[227] At the present state of the diffusion of communication technologies, uneven though it still is, communities can

[226] Marshall McLuhan, *Understanding Media: The Extensions of Man*, New York: Penguin Books, 1964.
[227] Melvin M. Webber, *The Urban Place and the Nonplace Urban Realm: Explorations into Urban Structure*, Philadelphia: University of Pennsylvania Press, 1967.

actually exist regardless of its members' geographical locations. Jessie Bernard even took this further and addressed what she then saw as a non-necessity of the concept of a community – in terms of a space designed for the peaceful development of human relations.[228] Subsequently, after the popularisation of the Internet, concepts like that of a "Network Nation" put more emphasis on individual volition than on any other factors.[229] Since then, the notion of the "network" has become an increasingly popular model and metaphor for imagining alternative organisational structures, not only with reference to community-related concerns, but also to other political, commercial, administrative, cultural, and other autonomous fields.[230]

More specifically, and looking at the larger dimension of communication technology, the anthropologist Arjun Appadurai has pointed out that significant relational changes have happened with the installation of networks; he argues that this helped to bring about the emergence of "between-places," in communication technology.[231] Still following Appadurai's argument, the way in which the mobile phone is embodied and used to perform in society in order to gain "accessibility" reflects disjunctures between five different "scapes" – "technoscapes", "ethnoscapes", "mediascapes", "econoscapes" and "political scapes" (see chapter B.1.); however, notional frameworks like his, and terms like "Network Nation" and "between-places", might be valid as suggestive constructions, they are forced to remain painfully abstract. As Andrew Barry has pointed out, it is important to distinguish between idealised images of global connectivity as imaginary concepts – and global technoscapes which include and connect only certain places and practices, whereas many

[228] Jessie Bernard, *The Sociology of Community*, Glenview: Scott-Foresman, 1973.
[229] S. Roxanne Hiltz and Murray Turoff, *The Network Nation: Human Communication via Computer*, London: Addison-Wesley, 1993.
[230] Andrew Barry, *Political Machines: Governing a Technological Society*, London: The Athlone Press, 2001.
[231] Arjun Appadurai, *Modernity at Large: Cultural Dimensions of Globalization*, Minneapolis: University of Minnesota Press, 1996. See also Adrian Mackenzie, "Moving and Imagining Moving: Infrastructural Software on the Technoscape," www.teamethno-online.org/ Issue1/Ethno_centre/Forge_study.html.

others are excluded.[232] What, on a rhetorical level is suggestive of a community of equals as a concept of "networking" and "connectivity", has of course little relation to actual political reality. This must always be taken into consideration when any precision or reliability is aimed at in a discussion of mobile communication. Only in the trite mythologies of globalised communication business do networks have an all-inclusive character – while their meshes are still sufficiently wide to let a vast majority of the world population go unnoticed.

This becomes very clearly visible in the logistics industries that have been built to support global mobile communication. The race for raw materials such as Coltan, providing the technological possibility to keep the mentioned networks going – as one of the most striking examples of new global monopolist economies – thus had to be a crucial part not only of my discussion, but also in the curatorial concept I devised for the first exhibition in Malmö. Moreover, it will see a reprise in the third exhibition of The Invisible Landscapes in Lund in September 2006, introducing not only the documentation of political facts, but – through the work of artists Alice Creischer and Andreas Siekmann – reflecting on the history of the visualization and representation of historical facts.

The construct of an "almighty connectivity" of mobile telephony is constituted and supported by complex global consequences, including the exploitation of material resources and labour; another space of economy is involved in the ideological space of mobile telephony. In the following, I will analyse more concretely power relations within mobile telephony using two different examples: one is Coltan, an essential component of the mobile telephone and some other portable electronic devices; the other is the specific mobile phone operation infrastructure in Kosovo, where I would like to re-think a kind of space that tends to remain rather invisible in the midst of transnational technological and capitalistic expansion and imagining.

[232] Ibid.

D.2.1 The Coltan Trade: A Moving Shadow of Colonial Structures

Global advertising for mobile phones, with some remaining cultural specificities, frequently emphasises almighty connectivity, implying the promise that the user can use mobile telephony to reach to the other side of the globe at any given moment. The suggestion clearly addresses power fantasies, but of course in a way that still seems "manageable" for the individual. While the vocabulary of advertising campaigns underscores the idea of a global extension of spheres of influence, the imageries of advertising break down these megalomaniac fantasies into the realm of private and individual relations, and, most powerfully, to an equally obsessive, eroticised imagery that produces the vision that the power and influence that emanates from the mobile telephone is somehow, almost like in an animistic ritual, ingested by its users. This means that material realities are excluded: in this, the marketing strategies developed for the mobile phone do not differ significantly from that of other sectors and commodities. The animistic tendency to allude to invisible powers at work in a surrounding ether space serves as a very simple sublimation strategy for the "real" procedures and structures that enable global communication networks.

However, what is in the background is that the mobile phone is always already part of a deep connection without any network – merely by way of the materials it is composed of. In order to build mobile phones, a variety of raw materials are required from various more or less dependent economies around the world: nickel from Chile for the battery, petroleum for the plastic casing and LCDs (liquid crystal displays) from the Persian Gulf, Texas, Russia, or the North Sea, tantalum for capacitors from Australia or Africa, microprocessor chips from North America or Scandinavia, components from all around the

world.[233] In a sense, the mobile phone can be seen as a condensed unit exemplifying the current structure of world trade.

Among many other components, coltan is maybe the best example to trigger an understanding of the power relations involved in the mobile communication industry, in international politics, in global economy. Coltan is the abbreviation and trade name of the mineral colombite-tantalite, from which the precious metals tantalum (Ta), colombium (Cb), and niobium (Nb) are extracted. Each metal has a variety of industrial uses, but especially Tantalum is widely used in electronic components, chemical equipment, missile technology, and nuclear reactors. However, the electronics industry consumes the largest portion of the worldwide tantalum production for capacitors – around sixty percent.[234] When refined, tantalum can be used for the production of a heat-resistant powder that can hold a high electric charge and only slowly and gradually release the power. The main source of attraction of tantalum, the one market that has most relevantly formed the corresponding demand structure, has recently been its use in the construction of capacitors for mobile phones and all kinds of other IT products, laptops, pagers, gaming platforms, computer chips and many other electronics. Coltan-based capacitors extend the span of autonomous battery life of these products significantly **(see fig. 31–37)**.

According to a recent IPIS (International Peace Information Service) report, the majority of the world's production of tantalum used to come from discarded slags of tin smelters. Following the gradual decline of the tin industry, new sources of coltan ore had to be found. The report explains that "the biggest coltan mines, which account for approximately sixty percent of the world's production are located in Australia (Greenbushes, Wodgina, Sons of Gwalia). It is generally believed that eighty percent of the world's reserves

[233] Jon Agar, *Constant Touch*, Cambridge: Icon Books, 2003, p. 14.
[234] From the report by the Pole Institute, *Regards Croisés: The Coltan Phenomenon*, Goma (DRC), September 2002.

Fig. 31 Coltan

Fig. 32 Anders Gustaf Ekeberg, 1767-1813. Swedish mineralogist who discovered tantalum.

Fig. 33, 34 Local Congolese labor to dig out coltan in North Kibu, DR Congo

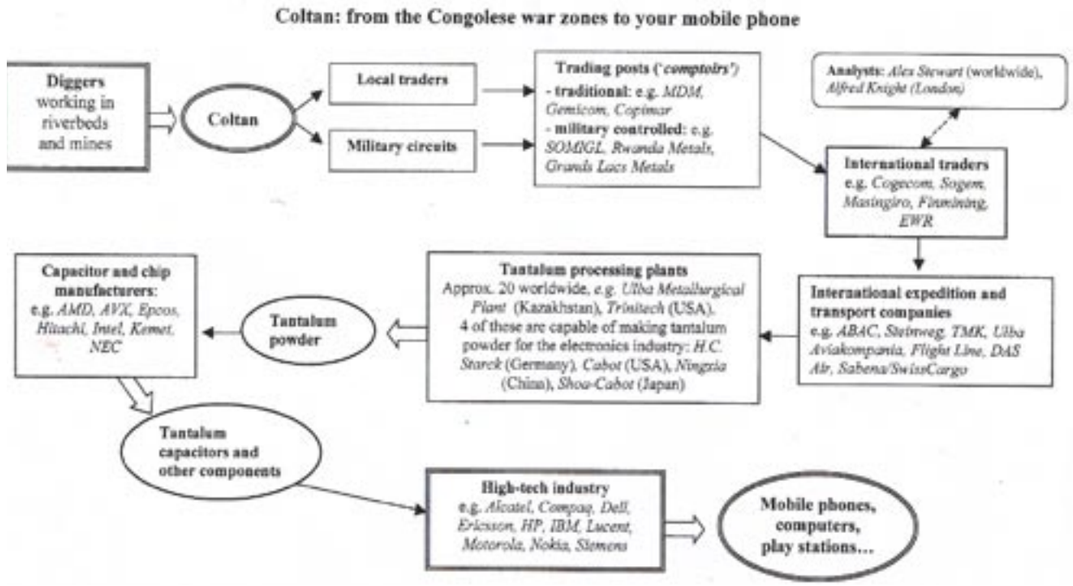


Fig. 35 Coltan: from the Congolese war zones to your mobile phone

Fig. 36 Microchip

Fig. 37 Capacitor

are in Africa, with DRC accounting for eighty percent of the African reserves."[235] This situation has created the "coltan gold rush" in North Kibu, DRC, which since then has significantly affected local society.[236] With the complexity of the political interventions of rebel and military forces of the neighbouring countries and by the high demand for coltan, the illegal exploitation of mines has only increased. Its price has spiralled out of control – rising from 30 to 40 $/lb in January 2000, up to 380 $/lb in December 2000. After the rush, it rapidly fell back to 100 $/lb in October 2001.[237] Since 2001, the demand and price of Tantalum have declined; in addition to that, the industry has found recycling procedures to reuse the materials of discarded cell phones and other battery-driven electronics. But recent upheavals in the Congolese Katanga district were sufficient to bring back a public concern about the safety of mineral resources for communication technologies. The "coltan gold rush", marking a central episode in the U.S. history of economic success through the exploitation of natural resources, has certainly not brought any positive effect to the economies of the DRC. At times, the preoccupation for the gorillas of Congo, threatened with extinction by the progress of the coltan mining, exceeded the media attention for the devastating effects on the population. The American government has labelled Tantalum a strategic mineral, allowing the government to gather extensive stockpiles for its own purposes. This adds further political complexity to the situation in the DRC. Most trading was done with rebels, the Rwandan military, and unidentified international companies in

[235] IPIS (International Peace Information Service), *Supporting the War Economy in the DRC: European Companies and the Coltan Trade: Five Case Studies*, Antwerp, 2002, p.8. See http://users.skynet.be/ipis.
[236] Report R37/2002, Dept. of Minerals and Energy, "Republic of South Africa: The Tantalum Market. A Micro-economic Analysis, 2002, cf. http://www.dme.gov.za. – Koen Vlassenroot and Hans Romkema, "The Emergence of a New Order? Resources and War in Eastern Congo", *The Journal of Humanitarian Assistance*, http://www.jha.ac/articles/a111.htm; and Natalie D. Ware, "Congo War and the Role of Culture", *ICE Case Studies* http://www.american.edu/TED/ice/congo-coltan.htm. - Elisabeth Gilmore and Päivi Lujala, *The Location of Natural Resources Database*, European Consortium for Political Research: Edinburgh, 2003. – General historical reference: N. De Kun, *Mineral Resources of Africa*, Amsterdam: Elsevier Science Publishers, 1987. See also Internet resources like http://www.mininglife.com and http://www.mining-technology.com.
[237] Ibid.

Europe and the US.[238] As a result, the consequences directly or indirectly finance war, instead of supporting peace and benefiting the Congolese people. The tantalite industry, embodied in the Tantalum-Niobium International Study Center, called on its members "to take care to obtain their raw materials from lawful sources. Members should refrain from purchasing materials from regions where either human welfare or wildlife are threatened."[239] In the complexity of the situation, this can only be seen as a diversion from the mainly clandestine character of most of the trade. It should also be mentioned that the few economic structures that were established in the Congo rapidly vanished during the first price fall of the material on international markets, causing a catastrophic destabilisation in local structures.

[238] Ibid. pp. 5–24.Cogear SARL in Brussels, Belgium is unidentified, Maingiro GmbH is clearly stated its contribution to finance the war in DRC, and a Swiss entrepreneur becomes the major business associate of the Rwandan Patriotic Army. IPIS grant German, Dutch, Belgium, Swiss governments the necessity of checking on these issue on their own as well.
[239] See http://www.tanb.org.

D.2.2 Alice Creischer / Andreas Siekmann: Alternative Visualisations of Monopoly-like Productions

It has become sufficiently clear that the gap between representation and the represented has grown in the process of a technological globalisation of communication. Hardly surprising in their functionality, advertising campaigns cannot be reproached for distorting reality according to their liking. But what is actually at stake in the discussion about the actual and the imaginary is the division of publicly used imageries for the description of social processes on the one hand, and those imageries that are produced by individuals and groups to construct subjectivities and identities on the other. The problem is far from new, since it has been accompanying the processes of industrialisation, colonisation, and globalisation throughout the nineteenth and twentieth centuries. Still, mobile telephony, as I will try to point out here, is especially significant as a central medium of current global structures of "exchange". The languages of the visual have become separated and isolated as strategies instrumental for promoting the meaning, if not the (much more complex) reality of the mobile phone. They have only limited validity when it comes to understanding of the reality of a medium that, leaving aside all secondary uses like camera or web browser, has remained largely "non-visual", operating on an auditive level.

Visibility today is something that is organised around commodities and consumer goods. In societies of control, invisibility is organised as well. This means that the division between the two has become increasingly difficult to explain on the level of social communication – it has now been assigned to the psyche and intuition of user individuals to digest, to process, to understand what is actually "visible" and "invisible" in each moment. The modernist projects for social communities, like the welfare state, the insurance or other

social security systems and institutions, do not have to be labelled as "failed". Their objective to serve as means for providing for unknown future developments remains largely unchanged. It has to be acknowledged that the image of a series of crises in representation seems to provide the most pervasive mode of description. As Horkheimer and Adorno already pointed out, the field in which the crisis becomes most effective is that of human subjects in interrelation, and the contingency behind them and within them: "For the planners, chance serves as an alibi, giving the impression that the web of transactions and measures into which life has been transformed still leaves room for spontaneous, immediate relationships between human beings".[240] The business of the Western-type modern state was (and is) to erase contingency and to manage what in other cultural fields was discussed as "chance operation".[241] This includes the channelling of concepts like "free will" and other source principles within the ideology of capitalism, which subsequently influenced the public appearance of the mobile telephony discourse.

The crisis in representation equally pertains to fields that seem to promise a maximum of transparency and visibility: those representatives of today's visual industries that have been assigned the task to explain to a larger public – in newspapers, magazines, television and Internet – the way the world is run. As part of an earlier tradition of visual explanation, the representation of "facts" through graphic visualisations as in statistical and other educational contexts could be expected to form an interesting alternative to "trendy" advertising media. But, looking at most "info graphics" available today, the pattern inscribed into the history of statistics discourse seems to have persisted in the guise of a progressive logic underlying figures of growth and decline. Quantitative information is still being presented as "fact", whereas, theoretically, these simplistic equations have long been left

[240] Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment: Philosophical Fragments*, transl. by Edmund Jephcott, Stanford: Stanford University Press, 2002, p. 117.
[241] John Cage can be seen as an important mediator of Eastern notions of "chance".

behind. A fact today is worthless without a detailed context; it is lost in the media cycles of repetition.

The invisibility of those components, actually crucial for the functioning of mobile communication, is paralleled in the character of most current systems of info graphics. Departing from the historicity of this problem in the context of modern art in the West, Alice Creischer and Andreas Siekmann, artists and curators, have been working on a long-term project concerned with a re-evaluation of historical models of statistic representation. Their main goal, however, was to experiment with the possibility to put some such historical models into action related to present-day socio-political formations.

What is interesting in this context is that, as a part of their "Atlas" project, they have produced one special chapter on the issue of Coltan: *Monopolartige Produktionen / Der Fall Coltan* [Monopoly-like Productions / The Coltan Case] (2005, see **fig. 38 and 39**) Here, based on their own research on the circulation of natural resources in capitalist economies, they created a visual interpretation of contemporary statistics, but on the basis of one specific historical model: the *Atlas Gesellschaft und Wirtschaft*, a work that unfolds a pictorial method of applied sociology developed by social researchers and artists Gerd Arntz and Otto Neurath in 1930s Vienna.[242]

Gesellschaft und Wirtschaft is a collection of a hundred pictorial charts and thirty text tables. As a project, it reacted to the growing need to visualise social change in early modernity, but it was to be firmly based on the latest statistics on population development and the evolution of economies. Already then, the invisible movements of capital and the changing forms in the organisation of labour necessitated a new form of visuality that would be able to explain the complex economic facts of an international market. Statistical graphics until then had largely relied on the aesthetics of the flowchart, where everything existed

[242] It was commissioned by the Bibliographisches Institut Leipzig. Sybilla Nikolow, "Gesellschaft und Wirtschaft. An Atlas in Pictorial Statistics produced by the Viennese Museum of Society and Economy in 1930", Institute for Science and Technology Studies, University of Bielefeld, Germany

only in relation to economic growth and progress – understood as an increased productivity and export-import-activity. Adapting the pictorial graphics of Arntz and Neurath, Creischer and Siekmann made a contemporary version of their Atlas to visualise the complexity of disjunctures of different global "scapes", in a simple manner that gives the viewer a more "realistic" impression of the dimensions of people and things that are otherwise hidden in numbers.

Creischer and Siekmann's case study represents a research on coltan moving through different, non-systematic stages and is exploring changes in artistic and social imaginaries related to the privatization and corporatisation of public space, especially since the early 1990s. This form of pictorial statistics, which has been the international standard model of the encyclopedia of unified science, visually explains the meta-relationships between industry, major corporations and "hot" topics and matters; the ecology of water, genetics and copyright, rare materials like tantalum, and others used in the media, software, medical industries. The work can be widely interpreted and combines different styles of representation that they use to display and compare social, political, and cultural aspects around the issue of coltan.

In Europe, researchers like Arntz and Neurath, as well as other socialist artists' groups like the Cologne Progressives (Franz Wilhelm Seiwert, Max Hoelz, among others), through the invention of *Atlas*, tried to shift the interpretation of what "progress" was supposed to mean – compared to the standards of socialism and Marxism, seeing themselves rather as a continuation of the project of enlightenment within industrialisation. To think of it in such a manner, the coltan issue as represented in the Atlas really raises a set of questions to each viewer: How can we understand the interwoven elements of the political and economic world in all their complexity? Does it suffice to simply speak of a globalised "flow"? And would this also already imply a concept like "connectivity"?

Monopolartige Produktionen

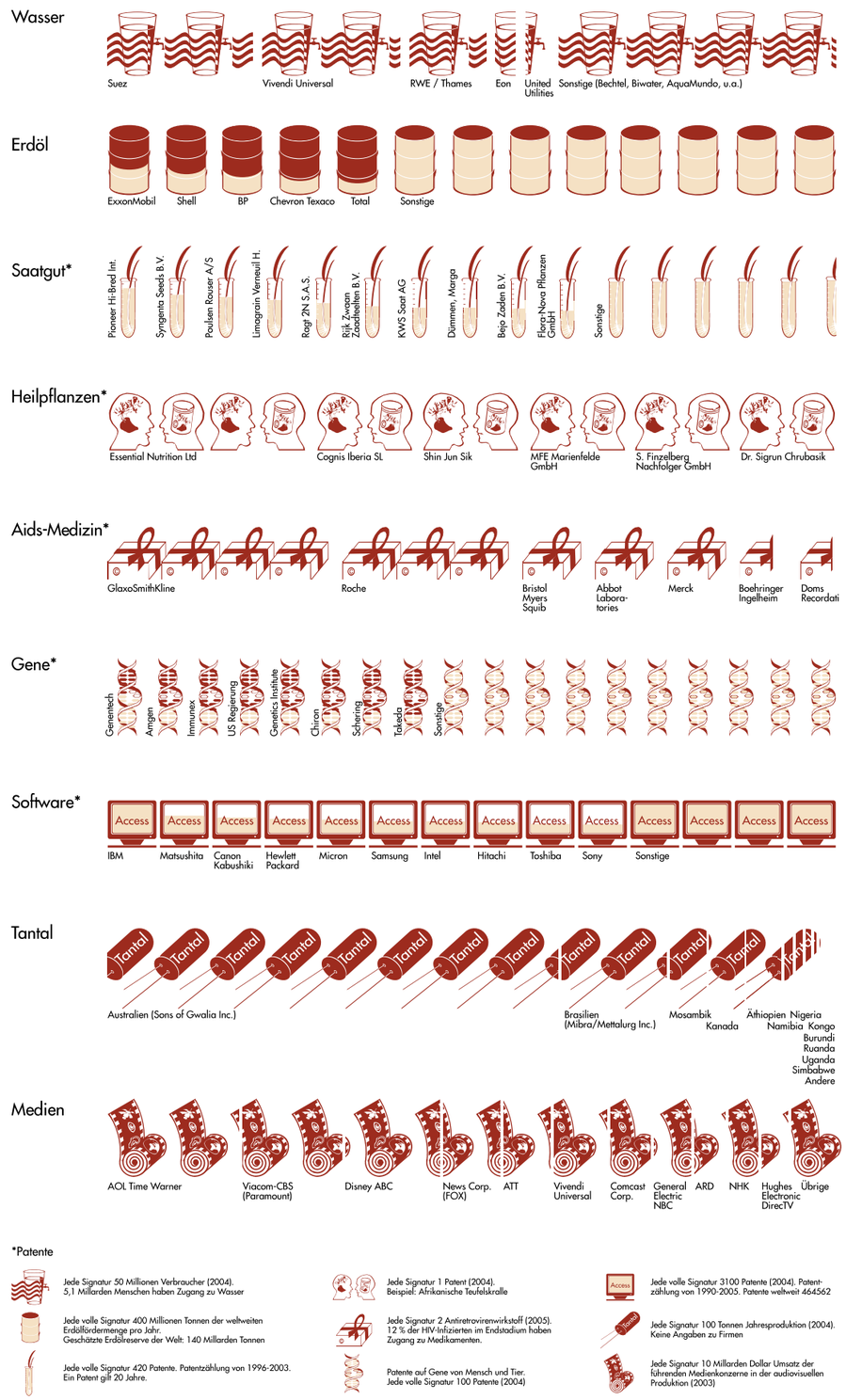
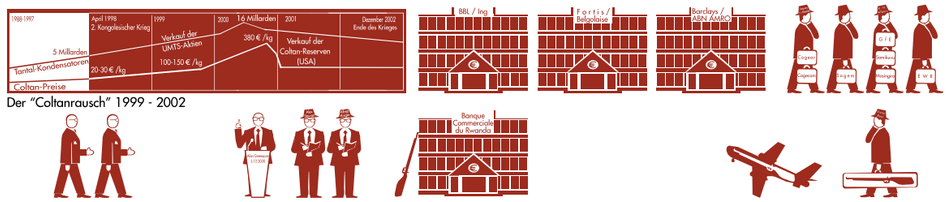


Fig. 38 Alice Creischer and Andreas Siekmann, *Monopoly-like Productions*, 2004

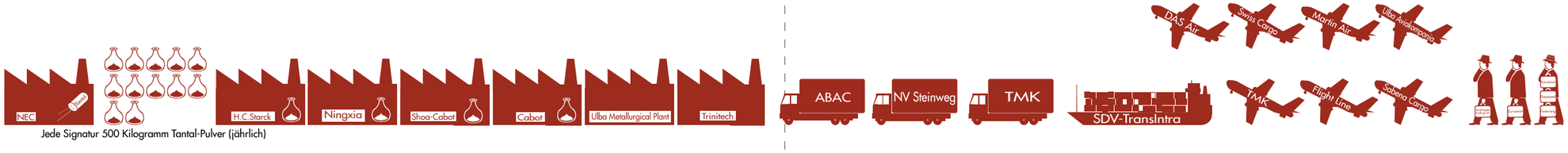
Der Fall Coltan *

Jede Figur 10 000 Soldaten (Rebellenzahlen geschätzt)

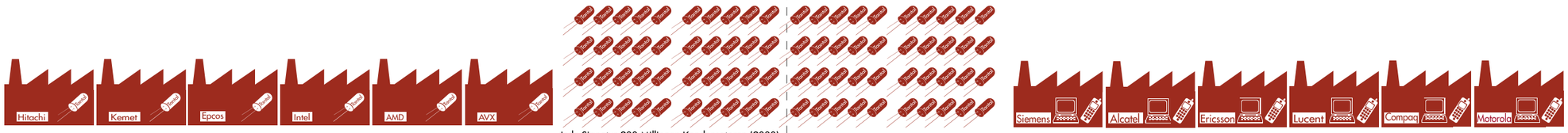
Jede Signatur 30 Tonnen Coltan (2002)



Der "Coltanrausch" 1999 - 2002



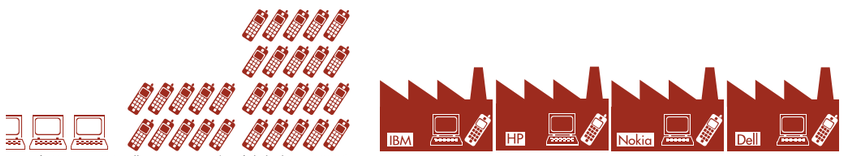
Jede Signatur 500 Kilogramm Tantal-Pulver (jährlich)



Jede Signatur 200 Millionen Kondensatoren (2000)

Jede Figur 200 000 Flüchtlinge (2002)

Jede Figur 50 Millionen Verbraucher (2003)



Jede Signatur 20 Millonen Laptops / Mobiltelephone (2003)

Jede Signatur 200 000 Tote

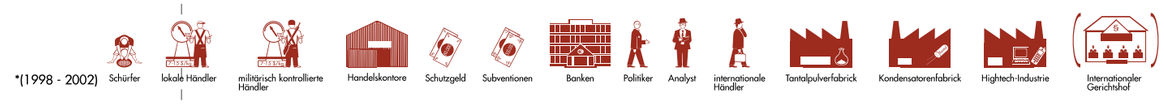


Fig. 39 Alice Creischer and Andreas Siekmann, *The Coltan Case*, 2004

The coltan case reveals facts about invisible relationships in a globalising world, which tend to be covered up by the advertising visuality of immaculate images of technology that also influence the logic of statistic representation today.[243] "Get Active", "Live Simply", "Share you World", "Flaunt Your Style" "Play Hard" – all these catchy phrases in advertising simply cover up the depth and operate on a specific imaginary surface. The political entanglement of coltan, only one of many components necessary for the functioning of mobile phones, suggests that connectivity is not simple at all, even though it has started to sound like a mere banality.

Kosovo is in Monaco

In geopolitical areas where mobile telephony is a relatively new industry, connectivity is formulated as a result of negotiations on influence structures in local politics as well as in transnational enterprises. A representative example of a disjuncture of the location of power and its representation resulting from this novel situation is the case of Kosovo.[244]

While the Congo is involved in processes of economic and political globalization through material resources for the production of high-tech, the Kosovo has become interesting for related industries on the level of infrastructure. Although it might sound odd, from the viewpoint of telecommunication geopolitics, Kosovo is not primarily a contested province in Serbia, but is rather to be described as a part of Monaco. That means that in this sense Kosovo is connected to worldwide communication networks via the country code 0377, which is also Monaco's number, even though, after some political conflicts, it now

[243] The details can be found in the IPIS report (Jan. 2002)
[244] The province is the subject of a long-running political and territorial dispute between the Serbian (and previously, the Yugoslavian) government and Kosovo's Albanian population. Although *de jure* a part of Serbia, it has been administered by the United Nations since the end of the Kosovo War in 1999. Kosovo is governed by the UN Interim Administrative Mission in Kosovo (UNMIK) and the locally elected Provisional Institutions of Self-Government.
(http://en.wikipedia.org/wiki/Kosovo)

officially belongs to Serbia. In the everyday reality of networks this meant that all calls from and to mobile phones both within and outside of Kosovo had to be connected through Monaco. This strange situation arose through a decision by the UNMIK (United Nations Mission in Kosovo)[245] in the course of Kosovo's "reconstruction" process. The decision implied to bring in Alcatel (a French telecommunication company) to set up Vala900 (which is a sub-company of Monaco Telecom) for the mobile telephone infrastructure in Kosovo in 1999.[246] The use of the Monaco code was part of a package solution offered by Alcatel. Thus, because of this treaty, the mobile phone users in Kosovo, wanting to communicate locally, are still forced to make international calls – re-routed via Monaco. This means that communications in Kosovo are effectively under the control of Monaco (the Monaco Telecom) in terms of the admitted numbers of phone connections, phone cards to be issued, and the development of the industry there at present and in future times.

Connectivity, as a decisive geopolitical paradigm, is in fact only realised after being negotiated in global political conflicts and fights for supremacy, which reflects the fundamental discord between economy, culture, and politics today. According to the United Nations, the most important criteria for the distribution of international country codes lie in the recognition process by the International Telecommunication Union (ITU), or the UN. These criteria indirectly cooperate to allow the expansion of transnational corporations to take advantage of chaotic political situations, forming an all-important element of the development of late capitalism. Roaming technologies guarantee the continuation of communication to, from, and within Kosovo, but they take on the familiar shape of "technoscapes" (Appadurai) within the new global economic structure. Regarding mobile telecommunication, people in Monaco are as close to each other as to people in Kosovo. The

[245] It is interesting to be mentioned that Kosovo was the first city in Serbia to have the Internet link up, because of its occupation by the UN.
[246] A Serbian mobile network called Mobtel operates irregularly and only in Pristina, the capital of Serbian Kosovo. There was another option to bring Deutsche Telekom instead of Alcatel, which was strongly supported by PTK (Kosovo's local public post and telecommunication company) and made a better offer than Alcatel's in a long term, however political consequences did not go that direction with the unclear negotiations.

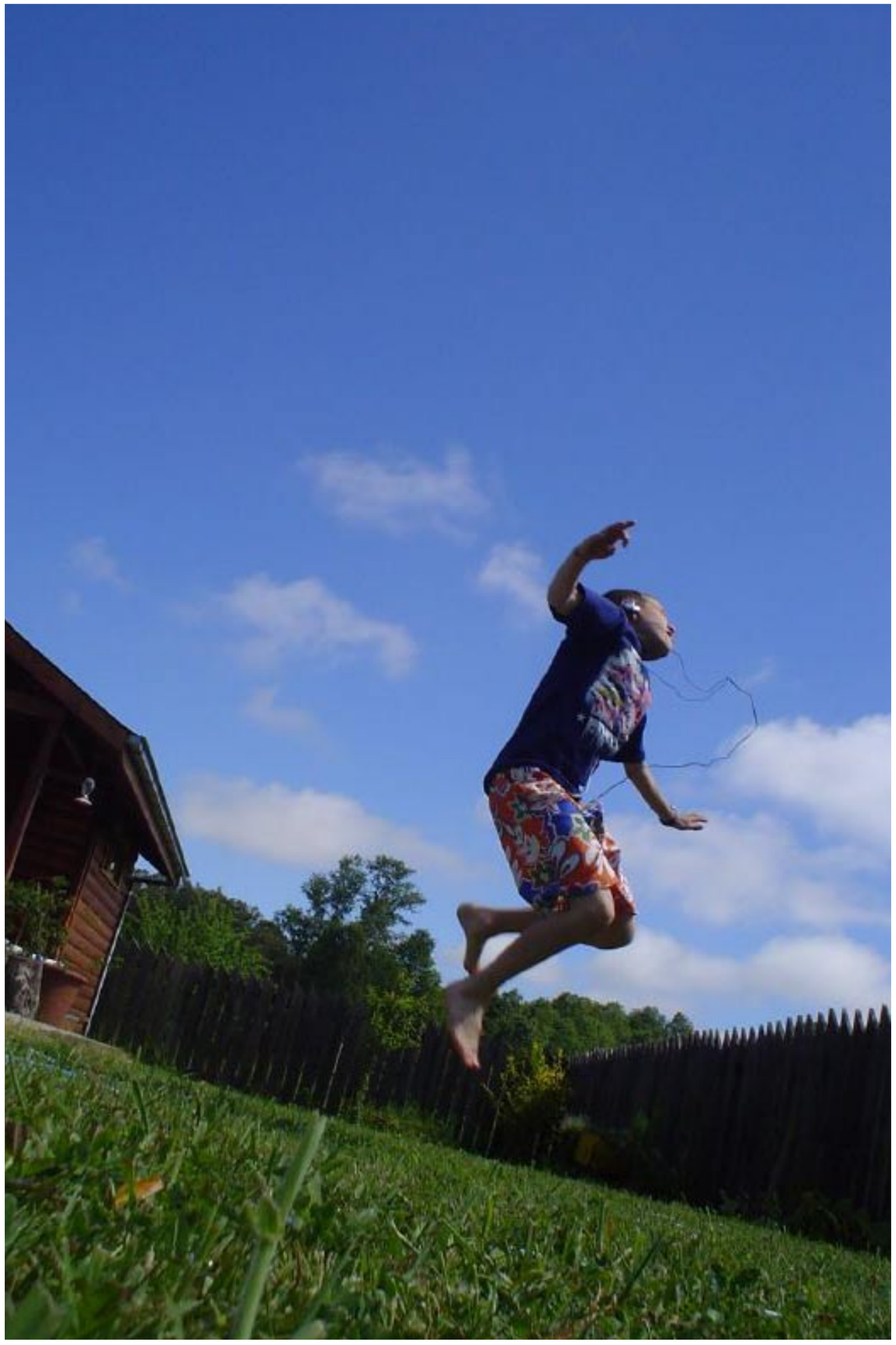
Kosovo is thus partly integrated into the economy of Monaco. Here again, it becomes apparent that the space of mobile telecommunication is not simply produced through "connectivity". As coltan in Congo was an example of how the old colonial structures persist and dictate global economic relations, the Kosovo is a representative example of geopolitical and transnational capitalism in the digital mobile network era. These are only two examples among many worldwide phenomena of mobile communication. The American artist Lisa Parks performed a research on issues of satellite-based and wireless communication in Slovenia and Croatia.[247] There are and will be many more inter-layered relations in daily life.

How to deal with the critical outcome of such an analysis of invisible connections? The digital networks are providing oceans of information, but although Oscar Wilde said that the true secret is not in the invisible, but in the visible, we need to discern the mechanisms of both visibility and invisibility within the system: what is to be seen and heard and what is not – and why. In the digital information era, "the meaningful is clearly marked by its fluidity." (Nyíri)[248] The comparatively easy access to information circulated at an increasing speed rate, however, implies the danger that researchers might become arrogant – to feel like we "already know".

What do words like "flow" and "seamlessness" actually refer to? Are they more than metaphorical elements of an administrative ideology of success? What flows, to what degree? What happens to the seams after their erasure? Is it simply the idealistic or positivist description of a technological system of connectivity? Is it not yet time to frame the fragmented scenes created by mobile telephony in a horizon of expectations and imaginaries? Accessibility creates new forms of control and power relations. Even so, is the mobile phone, as an apparatus, still able to create new and different kinds of access in the sense of an alternative social organisation? As Barry has pointed out, it is important to

[247] See "Postwar Footprints: Satellite and Wireless Stories in Slovenia and Croatia", *B-Zone: Becoming Europe and Beyond*, ed. Anselm Franke, Berlin: KW Institute for Contemporary Art, 2006.
[248] Kristóf Nyíri, http://hhobel.phl.univie.ac.at/mii/mii/node61.html,6/20/04

distinguish between the idealised image of global connectivity as an imaginary and a global technoscape that means that only certain places and practices are "connected", while many others are excluded.



ATLANTIC VIDEO

D.3 Is the Mobile Phone a "Territorial Machine"?

After considering the political, economical, and technological gaps between actual and imaginary implied by mobile telephony, one question quite naturally arises: more than the question, what this device actually *is*, the first question to ask is what it *produces*, and *how*. As can be observed in the history of media studies, ontological questions about the "nature" of media technologies are based on a series of problematic assumptions exerting a prescriptive definition of a "right" kind of social uses and behaviours. But aside from the ideological character of such statements, it can be argued that technologies like mobile telephony are still in a process of differentiation. Especially in a case such as this, it proves difficult to distinguish between the technically specific "machine" and the various possible uses it contains or implies.

The mobile phone started out as a communication device, like most other communication technologies, in the military industries; but in its civilian version, the gradual development of its attached functions seems rather arbitrary – starting with SMS derived from previous pager systems, both still and video camera functions, the recording of sound, music and video players, television and radio, data storage, GPS, Bluetooth, and other uses, like that of a torch… it has become impossible to understand the mobile phone by thinking about its isolated use as a telephone only. In what the industry describes as a "convergence" of different media products into one portable device (which has not happened yet on a wider social level), the so-called "cell phone" is transforming into something else entirely.

Previous generations of "mobile products", like the Walkman for instance, can be differentiated from this new product generation in one crucial point: they were exclusively designed for local users – single or multiple persons, what remained was the isolated, local

character of the media use these products offered. A first step into a new direction was the inclusion of a built-in transistor FM radio, a "progress" pointing out another basic property of the first-generation products: their mode of operation was unidirectional – users were consumers who could only passively operate with exchangeable, pre-formatted data carriers (cassettes, CDs). If the generation of products that are currently being developed goes into the direction that many forecasts predict, the passive mode will actually not be turned into an active one – which would certainly be the way in which the advertising industry would argue.

The activities that are now involved in the handling of the device are receiving a new twist in that they are emphasising and enhancing the consumption character of media use by starting to connect to the economy and to the socio-political, capitalist space of the Internet. Browsing functions have already been available for several years, but attempts to broaden and accelerate data transmission (like the UMTS standard) are only operative in some areas, whereas others still work with a data throughput that keeps the consumption of music or video files a rather painstaking experience. This "pioneering" stage of the development allows at least to observe that mobile device producing industries are refining and standardizing the ergonomics of "data navigation" (Apple Macintosh's "click wheel") for an intensified convergence with the "real" navigation that is enabled through GPS hardware and applications. As was the case with the reduction of buttons for the operation of the Walkman, cell phone producers are trying to simplify and unify the hundreds of different functions a regular device possesses as much as possible. The user interfaces are set to work on screens of varying sizes, which shift between the "paradigm" sizes of the smallest possible display known from early mobile phones, to the bigger screens derived from desktop computers, used in PDAs featuring basic office applications.

The experience of learning how to handle the navigation is actually a quite crucial one. Its simplicity or complexity can have a decisive influence on generational conflicts. Any

long-term user of a certain mobile phone or mp3 player will confirm that getting used to the navigation of these everyday products has a correlate in a corporeal imaginary that gives users the more or less vivid imagination of moving (actually navigating) through a space containing events and data they are expecting to be "there", waiting to be consumed. Much more than the rather complicated keyboards of the typewriter or of the desktop computer, interface structures like that of a mobile phone (or the iPod) become habitual patterns in the minds of their frequent users. This becomes evident as a restrained mode of operating that is often associated with the philosophy of "digital" thinking.

The aforementioned connection to communication channels – through mobile telephony or the Internet – is, in itself, not fundamentally new – but it can be called "mentally" new: the simplicity of a click-by-click process of interactive decisions can even become "dangerous", if one considers that each click corresponds to an "actual" movement on the bank account of the user, and on other accounts in the worldwide money system where users incessantly leave their traces and make consumption-oriented yes-or-no decisions. With its prevailing image of being a "private" medium – with a high degree of identificatory potential – the mobile phone as a structural preset seems to facilitate consumer decisions, since everything that regulates communications and data and money streams is operated via the same miniaturised keyboard. The clutter of different products carried by many people around now has become a popular "pathos formula" – as depicted in the introductory image spread on the "What's in my bag?" fashion on the net – is almost directly suggestive of further steps of simplification, unification, integration – thus guiding mobile product consumers from generation to generation. The "convergence" represents almost no technological problems anymore – the few remaining ones are largely political, like bandwith, satellite licenses, etc., but all-in-one products still seem to be risky investments for the industry that profits considerably from the logic of "switching" (to another norm or product series) and product upgrade.

Extended to the concept of "mobile privatisation"[249] that was proposed by Raymond Williams, Timo Kopomaa, a Finnish urban researcher has stated that mobile phones are gadgets that transform urban space into what he calls "new living rooms".[250] Mobile telephony is often considered an extension of physical, private space or as a means of privatising public space, but this view seems exaggerated. For some people who carry all their data stored in their mobile phone, it may function as a kind of mobile home, or as a mobile office. Still, there is a fundamental difference between privacy in public space and privacy at home that must be taken into account. If a person listens to his or her favourite music, does it really perform more than a subjective gesture of appropriation, does it actually make a space his or her own? Or, talking in formerly unlikely surroundings on the mobile phone, does answering an external call automatically "open up" a private space? The impression might arise on hearing a total stranger talking to you on the phone, but if there is a space emerging at all, it is not the same as the private space seen from the speaker's point of view.

The "privatisation of space" does sound like a very distanced observation, which is why caution is advisable when facing metaphorical descriptions like these. Different notions of "privatisation" need to be distinguished – privatisation as a subjective strategy of appropriation and empowerment, or privatisation in the sense of a capitalisation of (formerly) public matters. The mobile phone as a complex, miniaturised, portable set of connection and disconnection tools and mechanisms is one such place in which both definitions of privacy converge – it can truly be considered as a nodal point between subjective economies (of the self and the other, of formal or qualitative judgments) and "objective" economies of the market or of the commodified exchange of immaterial and

.[249] Raymond Williams, *Second Generation*, London: Chatto & Windus,1964. Anticipating privatisation in social conditions, the car serves as an example of geographical mobility in private space.
[250] Timo Kopomaa, The City in Your Pocket. Birth of the Mobile Information Society, Gaudeamus Kirja / Oy Yliopistokustannus University Press, 2000.

material goods between social beings, resulting in diverse degrees or new definitions of ownership.

The British sociologist Michael Bull interprets the idea of a "mobile privatisation" through the mobile media from a more political subject perspective. Taking into account the term of "users" famously theorised by the French historian Michel de Certeau in his *The Practice of Everyday Life*, Bull proposes that the meaning of the portable gadgets is today understood as a re-appropriation of space, as an oppositional act against modernised social systems. In the mid-1980's, de Certeau had claimed to work with the notion of "users" instead of that of "consumers", as he saw a tendency to interpret the notion of "consumers" in a passive sense – as a position imposed by the social system. He held that acts of everyday life create and alter new meanings through the procedures of use. Following his notion of "users", Bull describes the use of portable devices as reflecting repressed modernity and functioning as a flexible social barrier in environments yet uncontrolled, simultaneously altering the experience of the everyday journey through one's own, individualised soundtrack.[251] What he describes in the context of the Walkman and its product heritage, also applies to a significant degree to the use of mobile phones: they, too, muffle surrounding sounds to focus on the other voice as a distinct sound source and to exchange omnipresent noise for sounds corresponding to personal taste and necessity, and help to "reappropriate space".[252]

Although Bull refers only to portable audio, his insight can be extended to the use of mobile telephones, since they are today, with the full implementation of optional Walkman functionalities,[253] working as perceptual bifurcations – where one has to decide to either

[251] Ibid. Bull, "The Seduction of Sound in Consumer Culture. Investigating Walkman desires", in Journal of Consumer Culture, vol. 2 (1), 2002, pp. 81–101.
[252] Hosokawa 1984, op. cit., p. 172; Michael Bull, Sounding Out the City. Personal Stereos and the Management of Everyday Life, Oxford / New York: Berg, 2000, p. 55.
[253] Sony Ericsson W800, the first "Walkman"-branded mobile phone, which was a big success. The Walkman mobile phone was sold more than three million times as of 2005; in February 2006, the W950 is already the sixth Walkman phones. http://www.3g.co.uk/PR/Feb2006/2621.htm

open oneself up to remote "other" spaces via telephony or to dive off into subjectively designed inner spaces that produce the often quoted "cocoon" effect of acoustic isolation. Combined products like Motorola iPod phones, the Nokia N series, and others, hardly leave any substantial difference between the individual functions. In this sense, the use of the "enhanced" mobile telephones to permanently regulate and manage one's social and perceptual environment can be understood as an act of resistance or as an attempt to acknowledge alternatives against the lifestyles formulated by the cultural industries and administrative aesthetics in modernity.

If one observes phenomena around mobile telephony in the cultural context of Japan, Kenichi Fujimoto, a Japanese sociologist, contextualises the significance of the mobile telephones in relation to a general decline in significance of social spaces. Especially focusing on youth lifestyles in Japan, he counters that mobile telephony functions to produce physical, virtual or imaginary territories. This argument is fortified by recent developments even in the hardware of mobile phones: The ring tone, formerly a primary source of acoustic identity and territorial markings, has been expanded into portable "theme songs" that can be continually and repetitively played out over larger loudspeakers, effectively proposing the outline of an acoustic territory. Their proposition is gradually developing the concept of territorial fights as an aesthetic competition, which is, at the same time, conforming to older definitions around the use of "status symbols". Under the decline of institutional or legitimate spaces in society, Fujimoto analyses the strong desire to seek for a substitution for spaces such as schools, offices, and others; according to his view, the mobile phone fulfils these needs. In this sense alone, the mobile phone has been described and understood as a "territory machine" that negotiates and ultimately produces new space for its users.

Both Bull's and Fujimoto's opinions have the same point: that the users initiate a use of technology that is producing sense; but they are expressing it from different angles: Bull's

viewpoint is more anti-authoritarian, Fujimoto's less. In postmodern society, labour has become more immaterial and requires more flexibility to conform to schedules, to the importance of specific locations, the need for permanent quality control and assessment, etc. What is clear here today is that contemporary space is defined by a multiplicity of economic, political, technological, and social conditions that cannot be easily categorised corresponding to classical modernist and postmodernist notions of space.

Both Bull and Fujimoto describe communicative phenomena as the emergence of a new kind of space, but do not further clarify what sort of space this might be. It also seems rather questionable if a new notion of space can be automatically derived from older concepts of "territory". The notion of the "territory machine" (which Fujimoto uses) automatically links to and overlaps with concepts developed by Deleuze and Guattari in the 1980s, and in addition to that, also remotely relates to the notion of the "war machine" as put forward by Deleuze and Guattari. There are occasions when mobile telephony can be powerfully used in specific political contexts, as demonstrated by the recent examples in the Philippines, Korea, and Hungary. How does one think to "make" a territory at the very moment one "makes" a call? What kind of production, which degree of reality are we facing? There are exceptional examples gathered from extreme situations, but such a use does not always apply to ways used in everyday life. The daily use of mobile media more or less retains the character of an on-the-go self-management, a motion turned inwards to the user him/herself, while outward movements of the body and the environment are functionally integrated. How, if the outward performance remains largely immaterial in that it operates primarily on a symbolic level, can it gain validity on a social level? Furthermore, territory as such has to have a relative position in an overall context of relatedness towards others; but there is no such border or even a clear *sense* of border involved in the use of space that is characteristic for mobile telephony.

Moreover, space becomes an open horizon of potential obstacles that have to be circumnavigated using those senses that are not involved in a connection to "elsewhere". It therefore would seem possible to speak of a set of different negotiative practices to mediate between different spaces and levels, as a kind of "context DJing", shifting between territory, place, space, and non-space.

Most definitions of territory require "active interaction", whereas mobile telephony does not force users to get involved in negotiations, or to fight for or against anything. Using mobile media is an "interpassive" act. For users of the cell phone there is only an implied sense of possession, such as it is represented by the concept of territory (*self-own*), as there remains nothing to hold on to for the individual user. It is a very different mode to negotiate the space for the self, to construct subjectivity.

As it is quite dubious to rely here on the framing of territorial concepts for mobile phones, it is also necessary to examine if mobile telephony can really be the material carrier of acts of self-deterritorialization – which would be the other side of the same coin. The act of mobile telephony only temporarily releases desire without distinguishing between different spaces. Many theorists and critics describe how new media are levelling time and place by a mass production of moments and their relying on repeatable experiences. The mobile phone powerfully assembles time and space while one is pursuing one's own way. The anonymity and one-dimensionality of temporary experiences is created and reinforced by cellular types of organization: there is no direction, no going from one point to another, no long-term occupation of any space, but just being accessible in space at any point in time. Carrying a mobile phone in this particular orientational sense may actually mean being integrated into a spatial system. This adherence to a logic of space is related to the ambivalence created by multi-tasking in the mobile telephones in that its type of reference is also spatial, overlapping and superimposing layers of passive/active relations in space/time, much as it is the particular function of the conjunction "and" in Deleuze and Guattari (as

well as of "plurality" in de Certeau) and their concept of nomadology. Their concept of nomadic autonomy offers many points of departure for thinking about the "ubiquity of being" in mobile telephony. Deleuze and Guattari describe "a path [as] always [something] between two points, but the in-between has taken on all the consistency and enjoys both an autonomy and a direction of its own. The life of the nomad is the intermezzo." [254] That is, the media user equipped with an operational mobile phone is always already located a sort of space in which he/she partakes through "interpassive" acts. Can "interpassity" then be imagined as a new "nomadic" form of society? Can we consider that mobile network communication could be a new emerging form of society? The nomadic (not necessarily the nomads) forms a "smooth space", growing in all directions, and the nomadoid user is inhabiting them all.[255] In this space, "one is never without the other: a double de-territorialisation"[256] So, is the nomadic not about de-territorializing the self instead of space? It is not about external relations, but nor is about internal relations: that is, it is a mode of the self.

[254] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, transl. and foreword by Brian Massumi, Minneapolis: University of Minnesota Press, 1987, p. 380.
[255] Ibid., p. 382.
[256] Ibid., p. 392.

Transmitter

By Jonas Brun
(Translation by Jonas Brun and Ulrika Revenäs Strollo)

Here is the meadow now, turned yellow, moist
slowly dripping. A grey sky
above the girders of the transmitting aerial. Metal
feelers
and conducting wires. A magnetic surge
in all coils.

*

At the very back a sound, it climbs
along the aerial, a slight hum, a slow buzz.
A sound right before it turns unhearable, before
the sound stops being av sound.

*

Soundmakers in the fog, signals
over distance, sirens off and on.

Messages are collected
to be transmitted.

*

So natural the way the antenna
listens, like simple straight roads
stretched from the top of the aerial and out across
the meadows. A way to turn towards the world
and yet to be kept secret.

*

Smal sparks are
all conversations, singing where
they cross, vibrating like drops of water
hanging on an edge.

Silicon white, sparkling grains
to squeeze between the teeth.

*

Your voice is a place like every
sound is a place and somewhere
here collected and concentrated
into a wavelenght and into a name.

*

In all the mumble
something is squeezed, like the days and the names
squeezes everyone. Turning towards and
turning away.

It´s a sound going through everyone, it ain´t
just for you.

*

Signals going through the nights, transmission
between aerials, a certian wavelenght for
a certain antenna.

Transmitter, transmission, swarms
of voices.

Sändare

Av Jonas Brun

Ängen ligger här, gulnad nu, fukt
som sakta droppar. En grå himmel
ovanför sändarmastens balkar. Metallspröt
och ledartråd. Ett magnetiskt brus
i alla spolar.

*

Längst inne här finns ett ljud, det klättrar
längs masten, ett svagt surr, ett sakta inande.
Ett ljud strax innan det slutar höras, innan
ljudet slutar vara ljud.

*

Ljudmakare i dimman, signaler
över avstånd, sirener av och på.

Meddelanden insamlas
för att sändas vidare.

*

En självklarhet i antennens
lyssnande, som raka enkla vägar
uppspända från masttoppen och ut över
ängarna. Ett sätt att vändas mot världen
och ändå hållas hemlig.

*

Små gnistor
är alla samtal, det sjunger där
de korsas, vibrerar som vattendroppar
i en kant.

Gnistrande och kiselvita korn
att pressa in mellan tänderna.

*

Din röst är en plats som varje
ljud är en plats och någonstans
här finns den insamlad och anrikad
till en vågländ och ett namn.

*

I allt mummel
finns något som pressar samman, som dagarna och
namnen
pressar alla samman. Som vänder sig till och vänder
sig bort.

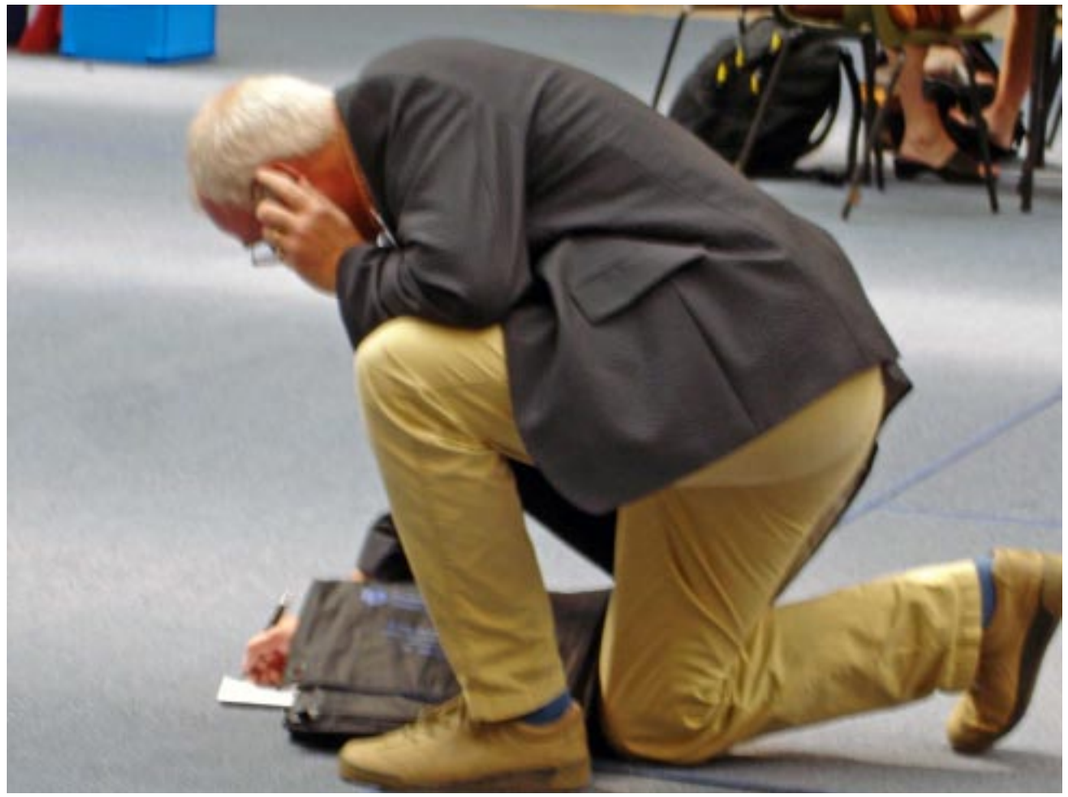
Det ljuder genom alla, det är inte
bara för dig.

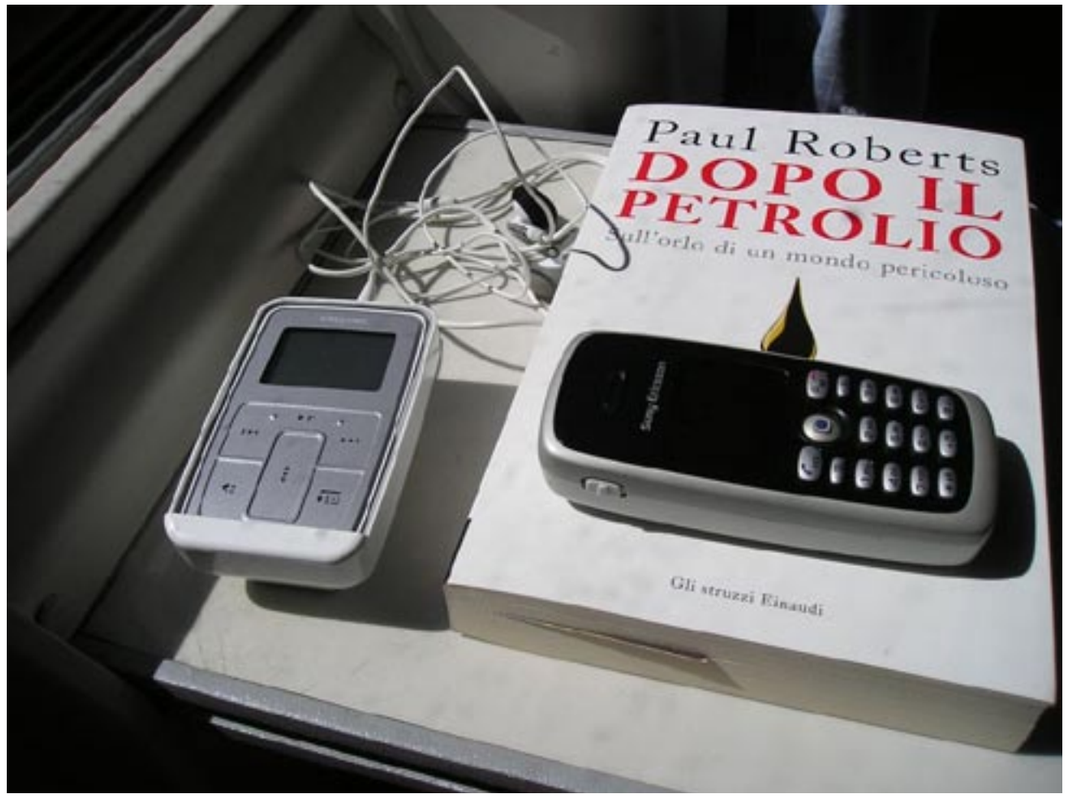
*

Signaler genom nätterna, överföring
mellan master, en viss våglängd för
en viss antenn.

Sändare, utsändning, svärmar
av röster.

E. Multitasking




Paul Roberts
DOPO IL PETROLIO
Sull'orlo di un mondo pericoloso
Gli struzzi Einaudi

E. New Subjectivities in a Mobile Epistemology: Different Modes of Self Through Mobile Telephony

E.1 Politics of Sound / "Injured Listening"

In chapter D, I discussed why mobile telephony requires to be analysed as a trigger for new concepts of the self (subjectivities), rather than new concepts of spatiality or territoriality. This also provided an opportunity to understand the use of mobile phones as an act of "interpassivity", a conclusion drawn from the pre-installed consumer structure of this device – and the prospect that this functionality to navigate a capitalist space will still be strengthened in the near future. It is and remains an objective of this study to differentiate views on exactly this question – of how power relations between network technologies, political and economic systems, and the users are shifting – I also mentioned possibilities of a "creative abuse" in the levelling of communicative hierarchies and in the conquest of political space and empowerment – something that seemingly contradicts the "interpassive" character. But the diagnosis of "interpassivity" should not be confused with a theory that is giving users a mere victim status within some almighty, overpowering system. The introduction of the self into the phantasmatic spaces of society and the "lifeworld" is much more complex and ambivalent than such a simplistic dichotomy of "those in power" and "those without". The role that technology plays in contemporary procedures and strategies of subjectivation has been widely acknowledged; here, I want to focus on the relative position of a tool for mobile communication that places its user (and actually, as could be seen, also its non-user) within the perceptual and economic hierarchy, which is also one of the senses. It has already been proposed how much of the success of mobile telephony might

be due to its bypassing of the visual, the central sense in the tradition of enlightenment and reason, favouring instead audio perceptions. The analysis of the alternative auditive embodiment through mobile devices offers a starting point to consider the development of subjectivity, as far as it is concerned by "external," apparative technologies (one "internal" technology being psychology). Their mobility prefigures a processual complexity for subjectivation that is certainly not "new" in itself, but is significantly changing the imagination and the imaginary of the self. It allows to discuss the mobile phone as a "technology of self" – as opposed to Foucault's "technologies of *the* self"– since it places more emphasis on the technological side of the formative process.

Mobile telephones and portable audio devices are facilitating an observable contemporary shift to the promotion of a "culture of listening":[257] they are creating new negotiations between sound and noise – through the further culturalisation, commodification, or, to put it more neutrally, the opening-up of categories of what is considered "noise" – as well as new attitudes to listening informed by functional structures of multi-tasking, by techniques of mobile and auditive navigation, and what can be called a politics of the soundscape. What makes these new noise/sound relations actually meaningful to us? How do such conditions bring about an epistemological difference? How does this difference affect the ways of articulating the self? And, how are we able to understand such a mode of the self in relation to digital mobile communication and non-communication?

In this chapter, which sets out to reflect on how contemporary sound is constituted to become a moveable (oftentimes not re-moveable) and manageable element of an ever more complex sensorial life, I would like to argue from the notion of an "injured listening" enhanced by gadgets. Trying also to consider the political dimension of sound/noise relations and their technological implementation in society, I aim to create a bridge between

[257] An expression used, among others, by Emily Thompson, in: "The Soundscape Of Modernity: Architectural Acoustics And The Culture Of Listening In America, 1900-1933".

"what we hear" and "how we are". In other words, I am asking how contemporary sound/noise actually constitutes a "we": how, in this field of mobile communication, representations change into ideologies of the subject and the group.

The Mobility of Sound: The Culture of the Copy, and After

As a manner of speaking about contemporary culture, it has become very commonplace to say that digital portable communication technologies have brought a different attitude towards concepts of copy (and original), particularly in light of recent "cultural technologies" of downloading, Bluetoothing, MMSing, and so forth. Arguments around concepts of original and copy, in turn, have become quite canonical in art history. In the early 1930s, Walter Benjamin used the notion of the "aura" in order to discuss the modern crisis of the original artwork in the age of mechanical reproduction. Later, the postmodern discourse of critical theory, often taking recourse to Benjamin's writings, has deepened the argument on the concept of originality. With their heavy emphasis on visual metaphors, postmodern theorists were trying to address two tendencies in particular: one being the replacement of public space by architecture (and public art), the other the rapid development of popular culture as visual culture since the 1970s. Talking about "hyper-realism" and the "simulacrum," Jean Baudrillard referred to a pervasive condition of media-dominance and the concept of the "image flood". In many sectors of the art field of the 1980s, these developments were countered by artists taking recourse in "strong" author positions and in production modes of immediacy: painting, performance, video. Only since the early 1990s, a more general influence of computer technologies and digital applications communalizing possibilities of copying, editing, hybridising, and sharing with mass has

helped to re-posit models of authorship and (artistic) subjectivity that tried to seriously consider some of postmodernism's earlier propositions. It could be held that the formerly prevalently theoretical discussion about the notion and the position of "copy" has gained significance through its "realisation" in the mass-individual experience of copying.

In his 1967 essay on "The Death of the Author," Roland Barthes argued, "(t)he birth of the reader must be at the cost of the death of the author", reminding us that art has primarily been introduced to us through reproductions.[258] Barthes' position shifts the focus from the activity of production to that of interpretation. This shift does not remain at the level of the interpretative act but is pushed much further to acts of editing and (re)assembly.

Scanning through contemporary culture, it is widely noticeable that the notion of "copy" is treated differently when applied to digital contents. Digitalised network systems have normalised and customised the production and reproduction of data. The indifference of digital information has helped to transform the concept of quality, making it almost indistinguishable from the descriptive level of quantitative information. The dichotomy of original and copy has, already in postmodernity, but most strongly and significantly in the digital age, found a variety of new combinations, ranging from remake, pastiche, parody, fake, to hybrid and forms of inter-object relations. Yet the notion of the original has remained largely untouched and undifferentiated – except for its varying positional value in rhetorics of immediacy and authenticity. The described change of paradigms subverts form and structure of the concept of copy. That means that the role and value of the copy, already the main aspect in early modernism at the crossroads between original artisan's objects and mass-produced "types", has long been recontextualised through technological development and the formation of networks in relation to economic, institutional and juridical aspects of traditional art. The invention of printing introduced the automatic reproduction of text and also produced notions of the copyright of the author, which differs categorically from the

[258] Roland Barthes, "The Death of the Author".

rights of the artisan. Authenticity was bound to play an important role particularly in economy and social organisation. But the mass of inventions leading to a popularised digital technology created one-click acts of copying, and binary code makes everything reproduceable *ad infinitum* without any recognisable loss of quality. As I discussed in C.5, this technology expands and blurs the distinction between the positions and capacities of "creator", "producer," and "consumer", and confronts us with conceptual limits of the classic notions of authorship, producing different attitudes and concepts regarding contemporary notions of "copy". With the actual procedures of reproduction unreachably hidden inside the "black boxes" of their digital gadgets, a new set of attitudes – of cloning / modifying / adding / disordering / destroying – from which people can choose after copying becomes important, and it is more than an extreme form of "customising" mass-produced consumer goods. It is the very stuff of transformative potentiality that is lacking former ritual access in hands-on acts of "understanding media". It is in this sense the artists group 0100101110101101.org provocatively proposed that "today, the copy is more than the original".[259] Endless "fake" website projects in net art and net cultural circles, which are a modified copies of already existing sites, exactly fit into this pattern of thinking.[260]

Regarding the capitalisation of authenticity, the Japanese philosopher Azuma Hiroki has noted subtle changes in related contemporary phenomena in Japan. He has asserted that "brand hunting" no longer matters for young Japanese people because they consider the aura of originality something to be added or attached by themselves, not by others (Azuma, 2002),[261] which is, in a sense, absurd, but in another sense, a transformation in the

[259] They claim that the copy contains surplus value compared to the original: not just the idea itself and the act of copying, but the implied series of acts after the copy as well.
[260] For example, one project by ®Tmark (1999) presented a counter website of the World Trade Organisation during the G8 meeting in Seattle. They named their site after the General Agreement on Tariffs and Trade (www.gatt.org), exactly copied the official site and changed existing affirmative texts into critical comments. In the same year, 0100101110101101.org also performed their legendary project to copy and open all the sites the on-line exhibition Surface, organized by the web art centre hell.com and allowed limited access. It brought a discussion on authorship, copyright, exchange in the digital net world.
[261] Hiroki Azuma, *Yubinteki fuantachi,* Tokyo: Asahi Bunko, 2002.

interpretation of "originality". This way of thinking leads to the young having much less interest in brands, and having an increased desire to come up with their own cultural assemblage. Observations like this testify about the insignificance of not only the concept of the original, but also of that of the copy. While, on a conceptual level, language is still infused and permeated by metaphors of "original" and "copy", the actual differences have become circumstantial knowledge, and the social groups defining originality seem to become smaller – were it not for the increasingly powerful tendency of "normalisation" and "homogenisation" as initiatives of the computer industries to regain control about what is "original" and what is "good" for consumers. Depending on context and level of rhetoricality, any copy may be transformed into an "original," and vice versa.

As the "culture of copy" is not so much about "quality", there is also no sustainability expected of its creations and products. The new attitudes towards copy phenomena are not easily acceptable within the established economic and social structures of control. From time to time, the notion of the "original" is still used and functions as an "anti-copy" concept even under conditions of media culture. What is significant here is not so much criticising attitudes of self-expression or creativity, but recognising current attitudes as they are.

From the Culture of Copy to the Culture of Sharing

Under the umbrella of the "culture of copy," a culture of sharing is being created, which is furthermore expanded by the increasing portability and integration of digital network technologies such as iPods, mp3 players, and mobile phones. New phenomena that can be observed around the development of these portable technologies have to be considered as part of a culture of sharing, even though it is still based on peer-to-peer connections. To

explain one common example: Around the year 2003, the "iPod jack" was an emerging popular practice among users in middle-class or university towns in the US and in Great Britain, such as Basking Ridge, N.J., U.S.A., Emeryville, CA, or the Campus of Pixar Animation Studios (Apple Computer CEO Steve Jobs' other company), Cambridge (U.K.). "iPod jack" involves approaching another yet unknown iPod user and plugging one's own headphones into the iPod of the other, and vice versa. This can happen during leisure time activities such as jogging or walking, with the surface sense of facilitating a communal sharing of individual music experience. This phenomenon really shows that the boundary between the self and the other is now being shaken up on an everyday level. Music archives in portable stereo devices are, even by contemporary capitalist standards, a quite intimate realm – intimacy being defined as a not individually, but also socially relevant experience. However, "iPod jacking" allows a total stranger to "cross the line" – in a controlled atmosphere. It can even be said that it is an "intercourse" in a symbolic sense – a metaphorical register encouraged by the proximity of all kinds of concepts around reproduction and creativity related in contemporary media. Or, does it even indicate a radically different sense of the self and the other? Compared with levels of "anonymous" circular creations interactively produced under conditions of invisibility and exchangeable identities on the net, "the real" of the body and of physical presence is being worked into a new set of media-related rules.

It might be questioned whether "iPod jack", tapping other individuals' resources as a "sharing" act of exchange in a physical way, can be expanded to a wider public space than that of some small parks in culture-oriented cities. However, the development of wireless radio technology and applications today already enables us to automatically search and share sound or other data files among neighbouring users without such "physical" human interaction – which can be observed in concrete visionary planning such as Bluetooth the

iPod[262], the TunA, which is a software application for mobile wireless devices to share music[263], or Café Sound Life.[264] This sharing phenomenon is certainly an extension of the computer culture of online file sharing, which historically began with Linux. Similar file sharing websites such as Flickr, YouTube, blogs and many others have become very popular as well. In section C., I introduced 0100101110101101.org's concept of "life_sharing" in an autonomous group, but quite similar phenomena are also seen in use on the level of everyday life around wireless and portable gadgets.

"life_sharing," a practice around the mobile phone is also emerging as an performative act in street culture. Connecting the ideas of music sharing and improvised performance, young people use mobile phones for "improvisational rapping", or "spitting" over music played through speakerphones[265] for example in South London. When a group of people jams around a mobile phone, sometimes the participants really get into music, entering into a flow of inspiration and excitement. Then, the music is passed on and shared with people around within a second through Bluetooth. Among these rappers, mobile phones are indispensable both for performing and for producing music: writing lyrics as text messages or recording voice notes on their phones, storing sound files in the mobile phone and listening to them. It can be said that the mobile technology has produced its own musical genre (not counting ringtones): Without the mobile phone, the music described above would not exist. Under the conditions produced around the mobile network devices, a new set of creativity after copying, an act of adding, editing, exchanging and sharing, has

[262] http://www.theregister.co.uk/2002/11/29/a_bluetooth_ipod_and_three/.
[263] TunA has been developed by Arianna Bassoli, Julian Moore and Stefan Agamanolis in Media Lab, Europe. According to their vision, "TunA is a mobile wireless application that allows users to share their music locally through handheld devices. Users can "tune in" to other nearby tunA music players and listen to what someone else is listening to. Developed on iPaqs and connected via 802.11b in an ad-hoc mode, the application displays a list of people using tunA that are in range, gives access to their profile and play list information, and enables synchronized peer-to-peer audio streaming." http://web.media.mit.edu/~stefan/hc/projects/tuna/
Here I should also mention a similar, but earlier device called "Lovegety" in late 1990s Japan.
264 Café Sound Life was developed by Sony Science Computer Laboratories, Paris. See http://www.csl.sony.fr/~atau/cafesoundlife/.
[265] http://www.wired.com/news/culture/0,68265-0.html.

emerged not so much in situations like sitting for a long time somewhere "outside" with a laptop – but actually in the streets, on the move with unknown participants.

Politics of Silence and Economies of Noise

What John Cage described in 1937 is also still true for the inhabitants of contemporary cities: they are always surrounded by sound and noise, from the moment they wake up until they fall asleep – even in their sleep. In various relations to their sound environment (enhancing, editing, opposing, erasing) portable devices are currently producing different attitudes of listening. Some attitudes are intended by the manufacturers of these machines, others are not – in all these uses, the sound listened to is very close to the ears (mobile telephone, headphones), even if combined with other activities that compete for the attention of the user on different perceptual levels. The industrial soundscape has made it useful, if not necessary to develop a different attitude to what was previously perceived as "nothing but noise". It could be considered one of the qualities inherent to most cultures that they try to embrace the living conditions that seem the necessary basis for their survival. At one point, early in the twentieth century, it may have been almost intolerable for some to live with the new noises of steam engines, typewriters, cars, and factories.

One of the major tasks of audio culture studies has been to find an explanation for the acceptance and re-qualification of these noises. One of the earlier ideas has been to declare it art, as in the futurists' manifestos that spoke of an "art of noise". This, of course, being an avant-garde statement that has been altered and transformed over the whole century, through innumerable acts of applying the label of "art" to any sound that seemed to represent something vital for society and the individual, respectively, in this case the machine-like character of all productions. Embracing what seems inevitable was in fact not at

all a natural development: it took decades of "sound politics" within industrialised societies to mediate between new technologies and those who were supposed to live with them and off them, with all the consequences this entails. Artistic contributions over the course of the last century, most prominently those of composers like John Cage, Brian Eno, Alvin Lucier, Max Neuhaus, Pierre Schaeffer, or James Tenney, have at the very least made it sufficiently clear that noise is not only destructive but is a phenomenon that is relative to habitual modes of perception under the transformation of everyday life in different cultures. In this sense, it may suffice to say that the mobile phone is a distinctive cause of perceptual transformation today.

On the other hand, the research that has been done by artists about silence (as the opposite of sound and noise, actually the opposite of all perceptions) has quickly led to the realisation that there is virtually no silence, ever – it can only exist as a concept. The alleged "nothing" of silence is rife with sound, at least that of breathing and of blood circulation and digestion.[266] As soon as there is audio perception, there is also sound, a fact that is even true for so-called "deaf" people[267] The drift in the development of popular listening devices, interactive or not, has been towards entertainment and consumption, so it could be said that what started out as an excess result of industrial production has been changed to sell as a valuable product of its own, in a nexus of industrialization and mediatization. It would be wrong, though, to assume that the state of reflection about hearing and listening very primitively sketched out above would have become a generally accepted reading of an "audio culture". From the position of studies of acoustic culture, it would then be surprising how many are still surprised when their attention is turned to the complexity of their

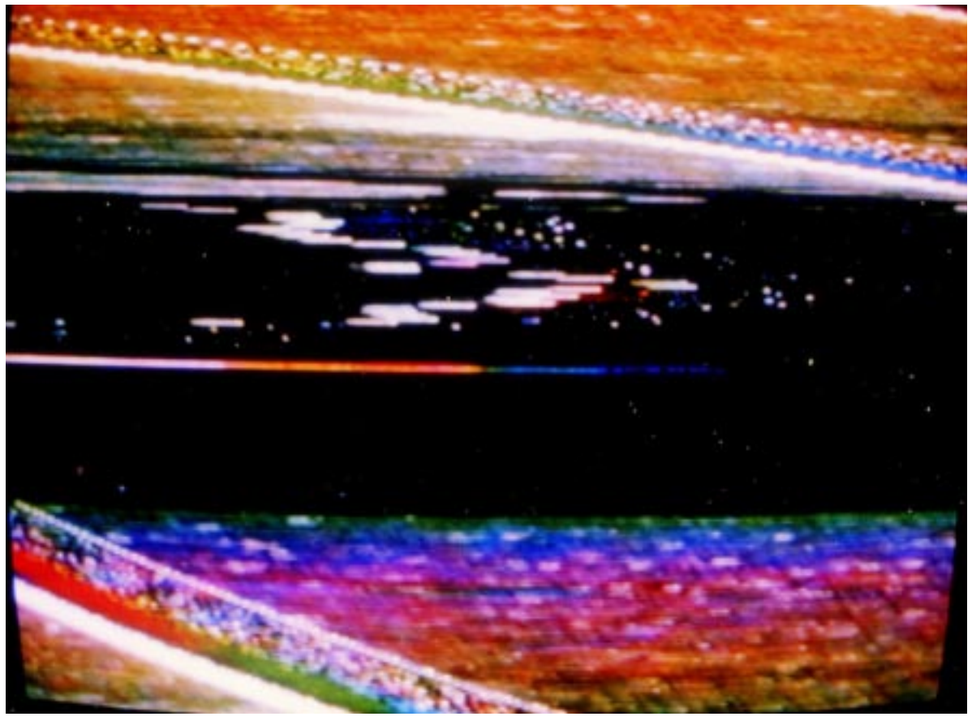
[266] Musical compositions have ranged from Roger Waters's "Music from 'The Body'" (1970) to Matthew Herbert's "Bodily Functions" (2001), a very successful album sampling actual noises of the body as "instruments" and rhythm tracks.
[267] It seems quite ironic that the further development of communication technologies (including the mobile phone) has largely omitted all "adaptations" for listening impaired people, especially considering that Bell's invention was original intended for the deaf. Inventions in that field are only still accessible to wealthier people.

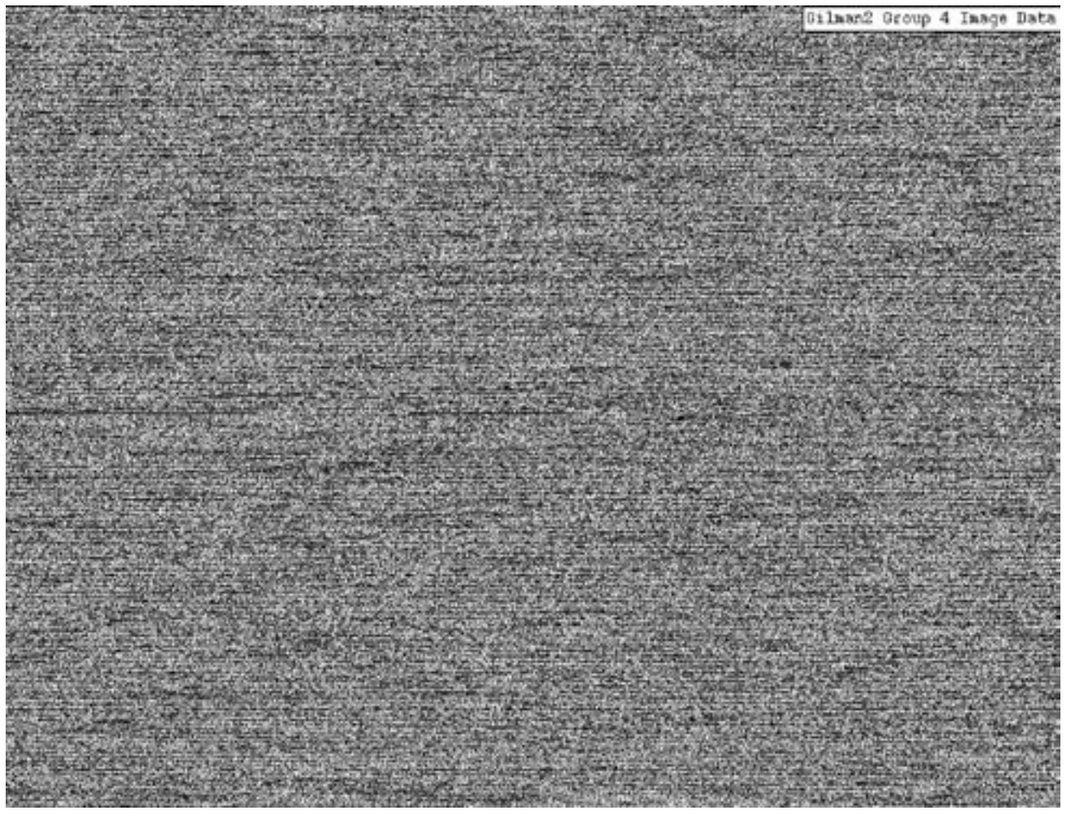
everyday sound environment that is most of the time successfully screened out and often only resurfaces in unconscious states (as phenomena of stress or tension), or in dreams.

With reference to transformed modes of listening, R. Murray Schafer has, as early as the late 1970s, described that contemporary soundscapes have become "alien" and "unnatural," and that it is no longer possible to know what, if anything, is to be listened to.[268] It is true that there are increasing amounts of noise, but also of sound organization (which was Cage's new definition of music) and unclassifiable acoustic information that moves around in everyone's day-by-day environment, a phenomenon that has even been described as an "over-population of sounds"[269]. Ring tones, the audible half of the conversation on the mobile phone, music playing out loud or through headphones: all of this is part of it. We may not always be sufficiently conscious about the sound around us, and pay less attention to the "normality" of sound. What sort of sound do we listen to every day? What we consider normal is almost never normal at all. Are there imaginary gaps between experiencing sound in imagination and in reality? How much are these actually designed and constructed, and to what end? Which sound is being filtered out? And what does this do to contemporary lives, and to the formation of selves?

In his prophetic book *Noise: The Political Economy of Music*, first published in 1977, Jacques Attali asserted the significance to decipher a sound-based form of knowledge, and has described the role of sound in the context of politics and economy in European history.[270] For him, sound culture has been professed by shamanic figures in society who fulfilled a ritual function of negativity within the order of sounds. Attali elaborates how these figures invested with special powers have always been suppressed, the form of their

[268] Schafer 1977, op. cit., p. 71.
[269] Ben Byrne, "The iPod – Development or Digestion?" – http://aliasfrequencies.org/bb/the-ipod-development-or-digestion/.
[270] Jacques Attali, *Noise: The Political Economy of Music.* (orig. 1977), transl. By Brian Massumi, foreword by Fredric Jameson, afterword by Susan McClary, Theory and History of Literature, vol. 16, Minneapolis / London: University of Minnesota Press, 1985.

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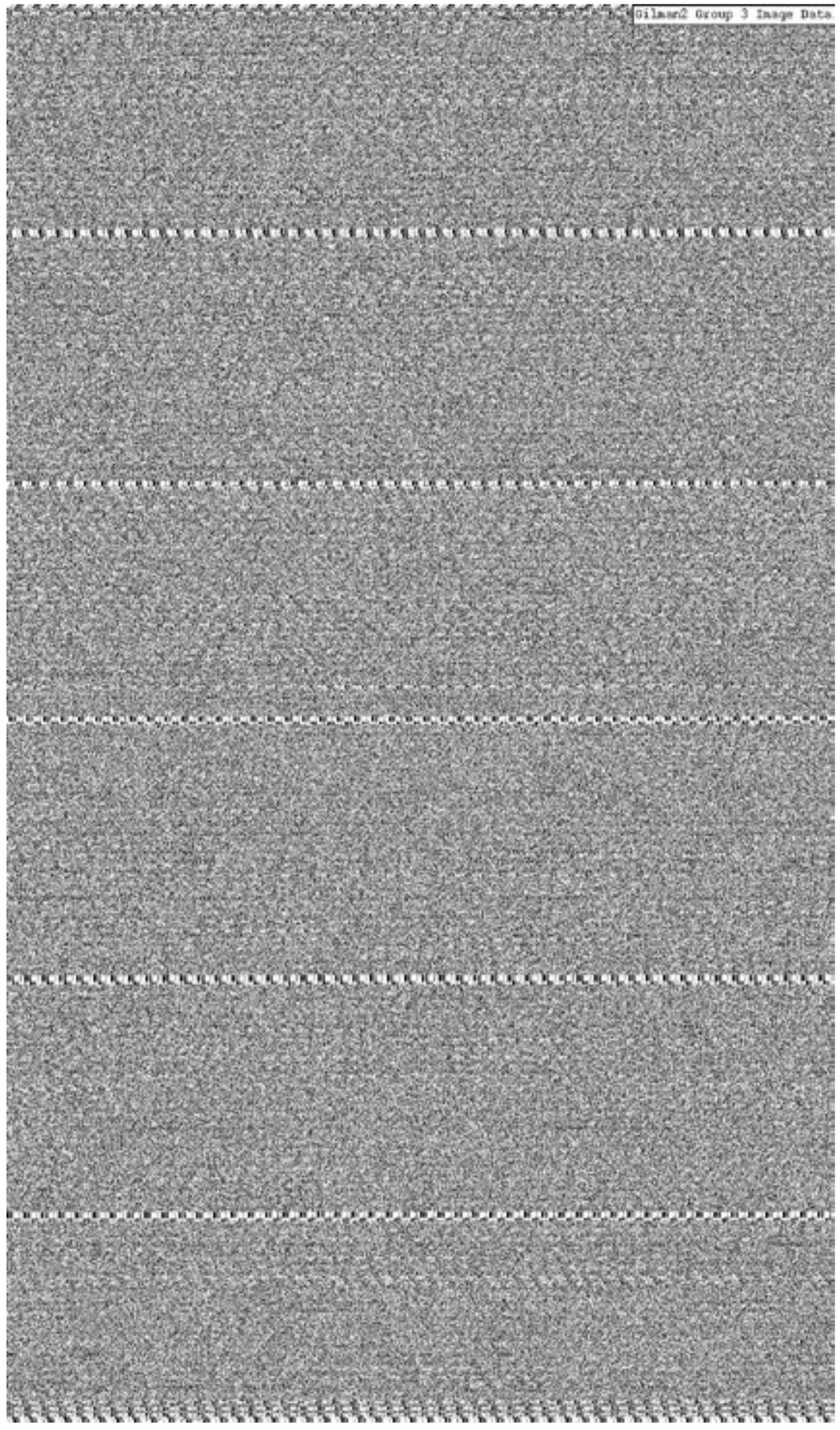
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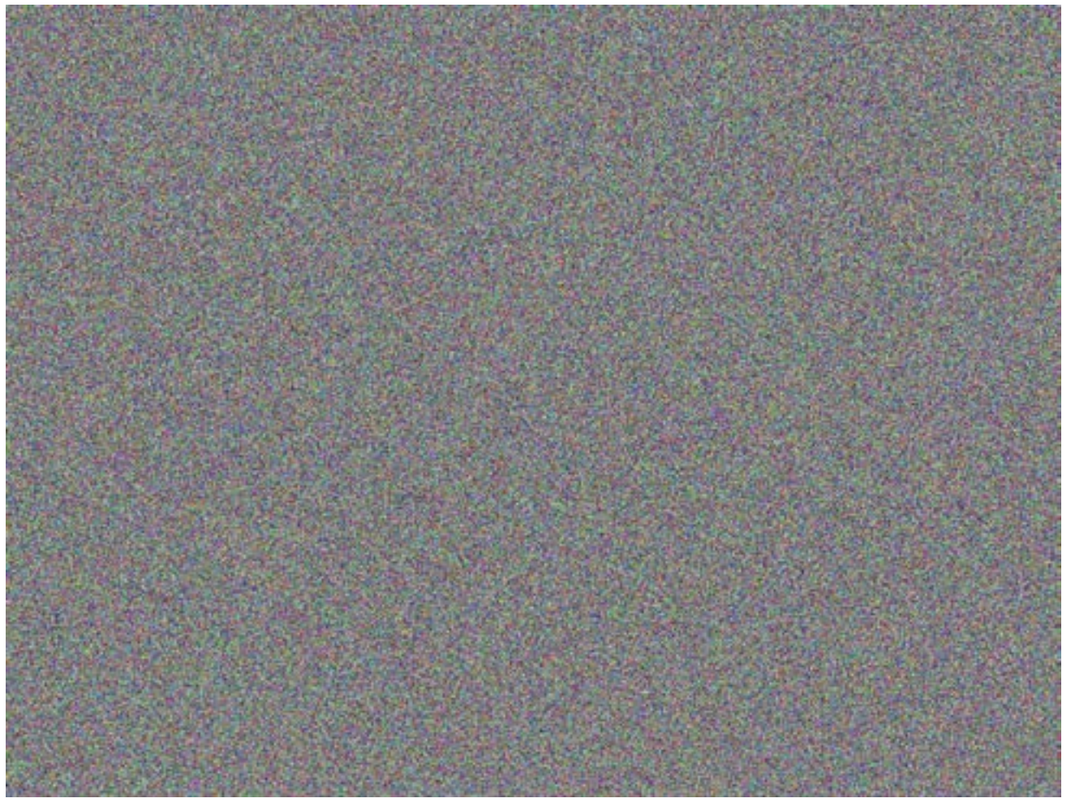
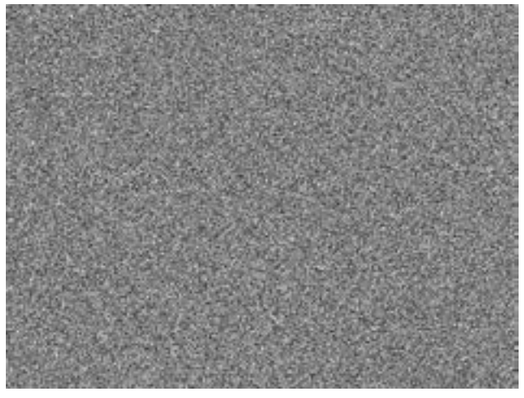
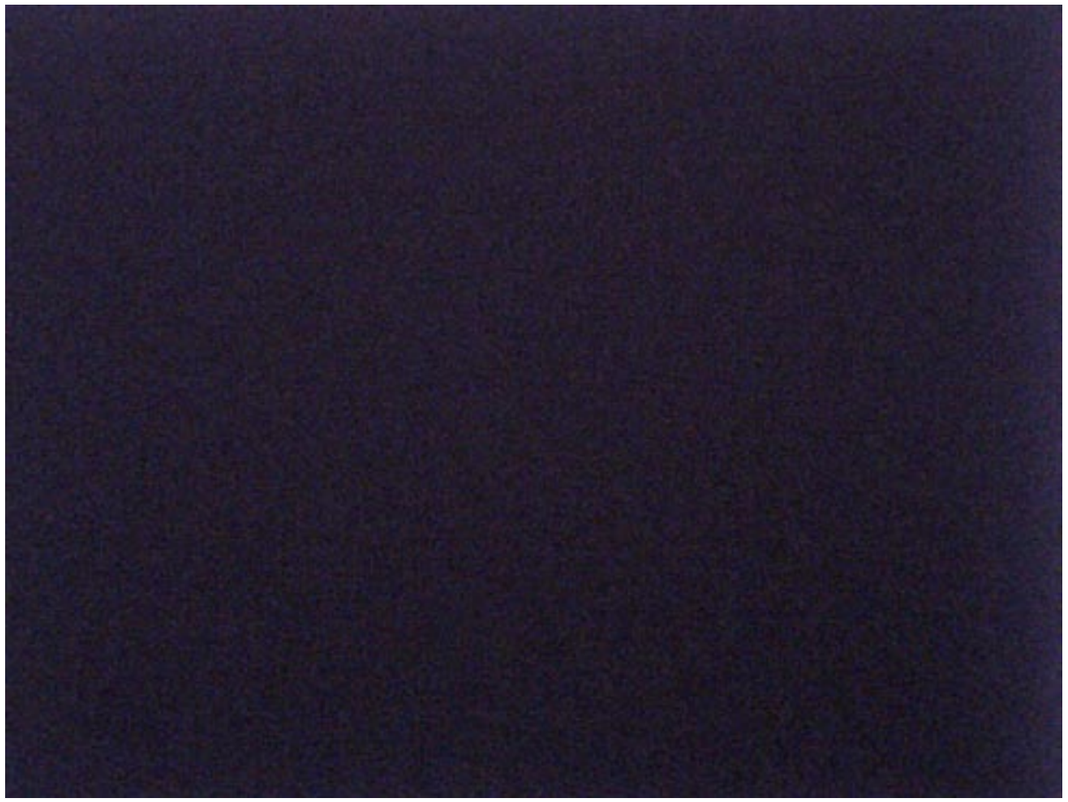
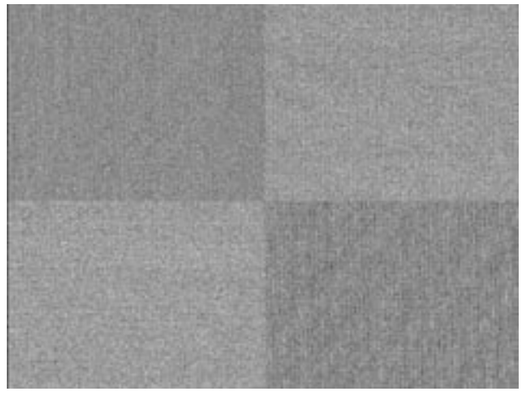






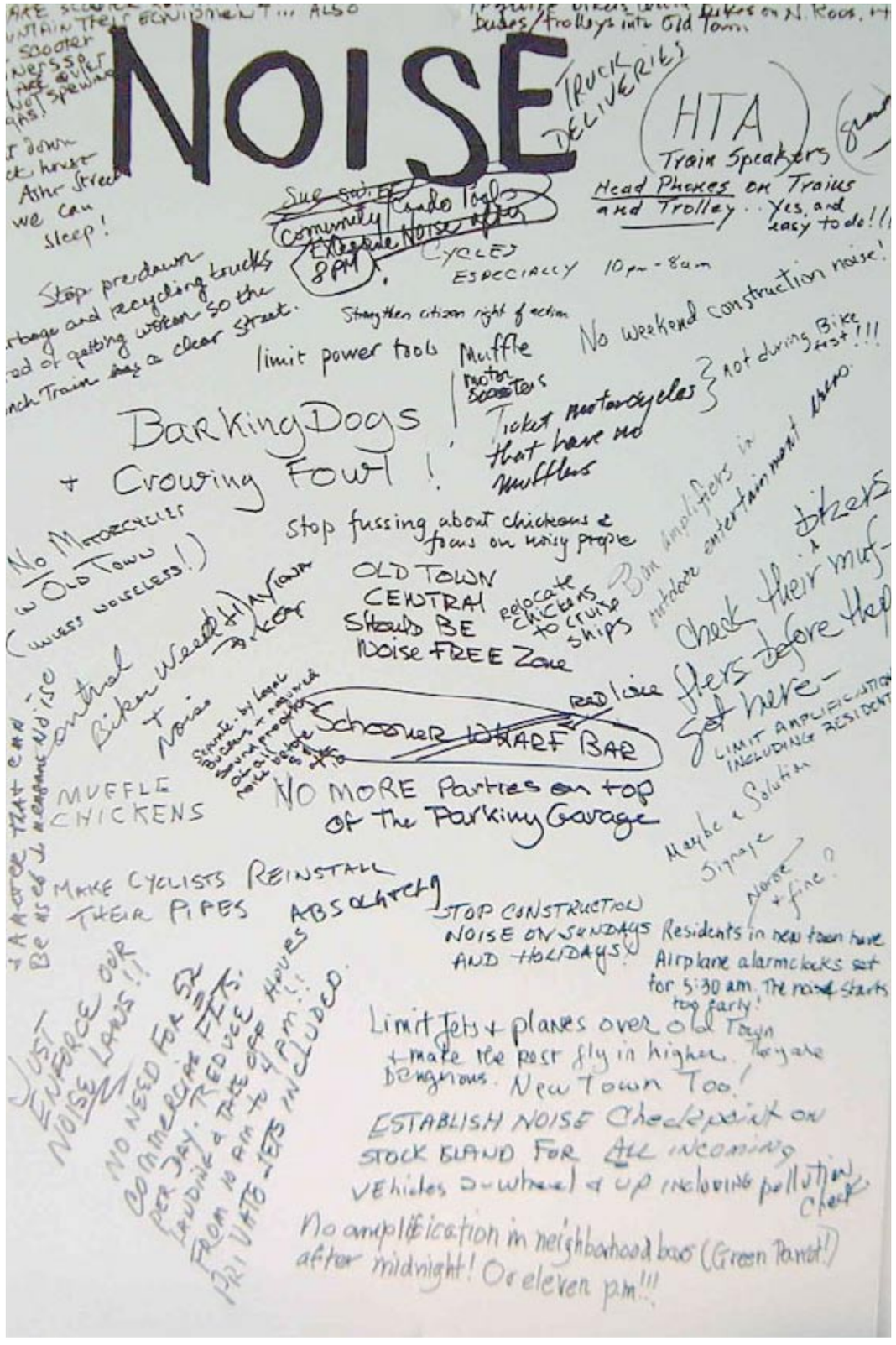


UNNECESSARY
VEHICLE
ENTERTAINMENT
NOISES
PROHIBITED
BY TOWN ORDINANCE

UNNECESSARY
NOISE
PROHIBITED

MAKEPOVERTYHISTORY
NOISE

SKUNK
KEVIN
BARRIO
SCOTT
Ellie
FIRST LOVE


NOISE
TRUCK DELIVERIES
HTA
Train Speakers
Head Phones on Trains and Trolley
Yes, and easy to do!!!
Community Condo Tools
Extreme Noise after 8PM
CYCLES ESPECIALLY 10pm - 8am
Stop predawn
limit power tools
Muffle motor scooters
No weekend construction noise!
Ticket motorcycles that have no mufflers
not during Bike fest!!!
Barking Dogs + Crowing Fowl!
stop fussing about chickens & focus on noisy people
OLD TOWN CENTRAL Should BE Noise FREE Zone
relocate chickens to cruise ships
Bar amplifiers in outdoor entertainment
Check their mufflers before they get here
LIMIT AMPLIFICATION INCLUDING RESIDENT
No Motorcycles in Old Town (unless noiseless!)
Central Biker Weed + Noise
Schooner WHARF BAR
MUFFLE CHICKENS
NO MORE Parties on top of The Parking Garage
Maybe a Solution Signage
MAKE CYCLISTS REINSTALL THEIR PIPES
STOP CONSTRUCTION NOISE ON SUNDAYS AND HOLIDAYS!
Residents in new town have Airplane alarmclocks set for 5:30 am. The noise starts too early!
Limit Jets + planes over old Town + make the rest fly in higher. They are dangerous. New Town Too!
ESTABLISH NOISE Checkpoint on STOCK ISLAND FOR ALL incoming vehicles 2-wheel & up including pollution check
No amplification in neighborhood bars (Green Parrot!) after midnight! Or eleven pm!!!
JUST ENFORCE OUR NOISE LAWS!!
NO NEED FOR 52 COMMERCIAL FLTS. PER DAY. REDUCE LANDING & TAKE OFF HOURS FROM 10 AM to 4 PM!!! PRIVATE JETS INCLUDED.

suppression being to silence the noise they were able to create. In today's cultures of listening, the meaning of silence has been changed as much as the meaning of noise.[271]

The cultures of listening have been greatly transformed and expanded, from fixed spatio-temporal events to appropriations of space, anytime, anywhere – especially through the use of recorded sounds and portable artefacts. Both noise and silence produced in the popular usages of portable devices direct attention to the "active passive"/"passive active" attitude of interacting within one's environment. Furthermore, users are exposed to a range of inaudible digitally constituted noise. This is another reason for the fact that silence does not necessarily mean "no sound at all", and requires us to further explore phenomena of silence as well as those of sound. Acoustic digitalization is more explored than visuals, probably as a consequence of its immaterial time-based nature and of the inaudible range of noises involved. How do our senses respond, how do they deal with such environments? What sorts of noise and silence are produced by mobile phones? Where does contemporary sound navigate us?

Sound / Silence, Mobile Phone Version

It has been held that the "silence" produced by portable music players can be seen as a personal sound sphere around users, operating as an inclusion within any geographical location by forms of "accompanied solitude" in urban space.[272] As previously mentioned in chapter D.3, the silence of the Walkman can be understood in the sense of De Certeau's

[271] Cf. Douglas Kahn, *Noise Water Meat. A History of Sound in the Arts*, Cambridge, Mass. / London: The MIT Press 1999.
[272] Michael Bull, "Sound Connections: An Aural Epistemology of Proximity and Distance in Urban Culture," *Environment and Planning: Society and Space* 22 (2004), p. 113.

"consumers' uses and tactics",[273] or strategies that can be expected to contain makeshift, improvised modes of subversion, evolving with each new technology that is able to regulate, ritualise, formalise the use of sound information.[274] Seeing the specialty of emerging 1980s, (media) philosophies like De Certeau's, to focus on the enactment of spatial relations within the media complex,[275] it is of interest that the urban cityscape has begun to shake off its connections to modern forms of public life and politics. This extends to the act of listening within the field of portable music that was passed on and further developed into other digital devices like mp3 players, iPods, PDAs, mobile phones, and others. It is a particularly important point here to understand what attitudes and acts of listening signify in any particular instance. Lately, more academic discussions on this topic have been conducted around what was at first believed to be a mere gadget.[276] Also from this point of view, the generation and consumption of sound (and noise) gains its political importance today.

Sound As Control

In contemporary sonic spaces in the public sphere, there are diverse aspects of sound that are interesting here in the context of mobile sound media – aspects that include both the audible and the inaudible. Contemporary soundscapes do not only consist of noise as a quasi-natural given, but also as a scientifically developed product, the existence of which may not even be consciously perceived. Once they pay attention to it, people realise that sound around them is also used as a controlling factor.

[273] Michel de Certeau, *The Practice of Everyday Life*, transl. by Steven Rendall, Berkeley: University of California Press, 1984.
[274] Shuhei Hosokawa, "The Walkman Effect", Popular Music, vol. 4, 1984, Performers and Audiences, pp. 165–180.
[275] See De Certeau, *The Practice of Everyday Life*, especially part III on "Spatial Practices", pp. 91ff.
[276] A series of research projects on portable stereo devices has been conducted by Michael Bull; see *Sounding Out the City: Personal Stereos and the Management of Everyday Life*, New York: Berg, 2000; "The Seduction of Sound in Consumer Culture: Investigating Walkman Desires," *Journal of Consumer Culture* 2.1. (2002); "Sound Connections: An Aural Epistemology of Proximity and Distance in Urban Culture," in: Environment and Planning: Society and Space 22 (2004).

Sound can be easily changed and transmitted in public. The voices we hear on the mobile phone are also pre-adjusted in order to reduce surrounding and internal noises and to filter and clarify the human voice, as I already mentioned in chapter D.1. The effects limit the "totality" of sound information that is technically possible, and the voice heard over the mobile phone is not the "real" voice, but the highly edited result of a customising process. Similar adjustments can be generally said to apply to all the digital sounds we hear in our daily environments, even though we don't perceive them as manipulated. Such a use of controlled sound can also be seen in use with portable music players and mobile phones. The exact purpose of their use is difficult to describe, but any interference through processing and altering sounds like this can, from a specific perspective, be regarded as an act of control that influences perception and, most importantly, self-perceptions of the users.

One prominent example is the popular use of Muzak in the public, commercialised sphere and the semi-public of workspaces. In certain respects, it can be seen as a cultural phenomenon that, at least since the 1950s, started to redefine the sphere of the self in relation to the "outside" sphere of social life – by integrating the concept of a "listening self" into a surrounding "ambient". Muzak is the background music in shopping malls, offices, stations and other spaces. It was invented and patented as a system by Major General George O. Squier for the transmission and distribution of background music from phonograph records over electrical lines to workplaces in 1922. The sound of Muzak is intentionally designed to amalgamate individual preferences in the choice of sound surroundings, to "satisfy" millions of different tastes and views, but was also developed in close cooperation with military research as a controlling mechanism: it had been observed that certain music helped to increase workers' productivity and influenced the shopping habits of consumers. This was soon adopted by science fiction writers, but maybe most prominently by William S. Burroughs in *The Electronic Revolution* (1970), a manifesto-like open invitation to subversion that suggested seizing the mechanisms of control employed by the "powers-that-be".

Muzak, the commercial variety of control through sound, was first used to calm down and prevent panic in the elevators of skyscrapers (which is why it is also known as "elevator music"). Especially after World War II, Muzak grew into a worldwide industry and is used to soothe and relax nervous conditions caused by the very same industrial complex of production[277] – to promote productivity in the workplaces in the 1940s and 1950s in the US and in Europe. It was even installed in the White House during the Eisenhower era and under the Nixon Administration. Over time, ambient styles have become more sophisticated, with selections depending on the location where the music is being played, and on the purpose the music is trying to achieve. The contemporary popular use is, for example, to define spaces and keep people moving, or simply to encourage purchasing in shopping spaces.

Muzak is one of the examples that sound around us is designed and created for the specific purpose to influence the psychology of listeners – although the direct effects still remain to be proven scientifically. Its unspecificity can be well illustrated by the use of similarly "relaxing" classical music in doctor's practices, or to increase efficiency for agricultural crops and animals – and in the "social hygiene" affected in places once frequented by the homeless, near train stations like those in Copenhagen or Hamburg.

The control of the self via the control of sound is not only an audio phenomenon, it also extends to the inaudible around us as well. For example some public buildings stream low frequency sound, which is inaudible for human ears, to avoid certain kinds of birds around; the same is done in subways in order to deter rats and moles. Or, some sounds are just like a normal bird's humming, but have been given a different pitch or different tunings

[277] See *Soothing Sounds for Baby*, a series of records produced by the composer Raymond Scott, published from 1963 onward in six volumes, each of which corresponds to a specific phase of months in the life of the newborn. His visionary spirit becomes visible in a quote from 1949: "Perhaps within the next hundred years, science will perfect a process of thought transference from composer to listener. The composer will sit alone on the concert stage and merely 'think' his idealized conception of music. Instead of recording actual music sound, recordings will carry the brainwaves of the composer directly to the mind of the listener." (cf. http://en.wikipedia.org/wiki/Raymond_Scott)

to scare birds away. These uses are known under names like "sound guard" or "sound protection" – all out of the range of human perception to control animals such as birds, rats, dogs, or raccoons. Low frequencies are also already used to transmit signals from the mobile phone and from other domestic (intelligent) electronics. Mobile phones generally operate in a frequency range that lies between 900 MHz and 1.800 MHz,[278] which is between that of FM radio and microwaves. Generally, it is said that low frequencies do not cause significant harm to human. However, there is a counter-argument here that low frequencies may have different physical effects than high frequencies on a micro-cellular level. A research team by Leif Salford, a neuroscientist, and Bartil Persson, a radiation physicist in Lund University proposed that low frequencies of electro magnetic might affect the leakage of albumin in brain cells.[279] Even though there are some controversies – about the question if experimental conditions are sufficient for modelling realistic conditions, and if they take into account the technological development that goes into the data that are used in the experiments, the use of electromagnetic fields is still a historically novel one, and it is not easy to present a scientifically sound analysis.

Here, what can be said is that there are frequencies that are neither visible nor audible to human beings, but to other living beings. For example, bats use sonar, Japanese eels can detect magnetic fields, and sharks are sensitive to electric fields generated by fish.[280] Butterflies can sense ultra-violet rays, seeing thousands of tiny images at once.[281] Mice, often used in experiments on the effects of radiation, can hear high sound frequencies beyond the capacity of the human ear. TVs, microwave ovens, radios, remote controls, communication technologies, wireless networks, GPS – all emit inaudible frequencies. Currently, they cover

[278] In the United States, the range is from about 850 to 1900 MHz. http://www.ehso.com/ehshome/cellphonecancer.php
[279] This counter argument was presented and questioned by moderation by Nils Reydbeck from Communication Systems Department, Lund University on the second day of the symposium accompanying The Invisible Landscapes in Malmö, on September 6, 2003.
[280] http://www.eyebeam.org/reblog/archives/2005/05/sensing_with_the_brain.html
[281] 'Vision in Birds, Butterflies, Cats, and Dogs' http://www.sewanee.edu/chem/Chem&Art/Detail_Pages/ColorProjects_2003/Early/index.htm

the entire surface of the Earth in a multilayered structure, and constantly produce a complex traffic of electromagnetic fields (EMF). The terms "invisible" and "inaudible" only refer to limits of *human* perception, which does not mean that they do not exist. Capitalised frequencies are actually producing a new acoustic environment in the everyday.

Paying attention to the "invisible" and the "inaudible", the artist Richard Hamilton produced a chart showing how human perception – optic and acoustic – is limited **(fig. 40)**, as part of the legendary exhibition This Is Tomorrow in the mid-1950s.[282] Hamilton had already predicted the coming of powerful, visual popular culture in future capitalist systems, and in this context he also provocatively addressed what he called the "Shuteye problem", projecting the words "Beware of Shutitis", "DID YOU HEAR THAT ?" and "*Think*, THINK, THINK" on the image of a head **(fig. 41)**.[283] Hamilton's chart clearly points to the existence of a much broader range of frequencies than that accessible to human sensory capacities. In his analysis, he bridged the developing power of capitalism to the human sensory capacity and its (then) present condition of malfunctioning. He thus targeted the ensuing age of consumerism; however, it is possible that the point he made can be re-interpreted when transferred into the context of digital mobile communication. Hamilton's view concerned material commodities, but mine is focused on the commodification of the immaterial. In the capitalist system, what we hear or do not hear is intentionally and automatically manipulated. This is actually very much reflected in contemporary sound culture in DJ – all kinds of practices around mixing sound and music, on turntables or on computers. Everything is mixed, and the mix creates its own value. In addition to the control of sound, the attitude of *consuming* sound – both listening to music and spoken words – occupies more and more time in everyday life. If mobile accessibility is considered as consuming immateriality and an "extension of the body", does it alter the meaning of the notion of "the

[282] June 1956, Whitechapel Art Gallery
[283] This Is Tomorrow consisted of twelve Groups. The Group 2, where Hamilton participated with John McHale and John Voelcker, dealt with sensory imagery in optics and images from cinema and science fictions in pop culture.

body/the self" as inscribed in its relations to society? Does it mean that the legitimate space of the individual body (subjectivity) is regulated in terms of accessibility or inaccessibility to others for consuming? In this sense, the mobile phone is not only a tool – it is the symptom of a society that is replacing (different notions of) subjectivities.

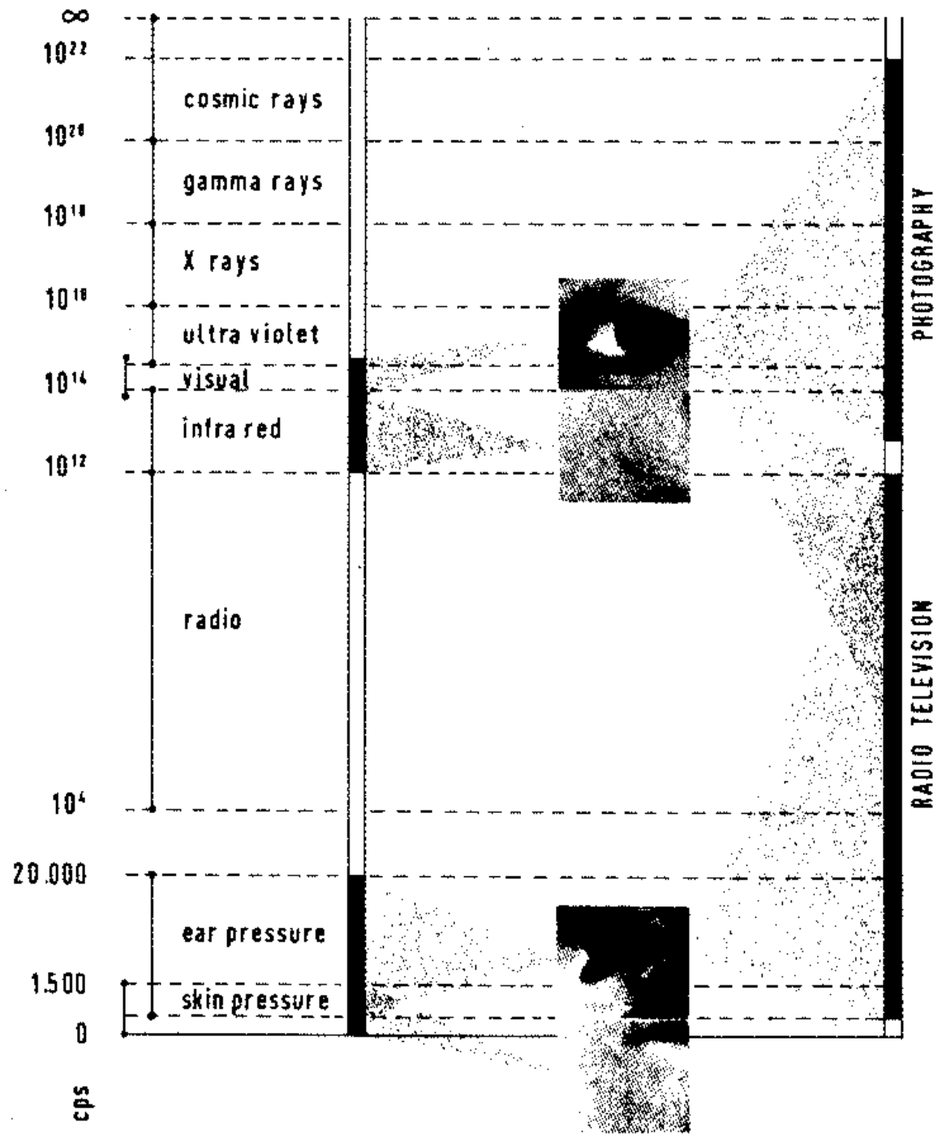


Fig. 40 Richard Hamilton, *One Chassis: four tools,* 1956, from "This Is Tomorrow"

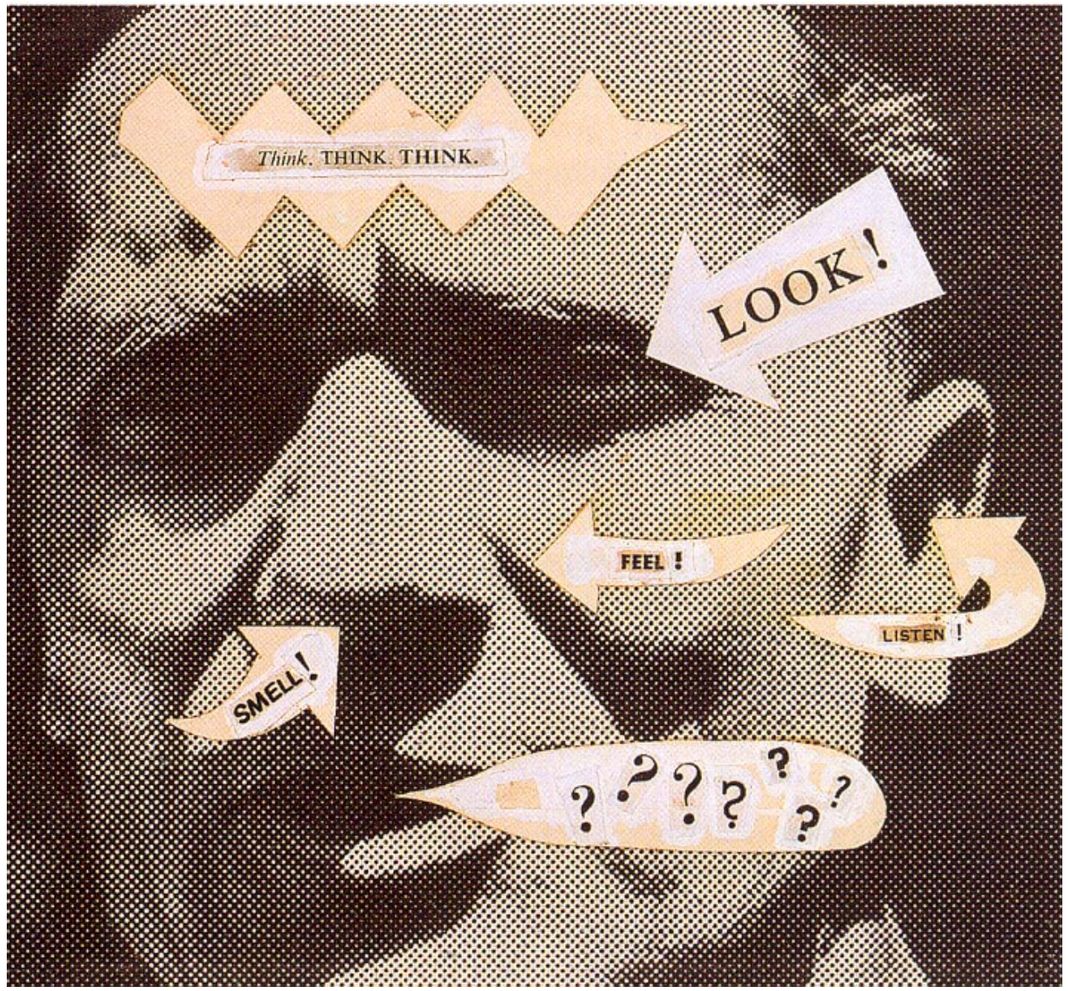


Fig. 41 Richard Hamilton, *Collage of The Senses,* 1956

What is "Injured Listening"?

"Tokyo Dream"

Return to Mukojima.
Headset glued to the skin.
Return to Mukojima.
My entire skin: an eardrum.
My entire skin: a sail in the wind.
Return to Mukojima.
This body consists of voices.
Trembling voices, trembling ground.
Return to Mukojima.
Typhone. Earquake.

(Leif Holmstrand, 2006)[284]

In Leif Holmstrand's poem "Tokyo Dream", the words beautifully characterise contemporary acoustic conditions. Our audio sensory is exposed to enormous amounts of unqualifiable, or acutely defined, sound waves. Being surrounded by controlled sound is very much comparable to the condition of wearing a headset all the time. Controlled digital sound may be comfortable to the ear, but we could also ask whether mobile phone might not also be a case of "self-amputation," in Marshall McLuhan's sense. As quoted by the medical researchers Selye and Jonas, he stated, "all extensions of ourselves, in sickness or in health, are attempts to maintain equilibrium. Any extension of ourselves they regard as 'autoamputation,' and they find that the autoamputative power or strategy is resorted to by the body when the perceptual power cannot locate or avoid the cause of irritation."[285] That is to say that mobile communication has brought us close-to universal access as an "extension of body": but we need to look at the flip side of the coin.

There is more to the controlling and filtering of sound. Pervasive sound is further

[284] Original contribution to The Invisible Landscapes, Lund, September 2006.
[285] Marshall McLuhan, *Understanding Media: The Extensions of Man*, op. cit., p. 46.

extended in order to influence our brains to produce non-existing auditory phantom phenomena such as hallucinations – the other side of "self-amputation". According to Digital Lab, a South Korean consumer research group, it seems that power mobile phone users experience hallucinatory states where they are convinced that their mobile phones are ringing.[286] Other reports attest that one third of the survey respondents reported auditory hallucinations, for example hearing their phone ringing when it actually was not. One says: "Even though I set my cell phone to vibrate when calls come in, I sometimes hear my phone ringing."[287] A similar report has been published on iPod users, but with neuro-scientific proof yet to be offered.[288] These descriptions seem harmless compared to the impact that pervasive sound can exert on the level of the unconscious. As Leif Holmstrand puts it, it can hit us in the form of a "typhone" or an "earquake".

Related to their respective aggressive potentials, it can be also mentioned that mobile telephones and portable audio players generate at least two different modes of acoustic effect: one is the mode of listening with "active interaction", in situations where the mobile phone sounds attract our attention, working like an alarm call. Another is the mode of hearing that pays less attention to the environment. Plugging our ears with headphones is producing a distance from whatever surrounds us. Such an attitude can be actually interpreted as quite (passive-) aggressive in another sense. When silence is signalled in a way that is detached from its surroundings, the message seems to be that an act of hearing more important than any immediate address requires full attention. "Plugged ears" signify a specific worldview, a self-positioning of the subject toward the world around it that refuses any possible interaction. It implies that the subject does not wish to be bothered by its

286 Simon Burns, "Korea becoming a nation of phone junkies", December 6, 2005. http://www.vnunet.com/articles/print/2147183.
[287] Ibid.
[288] Carl Zimmer, "Neuron Network Goes Awry, and Brain Becomes an IPod", *The New York Times*, July 12, 2005.

surroundings.[289] As an undeniably performative, communicative sign to the outward world, it can in fact be interpreted as aggressive. However, both mobile telephone and portable audio devices are capitalist objects demanding investments of time and money, in a realm of the immaterial. They demand our *personal* investment, and compete for our attention to switch between two levels of sound – phone sound and environmental sound.

Constant shifts back and forth between alternative modes of listening and hearing are creating a different habitual sensory balance within the acoustic sense. Reflecting on the wide, even trivialised adoption of "mixed media" today, Friedrich Kittler developed the utopian idea of an integration of all sensory levels, beyond any division, in order to create one unified new sensory. Such a dynamic proposal sounds attractive and invites fantasies of a future media society. However, I think it is more important to carefully consider minor changes already taking place as they more concretely signify what sort of changes will happen, and how. As what we face is unknown, it is quite meaningful to try to understand what the fragments of today's reality indicate to us and to construct a constellation being guided by these fragments, instead of jumping to the imagination of any "big turning point".

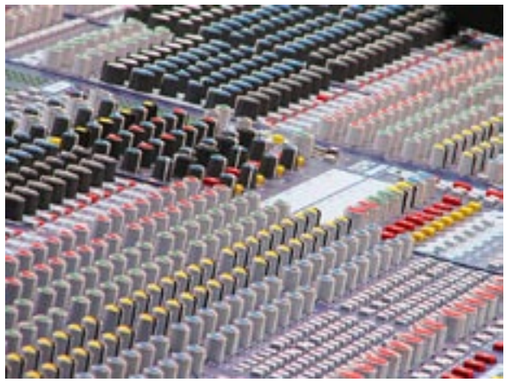
At the beginning of the 1980s, Roland Barthes analysed different modes of listening: "If the auditive background invades the whole of phonic space (if the ambient noise is too loud), then selection or intelligence of space is no longer possible, listening is injured."[290] He then compares this injury with other phenomena of pollution, arguing, "pollution damages the sense by which the living being, from animal to man, recognizes its territory, its habitat: sight, smell, hearing."[291] About twenty years after these claims, the conditions of listening have changed significantly. But, still, Barthes's view is interesting here in that it allows us to

[289] A similar attitude of being with off-attention in a multitasking environment can be sometimes observed, for example, when people are driving their cars using GPS navigation, television, and mobile phones.
[290] Roland Barthes, *The Responsibility of Forms: Critical Essays on Music, Art, and Representation,* trans. Richard Howard, Berkeley: University of California Press, 1985, p. 247.
[291] Ibid.

properly assess the history of the influence of sound in the everyday. However, his view is limited to the idea of invasion of one mode of listening into another. As already elaborated, listening experiences are not (and maybe have never been) limited to one sole fixed mode. And they are not easily divided into categories of listening, since they are so intrinsically connected to their individual historicity, by the processual development of habits (and its possible negation in an instantaneous, shock-like experiences), and ultimately by technologically implied or influenced modes of subjectivation that may correspond to different modes of listening more than any normative description of academic philosophy treating users as "trivial machines" could provide. How can we understand shifts in sensory conditions such as the one that Barthes referred to, or the one implied by the multi-layered model of attention that is so typical for the discourse of the mobile phone? Does it actually (physically) alter our sensorium or our cognitive conditions? Is it, as Barthes suggested, another stage in a process of pollution? Or, is it really pollution itself?

Contemporary soundscapes are "glued to the head" by portable digital devices, they work as sources of permanent distraction and create a sort of montage of different modes of listening under "real life" conditions. These modes of listening circulate around a new economy of the immaterial. As seen in the last paragraphs, sound is a powerful medium that functions in social, economic, aesthetic, cognitive and emotional operations. After a very short process of integration, mobile telephones have become deeply integrated into oour every day life, and seem almost indispensable. Our sensors never cease to be exposed to this new state of transition through mixed modes of listening[292] and mobile listening with a multitasking attitude.

[292] The use of recorded sound media via Walkman or iPod is categorically different from the mix and montage of "live materials" that is made possible by the mobile phone.



New Noise
iPod

Numark

E.2 The Flow of Multiple Subjectivities

In the previous section, I presented the contemporary use of sound as a means of control, and "soundscapes" as constituents of a DJ culture, which is based on a desire for reproduction and re-assembly. This mode or attitude of DJing does not remain limited to the realm of sound and vision; it influences much more generally a productive mode of the self in the context of the mobile phone. Earlier, I presented Shilpa Gupta's work *Untitled* (2005) and confronted its reflections on a flow of multiple subjectivities under the context-sensitive conditions of mobile telecommunication, as well as of a revaluation of imaginaries about physical space in a life deeply influenced by electronic devices. In this section, I will use my exploration of Gupta's work as a starting point and develop the argument on modes of the self and multiple personae. In the process, I will take a closer look at another example, a project called *Call Cutta Mobile Phone Theatre*[293] (2005), organised by the German/Swiss artists' collective Rimini Protokoll. In my argument, I will refer to how constitutive elements of subjectivities are copied, assembled, shuffled, (re-)created (and capitalized) as new subjectivities in the gap between a banal, individual communication act and the globalised market related to the digital mobile network era. I will continue to discuss the (controlled) flow of subjectivities by addressing the multiple levels that can be identified throughout the project.

[293] In the exhibition at Lund Konsthall, a thirty-minute video documentation of the projects in 2005 will be presented. Originally, the project was organized by Rimini Protokoll in collaboration with Goethe Institute Calcutta, Max Müller Bhaven, and Hebbel am Ufer Theatre, Berlin. It was divided in two parts, one in Calcutta, the other in Berlin, between February 26 and April 30, 2005.

Intimacy: Birth of the "Self Phone"

In *Untitled* by Shilpa Gupta, the invisibility factor empowers the user to perform and to initiate other subjectivities, to re-valuate the physical idea of space in electronic network systems; it suggests that SMS provides a space for processing new self-constructions. In a sense, the intimate mode of invisible communication offers the conditions necessary to perform plural selves. Invisible communication stimulates and expands the imagination, also helping to alter prejudicial structures of perception. Simultaneously, an activated imagination that fills up the void of invisibility invites communicators to feel closer and more "intimate". This may not happen all the time, probably only when two communicators are synchronised at some depth; this level of intimacy prepares a platform of the birth of multi selves. Identities are born at the moment of articulation.[294] In that sense, such mobile-created intimacy produces more moments for articulations of the self. Thus, mobile communication also allows the subject to assemble and shuffle seemingly contradictory, place-bound modes of being and to better control and perform his/her self-image. Such a process of constructing and reconstructing the self informs the condition of plural selves under context-sensitive, temporal conditions.

In the following, I would use another example, the *Call Cutta* project, to further explore the subjectivising situation of being navigated by performative acts through mobile telecommunication.

[294] Ernesto Laclau and Chantal Mouffe, *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*, London: Verso, 1985, pp. 110–111.

Assembling / Shuffling Subjectivities

> "She is Mrs. Knowles, listening from Manchester.
> His name is Neelanjan who calls himself Nick.
> He is one of the countless Indians who hide their real identity..."
>
> From the documentary film on "Call Cutta"

This is the beginning of a video documenting *Call Cutta Mobile Phone Theatre. Call Cutta*, a mobile phone-based project, provided personalised guided city tours via mobile telephone conversations in order to explore hidden memories in cities that seemed familiar to the local participants **(see fig. 42–45)**. The project was divided into two parts – one in Calcutta, the other in Berlin. In the first part in Calcutta, the project was a remote-guided city tour for theatregoers, navigated by a voice from a call centre. The process is as follows: viewers purchased tickets and were seated in the old Star Theatre at Hatibegan in Northern Calcutta, each of them receiving a mobile telephone. As soon as they were seated, the mobile phone rings and started to guide each member of the audience. The assistants in the call centre operated as guides and actors at the same time, and from point to point navigated the audience from the theatre through city streets, making them "discover" details, entering into a more and more personal dialogue, talking about their own memories, letting the guided persons fulfil little tasks. The second part of the project happened connecting Calcutta to the "other side of the world", Berlin. The navigator was still at the same call centre in Calcutta, participating in the project there during the nighttime in Calcutta, and during daytime in Berlin. The audience in Berlin was guided through many surprising sites in their "own" city by a voice with an Indian accent. Sounding more bizarre in the second part, however, the concept was that "people help each other through places and spaces, spying on aspects of the city, sharing and trading confidences, and developing mutual trust which overcomes any

loneliness (the theatre-goer may feel)."[295] According to an observation by members of Rimini Protokoll, the Berlin version grew to become an intimate conversation between two people who were far remote from each other and connected only by the telephone call.

Call Cutta Mobile Phone Theatre directed attention to the call centre industry, particularly as it can (usually not) be seen in Infinity Tower, Salt Lake, or in Calcutta, India, showing interrelations between industry and globalisation at the "personal" level of one mobile phone call - how new communication technologies today penetrate dynamic transnational economies, how a global network system functions in unexpected ways and reaches into the existence of another human being on the other side of the world; voices sensitively reflect psychological changes, negotiating modes and spaces of communication. People connected by such a communicative space are not just speaking or listening, but actually conversing:

> "At the beginning, they will feel somehow like being caught by a service line, because there is a service line at the other end. As time goes by, they start to trust the person on the other side of the phone, the voice becomes very human, and then you realize that this human voice is also lying on the phone, flirting with you on the phone." (Rimini Protokoll)

Here it is important to focus on the different starting points of the audience members and of the call agents. For the audience, *Call Cutta* is a participatory art project that they enter out of a private interest and in their leisure time, while for the agents, it is a "job" by which they support their lives.

[295] Pratim D. Gupta, "A Trek through Two Cities, Just a Call Away", *The Telegraph* (Feb. 25, 2005), http://www.telegraphindia.com/1050225/asp/calcutta/story_4417479.asp.

Fig. 42-45 Rimini Protokoll, *Call Cutta Mobile Phone Theater*, Calcutta and Berlin, 2005

Names and Identities

Going back to possibility of hiding one's identity by using different names, quoted at the beginning of this section from the documentary film on the "Call Cutta" project once more, I would like to think about how concepts of the self and identity are addressed here. What does using fake names actually mean? Does it mean that one starts to perform another self? Does it only remain a surface by which a person is identified through a specific sound? Or, does a name signify more, does it imply an identity?

I remember when I started to learn English at the age of ten, I was required to choose my English name for use in the lessons. At that time, I did not know many other English names, and all the popular names were quickly taken by others. At the end, my English teacher named me "Elizabeth". It felt very strange to be called and introduced as "Elizabeth". I did not understand to whom this name referred. But such a feeling was never discussed as an issue in the context of an English class. After being set up as "Elizabeth", this name was only used within the class context: I was shy about it at the beginning, but soon the use of "Elizabeth" was extended to the time after classes, providing a possibility to play with a different self, to be identified by a different name among friends. This lasted over two years, disappearing after the English class ended. My experience raised questions about the relationship between name and identity. If a name identifies a self, can one say that I was "Elizabeth" for a certain moment and in a certain space during my childhood? Or, was it just a play of the imaginary?

Gupta, in her work, decided that her name was not to be printed on the public posters in order to better preserve the anonymity of the artist. As discussed previously, invisibility keeps identities in an imaginary space, protecting the artist from dangerous influences, for example social, racial, gender-related, and other prejudices. In her case,

anonymity also had the function of initiating dialogues and "reaching out" with a message to the receiver. Offering no name facilitates transformations of the artist's assigned role. In a way similar to overcoming prejudice, hiding one's real name in the case of call centre in Infinity Tower means to be accepted and to be trusted by American customers. There certainly are opportunities when people need to change the way they look or imagine themselves, when they, in order to be accepted, resort to not telling everything about themselves, to representing themselves differently, emphasizing different properties or qualities, or simply by using a different name. In "Call Cutta", there was a short episode about a call agent's grandfather, in which the grandson told how he had to change his name from "Samir Singh" into "Martin Heynold" when he lived in Germany under the Nazi regime. This is but one example of an "integration process" that is expected to happen when migrants come to start new lives in a new country. How does such "integration", or in another word, such subordination affect the self? An American call centre company in Salt Lake City created 20,000 new jobs for young English speakers in Calcutta, to sell travel packages overseas. This company's size approaches one of a whole telephone army,[296] but against what and whom is this army directed?

Using different names in mediated forms communication may imply differences to the one that happens "face to face". If a name helps in the process of articulation, the use of fake names has equal significance both in reality and in media space. In a moment of autobiographic reminiscence, one call agent says, "This [location where you are] is where I lost my real name and sold credit cards everyday. I slowly started to talk to people personally." Can this condition of losing one's own name be interpreted as implying a desire to try to understand one's real self? As the name does not automatically help to articulate the identity of a person anymore, one has to seek other procedures and techniques to remember and collect one's fragmented persona, to then construct a self.

[296] Dialogue from the script of *Call Cutta*.

The procedure at work in *Call Cutta* is articulating a persona through the negotiations between a call centre agent and an audience member in which personal memories are shared and rearranged in relation to a specific site that is addressed in the mobile phone conversation. This act by which the audience member was re-articulated in a very concrete way, personally connected him or her to the agent, and vice versa. The bilateral dialogue re-created the other's persona, actually constituted by invisible subjects. They are articulating themselves through the mutual creation of a fictional persona about which they negotiate their relation. They "download" increasingly specific and "intimate" information, serving as a default persona that can be reacted to, helping to formulate one's own subjectivity. Then their newly articulated subjectivity can be "uploaded", a process that become a recursion, forming a "learning curve" of subjectivation.

In the beginning, one of the agents describes his/her own position, "Now I am exterritorial. Not here – not there – just somewhere in between." Actually, this applies both to the call agent and the audience member, at least in their present relationship. They both were "nowhere" – before a journey starts in which they articulated their selves in a process of mutual communication.

Transformation: "Who Am We?"

In a space where you are allowed to control your image more than in other places or on other occasions, people open up new aspects of the self. One audience member answers the question to the agent by saying "I am only a doctor for the duration of this phone call. I do not necessarily have to tell you the truth." Related to different levels of reality that are played with by developing avatars in cyberspace, the media psychologist Sherry Turkle observed that "multiple user dungeons" (MUD) are ideal spaces for thinking about the workings of

postmodern selves. She wrote, " The Internet links millions of people in new spaces that are changing the way we think and the way we form out communities. That we are moving from 'a modernist culture of calculation toward a postmodernist culture of simulation.'"[297] Her research on avatars on the net contests that a second persona played out in a MUD situation opens up new aspects of the self, but aspects of a persona that is imprisoned behind the computer screen, or caught up in the interface.[298]

Network spaces inevitably problematise the real and the virtual. In other words, network spaces – and especially those created by and in portable artefacts – re-render space under a different grammar derived from geography, urban design, architecture and others pre-decided conditions: epistemological pluralism has been recognised almost simultaneously in postmodern thinking and in the creation of network spaces. Through this shift, we have started to become familiar with a different epistemic modality of self "presence". Can we say that portable network devices accelerate the exploration of alternative forms of the self on the level of something that is done in everyday life? Or, have people become "moving data"? There are also more and different positions and relations implied in this media space: We may not be the ones who download information, but maybe the ones who carry, convert and transform these data for the world.

Here, the cultures of copying and sharing through portable networked technologies seem to offer a good vantage point for considering different shapes and meanings that the boundaries between the self and non-self can take on. These used to be only possible in cyberspace; portable network communication can claim to have brought them "out" and to have fused them with lived social reality. As multiple personae can be developed in cyberspace, why not extend this into the space of mobile telecommunication as well? The cultures of copy and sharing relate to different expectations of the self and subjectivity and

[297] Sherry Turkle, "Who Am We ?", 1996, http://www.wired.com/wired/archive/4.01/turkle_pr.html.
[298] Ibid.

are more set to found themselves on the principle of exchangeability than on that of sustainability, as one's data possession can be acquired, viewed, processed and re-used by others within seconds. Such a condition promotes a mode of communication that does not control a single subjectivity, but the transformation of subjectivities through the acknowledgment and enactment of new desires and capabilities. It provides an opportunity to construct a new process of self-constitution.

Intimacy, Again

On taking a more cautious look at the documentary on the *Call Cutta* project, it becomes clear that the flow of conversation between two subjects is controlled by the different roles that the conversation partners are taking on – here, communication is clearly perceived and enacted as a hierarchical process. The agent situated at the call centre starts out in the role of an official instructor, but soon enough moves on through that of a more friendly tour guide type, someone who one might trust to accompany a small trip. Then, as the conversation gets more personal and reversals of the questioning position are allowed, the mobile communication creates the feeling that there are two subjects who share a remotely similar vision, almost as if their respective partner is just beside one. By this time, the tone of the dialogue has relaxed, if one question is apparently not leading to a satisfactory result, it is soon dismissed for another topic. The conversation seems to aim at creating and transmitting a vivid impression of the place and situation of the person on the other side. Conversing about one's personal life – even if in a mode of pretending a fake personality – functions as a catalyst of communication, more than any purely rational exchange of information. The illusory impression that is produced by the performance of different selves may give access to intimate territory where two subjects start to interact on a very personal level.

Such a model of communication may be described as *ishiki tsushin* (conscious communication) as opposed to "information communication", according to the definition of the Japanese philosopher and ethicist Masahiro Morioka. [299] "Conscious communication" in his view is "a unique, united feeling constructed through mediated communication which detaches and voluntarily and abnormally isolates the communicator apart from reality."[300] In his study, he even describes his intuition that consciousnesses touch each other when mediated through telephony once a bidirectional channel is opened. Mobile phones may function as transmitters of such a mode of the self as far as it can be mediated through the transmission of voice. Can the "conscious space" that is mutually constructed in some moments of *Call Cutta* be understood as part of what Morioka has defined as "conscious communication"? What this concept describes is an "easy", informal kind of intimacy that is available as a characteristic form of interrelation in the dysfunctional relationships offered in "tele-cocoon"-like spaces,[301] or the realm of "intimate strangers."[302]

Networks only connect subjects. Behind these subjects, there are the accumulations of past and present politics and economics. This makes it all the more crucial to consider relational aspects of identity politics and history. Even though some modal changes are initiated by specific questions from the call service agent in the scenario, the conversation flows as if naturally improvised between the two persons. In our specific context here, this

[299] Referring to the proximate feeling emerging through telecommunication, in the early 1990s Masahiro Morioka introduced the term *ishiki tsuhin*. According to Morioka, it describes a communication for the purpose of social interaction, which he distinguishes from "*joho tsuhin* (information communication)" that is a kind of communication for passing on information or knowledge as correctly as possible, from A to B. See Masahiro Morioka, *Ishiki Tsushin: A Dream Navigator*, Tokyo: Chikuma Bunko, 1993.
[300] Ibid.
[301] The term "tele-cocoon" was introduced by Ichiro Habuchi in his essay, "Accelerating Reflexivity," *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*, eds. Mizuko Ito, Daisuke Okabe and Misa Matsuda, Cambridge: The MIT Press, 2005, pp.165–82. He used the term for an intimate zone, in which relationships with acquaintances can be entertained; whereas I have used it here for a protected, confined space in a more general sense.
[302] "Intimate stranger " is a term introduced by Tomita Hidenori, a Japanese sociologist, in 1997. With this term, he defines people with whom intimate, anonymous contacts are made in cyberspace. See "'Jiyu to Kodoku' to Keitai", *Poke-beru Keitai Shugi*, eds. Hidenori Tomita, Kenichi Fujimoto, Tadao Okada, Misa Matsuda, Norihiko Takahiro, Tokyo: Just System, 1997. The definition is taken from his essay, "Keitai and The Intimate Stranger," *Personal, Portable, Pedestrian*, pp. 184ff.

project can be seen as an interesting experiment,[303] searching different modes of subjectivities that can be developed in the use of mobile telecommunication, different ways of understanding the construction of the self.

At the end of the fifty minutes of the mobile phone-guided tour of *Call Cutta*, the two subjects are emancipated from invisibility by way of a mutual webcam, effecting what might be seen as a typical residue of theatrical modes of representation **(fig. 46)**. The visual representations of the two conversation partners were revealed – to the Calcutta resident in her usual working environment, to the Berlin resident on a monitor in the storefront window of a computer shop, inside a shopping mall – the final point on the tour. The project experimented with an emphasis on temporary, ambulant forms of network existence (at least for the guided person), as well as on the power of voice, which connected the two subjects over a distance of 15,000 miles. However, this ending still confirms the significance of the materiality of communication.

Rimini Protokoll juxtaposed two distant cities, Berlin and Calcutta, by means of mobile telephony. This unexpected combination and unusual situation – being guided through a city by a person on the other side of the globe – opened up a new approach to think mobile connections. And yet, the mobile phone also creates consumers through acts of "communication" like the one *Call Cutta* proposes. In the project, communication is treated as equivalent to working with structures and contents that are consumable by new communications technologies and the hierarchies they engender. These new technologies not only consume information and communication (that is inextricably linked to gaining information), it also "consumes" subjectivities, which enrich and valorise otherwise neutral information through their handling, copying and editing, their productive and reproductive

[303] One case could almost end up with the promise of future communication beyond the set up context, however, it was quite interesting that a member of the Berlin audience described her experience, saying, "I like the idea that we were talking the past each other all the time. It always takes about two seconds to catch up each other. This is, I think, the same way how the globalisation does not quite work." In such a context, communication space was more confined in the set up, which oriented the dialogue to the past.

labour. This seems to be increased by the effects of global mobilization. The naïve fascination that is at the functional root of *Call Cutta* – the capacity of being able to communicate in a surrogate intimacy even with a total stranger, may also be the most controversial point about it. Implicitly it is commodifying the Indian operators' personal subjectivities that is enacted on top of their profession as call centre information mediators working as cheap labour. Today, the representation of subjectivity is the most important content for digital networked capitalism. To put it in cynical terms, *Call Cutta* not only performed the media-powered play of subjectivities, but also showed a model to capitalise and exploit subjectivity in a mobile telephony setting which might serve as a model of communication services for the communication industry in the near future.

Fig. 46 Rimini Protokoll, *Call Cutta Mobile Phone Theater*, Calcutta and Berlin, 2005

E.3 Mobile Telephony, Mobile Subjectivities

The phenomena here described, performed and enacted in the context of mobile telephony, arguably form a new configuration in processes of self-articulation, and ultimately subject formation as well. Even though the applicability of consumer psychology seems quite natural here, we still need to interrogate the relationship between mobility and subjectivity. More precisely: we need to ask what role can mobile telephony play – as a tool, facilitation structure, communicative habit, social apparatus – in processes of constructing subjectivity, processes pertinent to questions on the mobility of migrants – as source signals or echoes of globalised mobile communication, and the current state of the diasporic cultural paradigm.

Mobility constantly forces persons and/or users to shift between subject positions, to adapt flexibly in rapidly changing political, economic, social, and personal situative contexts; while it is possible to describe this movement as a skill, as an advantageous form of social behaviour, it also renders the subject position unstable, insecure. In a sense, the permanently impending potentialities of mobility place subjects in an "in-between" state, articulating and re-articulating themselves. The quality of subjectivity that may be described as belonging to the worldview and structural requirements of communication in mobile telephony has a relational character in each new social context; and yet, at the same time it also implies a breaking up or a neutralisation of a general differentiation of planes; it creates gaps between the articulators and the articulated, a relationship on which subject relations are founded under hegemonic conditions. Therefore, "mobile subjectivity" has to be understood as a paradoxical display of colliding subjectivities. Pointing out the contemporarily instable subject positions in the dispersed social fields and in the identity politics of late capitalism,

and referring to Ernesto Laclau and Chantal Mouffe, the art historian David Joselit argued, "it [identity politics] is lateral in that it arises from a differential economy of coexisting subject positions rather than emerging from an essential human depth".[304] Keeping in mind that the juxtaposition of "types" of subjectivities can only be a metaphorical equivalence, is it such a form of unfulfilled, and never fulfillable subjectivity (since differentiation is its only "purpose") that can be observed, for example, in attitudes towards customising communication and personal representation through personalised ring tones in mobile telephones? In 2005, the Turkish artist Kutlug Ataman held an exhibition entitled Identity Is Not Something to Possess, but Something to Wear.[305] This title can also symbolise capitalism and the subjectivities attached to it, summarising the tendency of subjectivity to change: it is not something instantly constructed from scratch, nor is one – as seen from an essentialist point of view – "born into" it. Joselit has designated such a shift – from a model of subjectivity that is founded in interiority, to one in which the self is constituted through a play of surfaces – calling it a condition of "psychological flatness,"[306] echoing what Fredric Jameson described as the "emergence of a new kind of flatness or depthlessness, a new kind of superficiality in the most literal sense."[307] Since the mobile phone can be considered as much more than a tool, but as the symptom of subjectivities that are replaced by society, "psychological flatness" may seem close to the model of mobile subjectivity that is the constant adjustment (or non-adjustment – since this model, like any power relation, should be seen as dialectical) of a context-sensitive self. This psychological attitude that treats subjects as valid objects of social discourse can also be understood as an actual agency that disperses boundaries between the self and the other, and is constitutive of an actual reciprocity of the self in mobile telecommunication linked to ongoing social transformations.

[304] David Joselit, "Notes on Surface: Toward a Genealogy of Flatness", *Art History* 23.1 (March 2000), pp. 31-32.
[305] Museum voor Hedendagse Kunst, Antwerp (MuHKA). 2005.
[306] David Joselit, "Notes on Surface," loc. cit.
[307] Fredric Jameson, *Postmodernism: Or the Cultural Logic of Late Capitalism*, London: Verso. 1991, p. 5.

Shifting one's position in the enactment of mobility, or as part of an agenda, as the constant negotiation of a line between self and other, may merely resemble a gratuitous attitude to respect difference, but might also be just another problematic attitude, a more sophisticated and transformed strategy of colonisation, now under conditions of globalised direct communication and mobility. In this case it would be quite complicated to differentiate between the coloniser and the colonised: mobile telecommunication is representative of a "flat psychology" like that addressed by Joselit; it neutralises the surface meaning of the question who is coloniser and who is subordinate.

As seen in the examples of previous chapters – the "iPod jack" practices, the difficult levels of representation in the *Call Cutta Mobile Phone Theater*, or in Shilpa Gupta's work *Untitled*, communication technology functions as a setting that deliberately enhances subject-making processes and aims at a commodification of subjectivity. Jameson understood that the postmodern self is a liberation from the self that would still be "present to do the feeling," but replaced by what Lyotard already conceptualised as "intensities;" Jameson has described this condition as the "disappearance of the individual subject" in late capitalism.[308] I would say that mobile communication technologies shift such a vision to its complete opposite. Today, individual subjectivity seems more important than ever, and has already become implicated in an economic cycle of subjectivity all its own, involved in production.

Rethinking subjectivity as a *consumerist mode of productivity*, it can be said that communication itself has become a significant form of labour, as well as one of the most important processes in the realisation of products. As seen in Henrik Frisk's "etherSound" project, the process of realisation and production is hard to separate from that of consumption. This circumstance changes the meaning of what is seen as "labour" today, and raises questions about the quality of new relationships between labour and economic value in the spectacular phase of the capitalist system. Referring to the deep investments and

[308] Fredric Jameson, *Postmodernism*, pp. 15–16.

adventures of subjectivity in capitalist production, Maurizio Lazzarato writes, "It is not simply that intellectual labour has become subjected to the norms of capitalist production. What happened is that a new 'mass intellectuality' has come into being, created out of a combination of the demands of capitalist production and the forms of 'self-valorization' that the struggle against work has produced".[309] His statement (that, by talking of a "struggle against work" refers back to notions of work and labour developed in the context of the old operaist movements in Italy) can underline the importance of mobile phone studies, not understood as a unitary approach from one field of knowledge and inquiry, but from a much more general, philosophical one. Lazzarato continues, "the management mandate to 'become subjects of communication' threatens to be even more totalitarian than the earlier rigid division between mental and manual labor (ideas and execution), because capitalism seeks to involve even the worker's personality and subjectivity within the production of value."[310]

"Subjectivity" as used today may at times give one the impression that it is inextricably linked to an activity of nurturing the economic system. This process can be reversed into a cycle of production: the economy feeds a mobile subjectivity. In other words, subjectivity becomes camouflaged. In the context of mobile telephony, it becomes a conceptual, communication technology-based subjectivity.

Thinking back to my experiences curating the documentary section on the Coltan monopoly and its political and social consequences, both for the exhibition and the symposium in Malmö, (as I wrote in chapter B.3.6.) I could not help noticing that my own intentions were so easily flipped over to become an act of consumption. But I did not know where to look for the actual problem. After thinking about how immaterial production today is related to the individual subjectivity and the social system, I had to consider, without noticing it myself, whether or not I had constructed my "own" (general) ideology. Ideology

[309] Maurizio Lazzarato, "Immaterial Labour", 1997, see http://www.generation-online.org/fcimmateriallabour3.htm.
[310] Ibid.

is already a mode of subject production, one in which subjectivity is alive, and in which it is reproduced. Accordingly, when I presented my intentions, they could immediately be consumed by the audience of the conference. Lazzarato says, "The capitalistic entrepreneur does not produce the forms and contents of immaterial labor, he or she does not even produce innovation." Under such a circumstances one of the questions to be drawn from this study could be: what are artists, curators, or the so-called "cultural producers" actually producing, and how? Or, there is another interpretation: Is this an era where these producers happen to cater to the capitalist market of subjectivities more than before, with their laterally developed, mobile subjectivity?

Conclusion

In so many preliminary formal and informal conversations, one experience proved quite long-lived: until now, the study of the effects of mobile telephony is not a particularly "arty" topic, at least not in the way that "migration" or "identity" are. Apart from the critical proximity to market and industry that has informed and sometimes also warped research, this may also attributed to the fact that under the impression of research enterprises such as "visual studies", media discussions have recently been conducted with decreased investment. It absolutely makes sense that topics like migration, war, capitalism, gender, labour, race, and nationalism that had been discussed in what was once a primarily academic context have come to be discussed from a multiplicity of geopolitical, economical, ethical, social, and other viewpoints, an important one being that of the art field. As currency within the artworld cannot and should not be confused with critical relevance, it at least remains to be said that – however they were used or addressed – these thematic complexes were not the most popular ones in the field of contemporary art. However, the mobile telephone is discussed quite rarely. Just as the telephone in general has tended to be a "neglected medium," the mobile telephone has also been more or less avoided in this field and automatically pushed away into the corner of "media art" / media studies or sociology. But even though popular phenomena around the mobile phone are so powerful and ubiquitous, why is it hardly ever taken as a starting point for philosophical examinations of what informs the contemporary? History is moving – more than thirty years ago, as early as 1973, Jürgen Habermas already stated that the technological changes in interpersonal communication had begun to open up a "new dimension" for subjectivity. All the phenomena around the mobile phone can be understood as indications of emerging new cultural symbols and meanings.

This is why it seemed of particular importance to think about the mobile phone by combining and juxtassembling the different perspectives of artworks, curatorial and documentary strategies, and other visual and acoustic references.

Starting from my own personal interest to discuss the question of how mobile phones affect and change communications today, I curated three art projects – in Malmö, Bangkok, and Lund – between 2002 and 2006. By analysing the eleven artworks in these projects, and the other visual and acoustic material I had collected, I tried to describe and analyse mobile phone culture in terms of its role in "everyday reality", that is, from a more integrative philosophical point of view, rather than by following strategies of media studies or sociological discourses. In addition, the combination of diverse visuals arranged by a process of free association or word play led me to a different creative (ab)use of the medium and also helped to contour the problematic aspects of its hegemonic characters.

I have also developed the argument that mobile telephony (as the totality of its imaginable uses) is creating a fundamental shift to start a new process of configuration of self/selves in everyday life. That meant I had to put emphasis on an analysis of the device not as a producer of space ("territorial machine"), but rather as a catalyst for new forms of subjectivation and subjectivity. The shift that the mobile phone is creating implies and reflects quite complicated contemporary conditions. One is a new culture of listening: an attitude of listening to sound over earphones within a acoustically defined "sphere", the ambient cocoon; DJing, the game of chance with random and planned acoustic events, has produced different modes of listening and also a model for the individualised (late- or post-industrial) practice of multitasking in interpasssivity. Synchronised with other conditions, the new culture of listening can be understood as producing an "amputation" of a hypothetical sensory balance, leading to a state of "injured listening". Another condition worthy of study is that the new mode of the self is deeply involved with geopolitics and the

commodification of immateriality in capitalist systems of the mobile information network age.

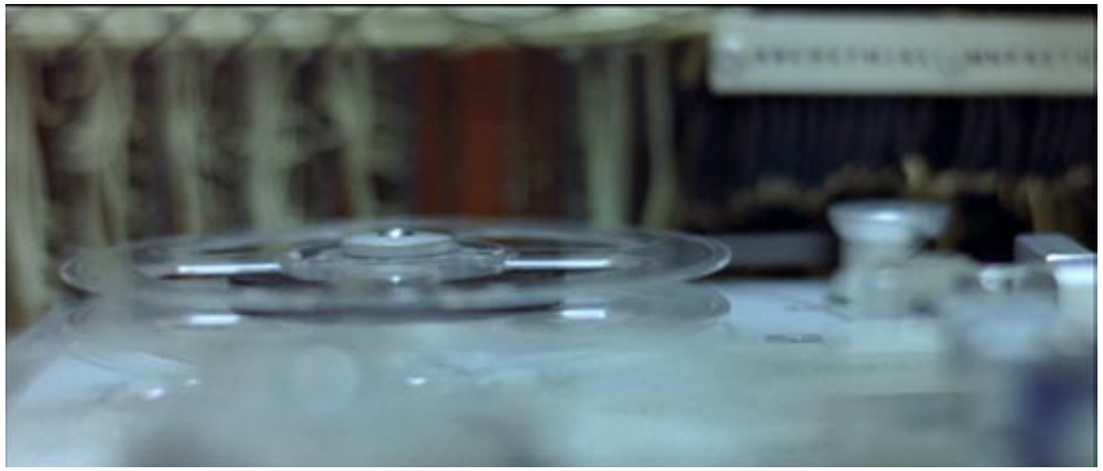
In this paper, and through my curating, I tried to propose a re-insertion of thinking politics by reflecting the mobile telephone – without idealising theoretical assumptions of political thought. Today, communication, commodification, and consumption are inseparably united into one process of conception, organization, realization, production and execution. As seen in several artworks in The Invisible Landscapes, in these steps, the role or the division of labour is constantly shifted and reimposed. This results in mutually and deeply affecting conceptions of the subject, and readdresses definitions of "creativity" and "authenticity". Individual subjectivities are not only the content of cultures anymore, but also a transformed economical production, which eventually feeds back subjectivities that have been exhausted and emptied out by capitalism.

On the other hand, the accessibility granted by mobile media seems to speed up the perception of time that is filled with constant communications providing organisation and management. But even under all the aspects enumerated here, the paradoxical nature of the mobile telephone is not so easily grasped or crystallised. Shifting subject positions can be endlessly rearranged and camouflaged as a consequence of the new forms of social ordering and conditions that have been described as forming a "flat psychology". But such subjectivities may exhibit different understandings of concepts of subjectivity, one implication being that the "mobile subjectivity" that has developed around mobile telephony is operative in its immaterial character.

Toward the end of this paper, I addressed the idea that "flat psychology" may be an adequate way to describe a model of thinking mobile subjectivity. This will be the perspective of my future studies departing from The Invisible Landscapes. The notion of "flatness" is already an overdetermined expression in diverse fields: not only in those contemporary identity politics that Ernesto Laclau and Chantal Mouffe refer to, or as used in

the postmodern philosophy and aesthetics that Fredric Jameson developed, or in histories of Western modern art from Clement Greenberg to David Joselit; it is also relevant for East Asian aesthetics as well as for contemporary cultures including digital media or popular cultures, contemporary art practices, and others. In the next step of my studies on mobile subjectivity, I will consider further developing my argument by researching different significations of "flatness," derived from multiple resources in historical and contemporary artistic and cultural phenomena in the everyday, and rearticulating this notion in relation to mobile telephony.

Appendix

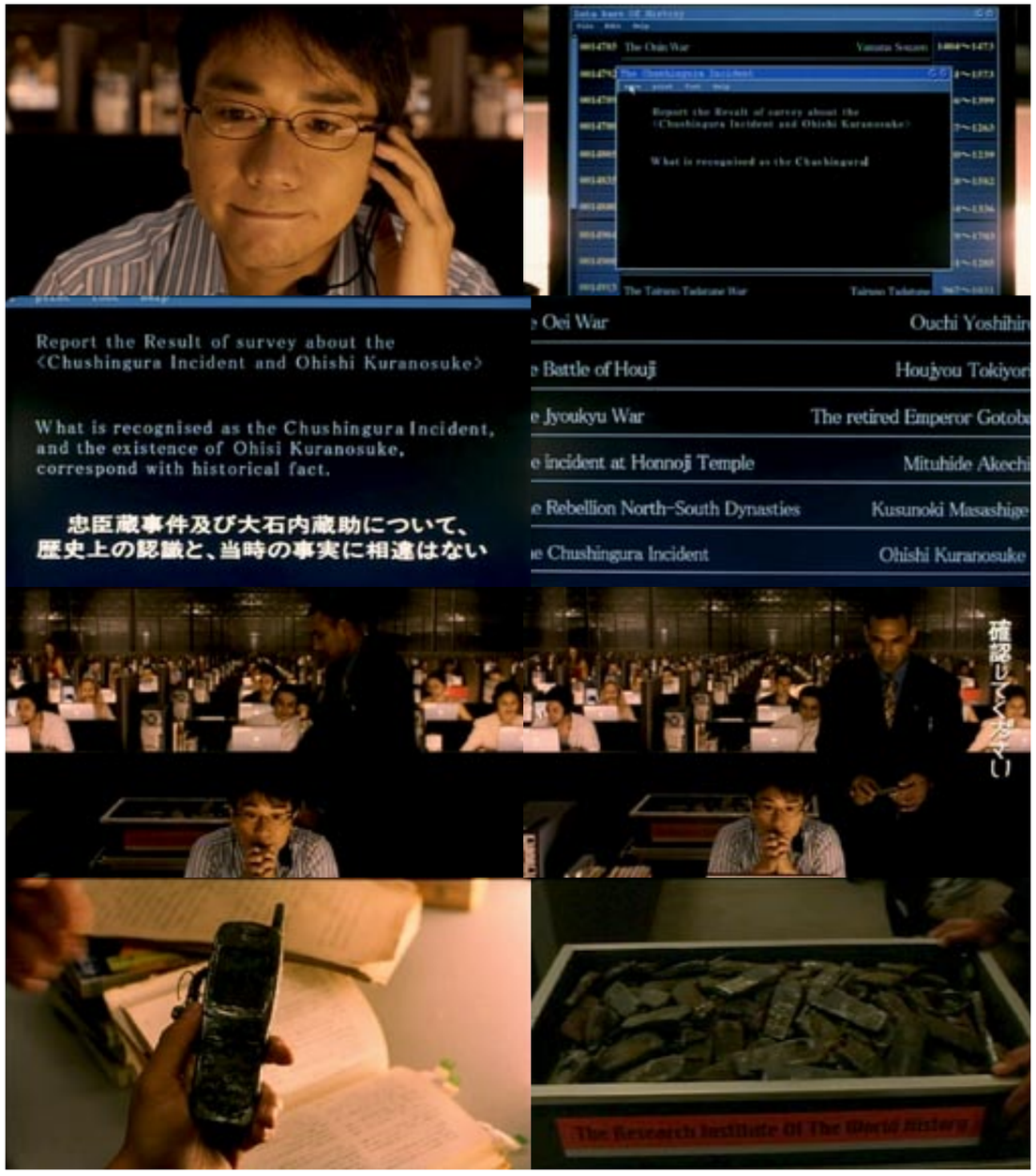


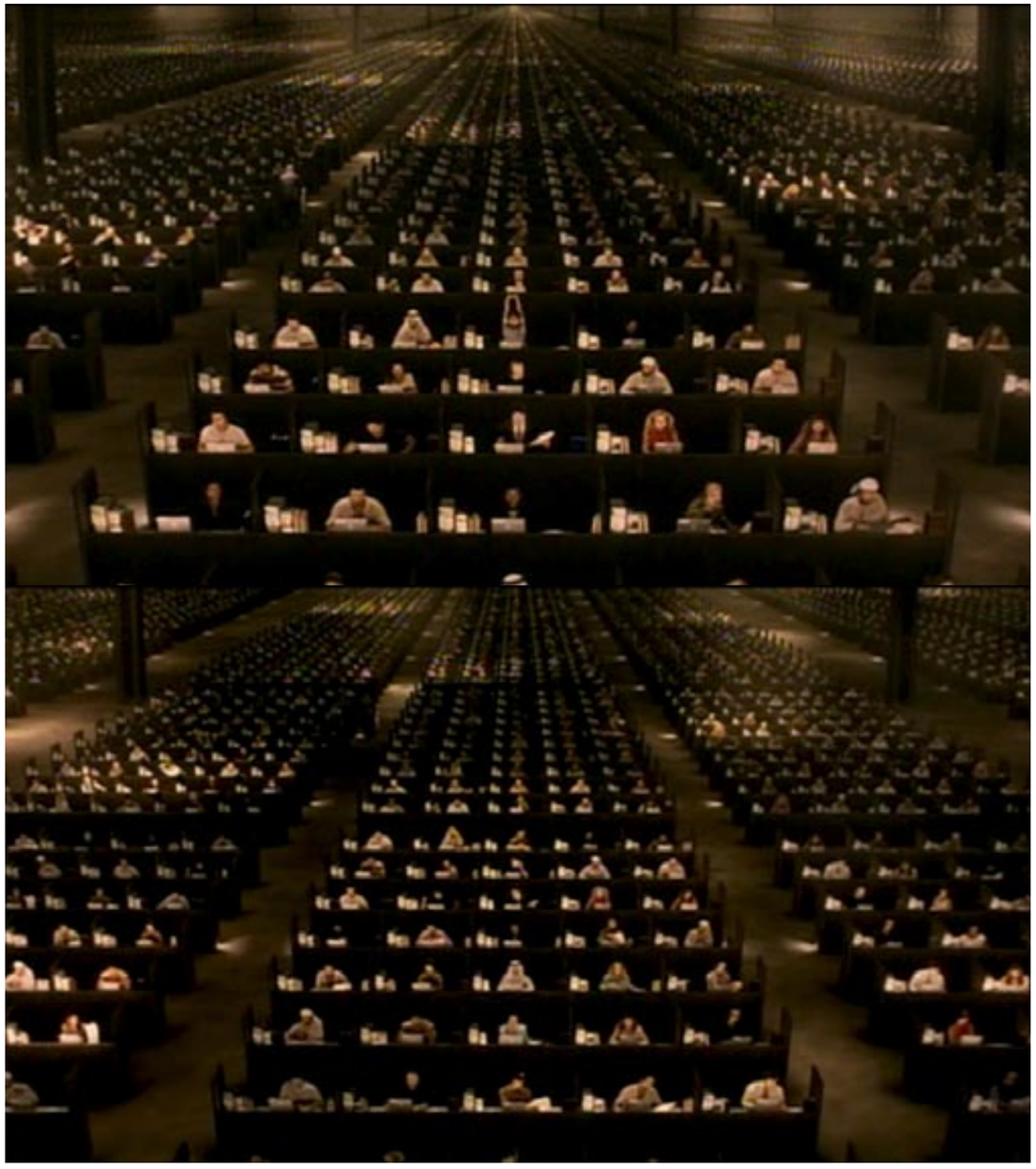
Video stills from “THX 1138,” USA 1971, Director: George Lucas

Video stills from "One Missed Call," JP 2003, Director: Miike Takashi

Video stills from “Samurai Cellular,” JP 2000, Director: Suzuki Masayuki

Video stills from "Samurai Cellular," JP 2000, Director: Suzuki Masayuki





Video stills from "Samurai Cellular," JP 2000, Director: Suzuki Masayuki

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Appendix:

Video stills from "THX 1138," USA 1971, Director: George Lucas;
video stills from "One Missed Call," JP 2003, Director: Miike Takashi;
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