



How Space and Zones Gain Existence: Surveillance and Political Control on the Spot

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Surveillance and political control take place 'on the spot'. By working in such a way, they constitute a spatial existence that, owing to the various technologies of surveillance and control, is topographically drawn and not only restricts certain areas and borders but also creates these in the first place. These technologies include RFID as it is used in the food industry, passports, clothing and shoes, surveillance cameras (CCTV), cellphone technologies, GPS, and standardization technologies in the health industry. The use of digital media allowing data transfer and data processing over distance is the decisive factor.

Given these circumstances, what can existence, non-existence or the crossed-out non-existence of space and its location — for example that of the economic, geographical and political space of Europe — signify? How is space localized? What would be the location of space? How do space and zones gain existence?

Outlined, determinable, identifiable spaces are created in spite of all the apprehension and hype concerning globalization. For example these include the development of a modern Europe — in other words: the intensified movement towards identification and delimitation that can be seen as re-territorialization. A European space is created along the lines of historical tradition with the European Union, and this is a space that both delineates and observes areas within and controls and economizes areas without. This takes place through delimiting definitions such as accession country, candidate countries (for example Turkey, Macedonia, Croatia), or in delimitation from states that do not belong to the EU in any way at all (for example Iceland, Montenegro, Norway) and other continents too.

But the widespread assertion — in particular in media and cultural theory in the 80ties and 90ties of the last century — fears the disappearance of space, also called deterritorialization and denationalization whether policies, capital political subjectivities, urban spaces, temporal frames as a result of contemporary transport and transfer technologies and the development of digital networks as well as. It is particularly this thesis, which is frequently raised in debates on technological developments and trends in globalization and has led to the return of the subject of space in conferences, exhibitions, and other cultural and political discourses. In this case, the argument reads as if space were a direct part of the human body now endangered by the new media. Do not exist. As if it was the digital medium, itself not visible or tangible without a sustainable codification system that had caused this allegedly directly tangible space to disappear.



Modern strategies of surveillance and control systems, which are in many ways dependent on the use of highly developed media technologies, determine both the constitution of borders and spaces and also the dissolution of localities and states, and of the points of transition between what is called physical space and data space — all in all the extension of spaces. These strategies can extend closed geometric space and also re-encircle opened-up space. It is these strategies that strike out the non-existence of space by erecting borders again or setting up bulwarks. They also, however, question any exact positioning ‘on the spot’ by for example placing whatever takes place within a fixed network that can never be complete due to the immeasurable amount of data. One question would be: Do these mechanisms mean the process we call globalization must include studying these processes of deterritorialization and denationalization?

I would now like to consider the paradoxical situation in the theory of space that is expressed by the typographical crossing out of the word ‘exist’ in the following steps:

Space is disappearing. Space no longer exists. What is the theoretical premise that underlies this thesis? To what extent is it necessary to assume a direct physical state of space and not an ‘as if’ of the phenomenon in space that creates the space, as the German philosopher Immanuel Kant, for example, argued?

Which philosophical premises underlie this apocalyptic rhetoric of loss, which claims that space is disappearing or no longer exists?

What roles could the distinction between place and space play, or the question of the place or location of space? To what degree is an empty space assumed to be omnipresent?

Surveillance systems, by which I mean the manifold technologies that together create the close net I referred to earlier — RFID, GPS, cellphone technologies, CCTV, do not only make it possible to cross borders, but also create their own areas. To what degree is the disappeared or extended space delimited by this? To what degree can mechanisms of exclusion and inclusion take effect?

But any border itself works as a technique of difference that makes the space and thereby also itself evident. The border is part of an ‘atopical horizon’ that, as it were, opens the border up again into the field of globalization.

The disappearance of space

As early as 1837, the inventor of the telegraph, Samuel Morse, thought that his machine for transporting and recognizing signals would overcome space and turn the United States into ‘one neighborhood’. A short time later, the author Heinrich Heine came up with a more drastic formulation, referring to the development of traditional means of transport: the railway will kill space and we will be left with only time. A century later, the same basic idea recurred in Carl Schmitt’s geopolitical theories: aircraft and radio are more and more undermining the territorial sovereignty of the state, because airplanes can fly across states without impediment and electric waves circle the globe through the space of the atmosphere incessantly and at incredible speed. The media theorists Paul Virilio and Peter Weibel claimed, for example, that the significance of space was on the wane. They argue that distances can be more and easily overcome due to devel-



opments in digital media and communications technologies. Ideas such as the ‘death of distance’, ‘time-space-compression’, the ‘placeless society’ and the ‘end of geography’ have become commonplace — as a result of the global networking of teletechnologies. The ‘natural’ body, so it goes, is replaced by teletechnological surrogate bodies, and with the renunciation of the body comes the acceleration of the message. The disappearance of space would therefore require the disappearance of the body that occupies it. The result would be, according to Virilio, that history no longer takes place in local places, in regions or nations, and that geopolitics and geostrategy are passé, and that war no longer takes place at a locality — which Virilio sees as making it immaterial.¹

The basic requisite for this assumption is a binary structure: a distinction between far and near, material and immaterial. The ‘near’ space, or direct space, is postulated as given and as having undergone dissolution because its counterpart, distance, has been assimilated. The state in the age of the computer can therefore no longer be measured by the criterion of the sovereign state defined by territory (the nation state).

But this leads to my question: what does it mean when something takes place at a certain place? Where is that place and how can it be inscribed in what space?

What does it signify if RFID technology becomes the alleged ‘real close-up’ standard in any number of fields from agriculture to the food industry, seeming to combine environment and IT and thereby tracking all the paths taken by the product and the buyer and seller? Is it not the case that this technology that transgresses borders in a further sense, expanding and multiplying trajectories of communication, actually closes down an open space and thus constitutes another homogeneous space? How can we conceive of space that disappears? Or put another way: which space is actually disappearing? Is it the gap between data-cizing and the world that disappears when simulations and surveillance technologies are awarded integrity?

The word ‘space’

The etymology of the German word ‘Raum’ (English: ‘space’, ‘room’) can provide some insight into our notions of space. The noun ‘Raum’ is derived from the verb ‘räumen’, which means ‘make space’, ‘clear’, ‘free up’, ‘leave’, or ‘carry away’.² ‘Raum’ thus denotes both the creation of a space, making something ‘urban’ for example, and also the place itself. ‘Raum’ first stands for a process of locating, delimiting and drawing borders, and then the place itself.³ This chain of significance emphasizes that space is brought about through human activity — through action. Put simply, two basic perspectives and concepts of space can be identified: space cannot be conceived without the objects that occupy it. The same idea from a different perspective is, of course, that a physical object cannot be conceived without space.

¹ Virilio, Paul (1980): *Geschwindigkeit und Politik. Ein Essay zur Dromologie*, transl. Ronald Voullié, Berlin.

Virilio, Paul (1989): *Die Sehmaschine*, transl. Gabriele Ricke/Ronald Voullié, Berlin.

Weibel, Peter (1990): ‘Vom Verschwinden der Ferne. Telekommunikation und Kunst’. In: Weibel, Peter/Decker, Edith: *Vom Verschwinden der Ferne. Telekommunikation und Kunst*, Cologne, 19–77.

² Kluge, Friedrich (2002): *Etymologisches Wörterbuch*, Ed. Elmar Seebold, Berlin/New York.

³ Schroer, Markus (2006): *Räume, Orte, Grenzen. Auf dem Weg zu einer Soziologie des Raums*, Frankfurt a. M., 29.

“Raum steht für einen uralten Ausdruck der Ansiedler (...), der zunächst die Handlung des Rodens und Freimachens einer Wildnis für einen Siedlerplatz bezeichnet (...), dann den so gewonnenen Siedlerplatz selbst.”





Space and place

Kant's considerations on space were not consistent, but, as already mentioned, he did see 'absolute space' as a conceptual fiction and he did not understand space or time to be empirical concepts. A priori space is the basis of every empirical observation.⁴ But, if we follow Kant's ideas, we can never distinguish whether phenomena are really in space or whether they just appear to be. Therefore, space is created by the human imagination, even if Kant sees the idea as linked to a sensation of the hand — both left and right.⁵ In this imagined space, places would be positions that are drawn and depict space or give space its place, so as if it existed. This is a paradoxical structure that the philosopher Michel de Certeau attempted to describe on a different level.⁶

Certeau sees place as an order that divides up elements in relations of coexistence. This rules out the chance of two things being in the same place. The law of the self applies: one element is seen adjacent to the next, and each is located in its 'own' separate area, which the law defines. A place would therefore be a momentary constellation of fixed points. Certeau writes 'a place seems to be defined by an immobile body'. A space, on the other hand, arises 'when vectors, speeds and the variability of time are brought into play'. In all, space is a place with which one does something.

To summarize: what the rhetoric of loss sees as disappearing is a bodily space that in fact will never have existed in that form. This is particularly the case when it is assumed that space always comes about through action and processes of location, or would be present only in the imagination.

The augmented space

Working from the concept of 'augmented reality', the media theorist Lev Manovich posits the idea of 'augmented' space as a counter theory to disappearing space and links his description of this augmentation or expansion of space to modern methods in surveillance technologies. That means: he shows that the augmentation of space is necessarily bound up with comprehensive control of that same space and therefore ultimately — and once again — its fixation and limitation.⁷

According to Manovich, augmented or also dynamic space arises as follows. Physical space — as Manovich puts it — is subjected to both data extraction and data input by means of video surveillance, cellphone technologies, RFID and GPS.

This idea mentions a space inside and a space outside.

The technologies used are both location-dependent and independent of any fixed location. Manovich uses the concept of cellphone technology to denote location-dependent cellphone ap-

⁴ Kant, Immanuel (1787): *Kritik der reinen Vernunft 1*, Transzendente Elementarlehre, Erster Teil. Transzendente Ästhetik. 1. Abschnitt. Vom Raum, Ed. Wilhelm Weischedel, Frankfurt a.M. 1997, A22/31, 71–78.

⁵ Kant, Immanuel (1786): 'Was heißt sich im Denken orientieren'. In: Kant, Immanuel (1968): *Schriften zur Metaphysik und Logik I*, Werke V, Ed. Wilhelm Weischedel,

Frankfurt a.M. 1968, A304–A330, 267–283.

⁶ Certeau, Michel (1997): "Räume" und "Orte". In: *Atlas Mapping*, Eds. Sabine Folie/Paolo Bianchi, Vienna, 132–141.

⁷ Manovich, Lev (2005): 'Die Poetik des erweiterten Raumes'. In: *Topos Raum*, Eds. Angela Lammert/Michael Diers/Robert Kudielka/Gert Mattenklott, Berlin, Nürnberg: Akademie der Künste/Verlag für moderne Kunst, 337–351.



plications, such as the use of a mobile telephone to check in at an airport, and also independent applications like ascertaining your coordinates via GPS and checking e-mail via cell phone.

The surveillance, creation, and delimiting of spaces is, according to Manovich's theory (which I am following here) dependent on data flowing into physical space and being accessed, and also on data being taken out of the physical space, primarily by means of sensory technology etc. These ideas premise the existence of a direct space in the sense of an augmented physical space. A structure that can be defined more clearly when examining the manifold and widespread marketing and uses of RFID technology and the other so called key technologies today including Global Positioning System (GPS), Contact Smart Card, Fingerprint Biometrics, 1D and 2D barcode scanning, imaging, Bluetooth and GPRS/GSM.

RFID

In communications technology transponders are used — devices that receive radio signals and react to them by sending their own signals. Such a transponder, as a magnetic strip, is bombarded with electromagnetic waves by a sensor — an example would be the use of the technology behind a cash counter. These sensors permanently transmit signals, like a tracking signal, and wait for possible answers. The transponder contacted reacts by sending a weak but recognizable electromagnetic signal, which is interpreted by the sensor station. If, as in RFID technology, a minute chip is added to these transponders, then the return signals can be used as precise identification codes containing more information, comparable to barcodes on packaging. Earlier and more simple systems were only able to transmit a signal, perhaps saying 'help, I've been stolen'. Today, it is possible to use the additional chips to communicate much more complex information. It would be fair to say that wherever identification is the issue then RFID seems to be the solution, with a rapid effect over up to six meters. 'RFID provides answers to requests for information when dealing with objects close by' is the formulation used on the *Europa-Digital* website.⁸ These answers would now theoretically be available everywhere and could be accessed for example when meat production is under observation from the butcher's counter to beyond state borders, or when milk production is supervised and the milk cartons automatically indicate that they are about to reach their sell-by date, or when data relating to supermarket customers is stored individually, or when a disco-goer pays without cash or cards. Identification and tracking systems are also in effect when the chip in a passport is used to detonate a bomb, if the corresponding identity (nationality for example) can be identified by distance sensors.

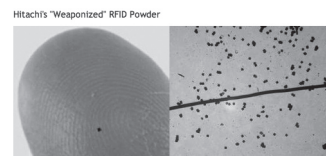
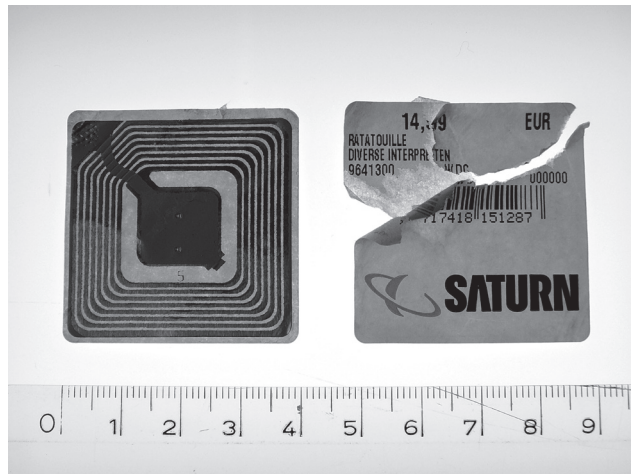
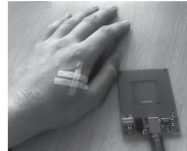
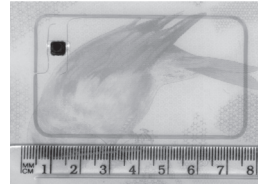
The examples illustrate why the use of RFID chips could signify an augmented space in Manovich's sense, a physical space that is 'compressed by data'.⁹ In this space each point can potentially contain different information that is transferred from somewhere else. And various sensors can be used to select information from each point in the space and to record facial expressions, gestures and other human activities or temperature and degrees of light. Various augmentation technologies could be seen as control and surveillance technologies, giving the

⁸ Europa Digital: <http://www.europa-digital.de> [last access: 05/10/2008].
⁹ Manovich 2005: 337–351.



RFID on the spot.

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RFID Schlüsselanhänger



Durch das Lesegerät abgerufen werden die Daten per Funk übermittelt.
Bild: Siemens



physical three-dimensional space a new dimension and making it a multi-dimensional space. The loss of significance of geometry, which is expressed in these augmented or compressed data spaces, can be seen as part of large paradigm shift. Whereas the organization of a society determined by digital media and electronic networks was carried out on the basis of the straight lines of human vision (following Michel Foucault's metaphor of the panopticum¹⁰, which is used inflationary¹¹ and could be now substituted by hypercontrol¹²), and therefore on the geometry of what is visible, this is no longer the case in the surveillance society of telepresence and sensorics. Some technologies using video surveillance and infrared communication do still require a line of vision, but this is not the case for the majority of technologies used, including cellular and Bluetooth communication, radar, environmental sensors and RFID chips. Instead of the binary logic of visible/invisible, material/immaterial, which Virilio and Weibel seem to still adhere to, this new spatial logic must be described by means of concepts like function or field, which are organized and ordered. Within these technologies each point in a space has a defined value in a possible continuum. For example, the variable strength of a mobile radio signal is dependent on the distance from the transmitting station.

What Manovich shows is that the augmentation of space that lays a claim to producing a continuum of space also entails the surveillance of space by means of dynamic data.

A space that is compressed by data — an augmented space — can easily be exercising control and keeping borders at bay. Therefore, the development of augmented spaces by means of digital media is not hindered by the simultaneous formation of alliances of states that attempt to protect their territories in economic and geographical terms through mechanisms of inclusion and exclusion. Rather, these two trends seem to indirectly require each other.

Europe — as an example for globalization strategies

Europe exists and arises as a space that is recognized and formed as a single context in terms of geography, security politics, and economics, and yet at the same time wishes to adapt to the trend towards a globalized social structure. Globalization is taking place inside the national space to a far larger extent than is usually recognized. It is here that the most complex meanings of the global space are being constituted and the national is often one of the key enablers and enactors of the emergent global scale. Saskia Sassen writes in her book about Territory, Authority and Rights:

“A good part of globalization consists of an enormous variety of micro-processes that begin to denationalize what had been constructed as national — whether policies,

¹⁰ Foucault, Michel (1995): 'Panoptism'. In: *Surveillance and Punishment*, Second Vintage Books edition, 195–228.

¹¹ Daggerty, Kevin (2006): 'Tear Down the Walls: On Demolishing the Panopticon'. In: *Theorizing Surveillance: The Panopticon and Beyond*, Ed. David Lyon, USA, Canada:

Willian Publishing, 23–46.

¹² Bogard, William (2006): 'Welcome to the Society of Control: The Simulation of Surveillance Revisited'. In: *The new Politics of Surveillance and Visibility*, Eds. Kevin D. Haggerty/Richard V. Ericson, University Press Toronto, 55–79.



capital, political subjectivities, urban spaces, temporal frames, or any other of a variety of dynamics and institutions.”¹³

She says also

“There is a sort of invisible history of the many moments and ways in which denationalizing tendencies failed to materialize and succumbed to the powerful currents of national, still alive and well.”¹⁴

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Both are part of the globalization process as well as part of the control and surveillance systems: the deterritorialization and the territorialization, the denationalization and the nationalization.

How does Europe — as a space, a concept, strategy — take part in this globalization process?

The geographical entity of Europe today consists of forty-six states. It is seen as a discreet continent, although it in fact directly borders Asia.

There is a difference between the political and economical Europe and the geographical Europe. The European Union is a union of states with to date twenty-five states that do not all belong to geographical Europe. Cyprus, for example, belongs to the European Union although it is seen as geographically located within Asia.

The Union claims to pursue both inter-governmental and supranational interests in the sense of the European community. It is the product of several other European alliances since 1951. According to the conservative US government advisor, Patrick Buchanan, speaking in 1998, the process of the formation of a ‘United States of Europe’ can only lead to an ‘artificial Europe’.

“Thus, we all have a stake in the experiment to create a giant artificial nation called the ‘United States of Europe.’ (...) Europe’s peoples have been separate for centuries. Unlike America, this new Europe is simply a customs union tied together by bureaucracy and greed. As Ernst Renan wrote long ago, ‘A Zollverein is not a fatherland’ — a customs union is not a country.”¹⁵

It is based on bureaucratic processes and prioritizing economic concerns, quite unlike the more organically developed United States.

This argument is based on the hypothesis of a difference between an organical and an artificial space. Also, this argument must surely be countered by the fact that the USA certainly works with similar inclusion and exclusion mechanisms to protect its borders and ascriptions of identity, just as the European Union does by means of its own criteria on accession and its constitutional rules. There are both strategies: The denationalizing process of certain components of the economy and the renationalizing in some components of the immigration policy — both processes structure the complex architecture of globalization strategies in Europe.

13 Sassen, Saskia (2006): *Territory, Authority, Rights: From Medieval to Global Assemblages*. Princeton University Press, 1.

14 Sassen 2006: 2.

15 Buchanan Patrick J. (1998): *Europe the Artificial Nation*, May 4, www.buchanan.org/pa-98-0501.html [last access: 05/10/2008].



On the European level cross-border surveillance strategies are particularly significant in both security politics and food industry, as in the case of meat and milk production, also the fight against terror, and identification mechanisms in border, territorial and economic control. In this respect the apparently paradoxical strategies that both produce physical and geographical space and in augmenting it also make it disappear again are in fact just the two sides of one coin. In the strategies of control and surveillance — some of which I have presented briefly here — an augmented space is controlled on the spot. And it is this simultaneity that provokes the crossing out of the not exist of space. Europe does not exist.

Beyond the horizon

I would like to again consider this position with a theory of space, following Tholen's question. Are there traces of another theory of space that would be sufficiently open to take seriously the indisputable fact of telematic change but without sacrificing itself to the melancholy of a total loss of space?¹⁶ This could only succeed if the ghostliness or the open unhomeliness of space (Derrida) could be situated in such a way that would guarantee that what is known as public space really would become space.¹⁷ And not only in the sense that a disappearance would have been produced to produce phenomena, but also going beyond the alleged given pre-existence of space. The exploration of the given of the spatial affectability — this could be what is worth holding on to from all the examples from Kant onwards. The mediator would be the translation of the imagination into a creative force, provided this would be a reaching out to the other without origin or home.

That would mean: a horizon that presupposes its own anticipation. The atypical horizon, as formulated by the media theorist Stefanie Wenner¹⁸. The horizon stands for the border and the expansion of the here. And it would therefore be a function of augmented or expanded space. The horizon determines everything that is horizon-like, but is not contained within it. Therefore, the horizon would be the margin of the spatial, and itself a part of a technique of difference in making things apparent. It would be the border and its opening. It regulates and bestows meaning on whatever it frames; it closes in so you can see what you do not know. This would be the figure behind the paradox that runs through this text: space implodes at the horizon and also expands and augments the here. It produces oscillation between here and there and in its atypicality it sets off a desire. In this way it would also be the desirous crossing out through not exist, which could also guarantee its becoming space.

¹⁶ Tholen, Georg Christoph (2007): 'Der Ort des Raumes. Zur Heterotopie der Einbildungskraft im 'digitalen' Zeitalter'. In: *Topologie. Zur Raumbeschreibung in den Kultur- und Medienwissenschaften*, Ed. Stephan Günzel, Bielefeld, 99–115.

¹⁷ Derrida, Jacques (2004): *Marx' Gespenster. Der verschuldete Staat, die Trauerarbeit und die neue Internation-*

ale, transl. Susanne Lüdermann, Frankfurt a. M., 175.

¹⁸ Wenner, Stefanie (2005): 'Die Atopie des Horizonts und die Erweiterung des Hier. Medienphilosophische Erkundungen'. In: *Schnittstellen, Basler Beiträge zur Medienwissenschaft*, Eds. Sigrid Schade/Thomas Sieber/Christoph Tholen, Basel, 379–389.





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Figures

Fig. 1–24: From the digital archive of the author.