A city revised: representing or recreating the urban space as a polygon experience – a discussion of the case of virtual Turku

Tommi INKINEN

Tommi Inkinen, University of Turku, Department of Geography, FIN 20014-Turku, toalin@utu.fi

Abstract

The Internet has provided a new means to represent urban space. The development of modelling languages, like VRML, has given us the tools to recreate urban locations on the net. In this paper, the virtual image of Turku, a city located in Southwest Finland is discussed. My approach is twofold. Firstly, I focus on the 'official' city web-page and its two dimensional textual appearance. This constitutes the essence of virtual city as 'public' project. Secondly, there is a challenging new field that combines aspects from computer sciences, urban studies and Internet research. This refers to three-dimensional city models that are used to represent an exact copy of the material space of cities. The analysis is based on interpretation of interviews and contents of the two site structures. The following conclusions are proposed. The mission of a virtual public city is twofold: it is a local project, purposed to build a new and efficient medium to connect the administration and citizens; and it is also a global/national project, a medium of advertising and giving knowledge of the tourist possibilities and attractions. On the other hand, the private virtual city project is based on potential future incomes. It is a means of gaining profit via expanding possibilities provided by e-commerce.

1 INTRODUCTION

The theme of wired cities creating a single ominopolis, a world-wide-city as Crang (2000: 302) puts it, poses challenging question to those studying the impact of technology in social development. Most Finnish cities have begun to use the Internet as a medium to provide information to the public and also to 'boost' their image. In this paper, I am going to discuss the virtual images of Turku, a city located in the Southwest corner of Finland. Finland is one of the most advanced high-tech countries in the world. The proportion of Internet connections per capita is the highest in the world, for example (www.c-i-a.com, 2000; www.mids.org, 2000). The relationship between city-space and e-space is a complex one. Several interest groups with different goals are behind the development of 'virtual' cities. The city administration has its own agenda that is often connected to the provision of 'official information', mainly in two-dimensional form. This web-site can be found at <www.turku.fi>. Secondly, private actors have started to pay more interest to the possibilities for virtual city-space as a part of their marketing strategies. In Finland these actors are usually local telephone companies providing Internet services and connections. These operators have ambitious projects for re-creating the city space in 3D-form. The reference is to the projects, in which the city space has been modelled on the Internet and the user is able to interact with the model. I evaluate both the official Turku web-site and the privately funded city model project known as 'virtual Turku' <www.virtuaaliturku.fi>.

The empirical comments on this paper are based on interviews. From November 1998 to August 2000 totally 73 depth- and 228 'street survey'-interviews have been conducted. Most of the interviewees were either computer professionals or critical cultural scientists. However, 'ordinary' citizens were also interviewed, via street surveys. Based on results of these interviews I suggest that a personal connection to 'computerisation', mainly via occupation, is the major factor in the formulation of discourses and attitudes related to 'virtual' entities. In addition, older and more traditional forms of media, like newspaper, television and radio have created an extensive 'hype' about this issue. Now advertisements effectively promote ideas of virtual tourism and new opportunities to consume. These ideas connote the fundamental basis of this paper. The two questions are interwoven and therefore strict separation of the issues is impossible. The themes are synthesised together and a critical approach will be proposed.

2 THEORETICAL PERSPECTIVES

There are several geographically challenging issues related to Internet representations. Firstly, the debate of the 'end of distance' and the 'anti-spatialisation' of performing action (e.g. Mitchell 1995) is popular. The connection can be drawn to the 'world' city idealisation, and global information exchange. The global network is said to diminish the strains of distance, resulting in every city being accessible from any location. This derives from to the McLuhan's (1964) ideas of a global village. The role of geography is seen as a simple concept of distance. There are, however, several factors and themes that have to be taken into consideration. Space itself is not a fixed container (e.g. Foucault 1979; 1978). It is produced through social interactions, subjective interpretations and senses of belonging to someplace. The idea of a 'global' village generated by electronic communication systems seems to be a simplified alternative, in which the deeper understanding of human subjectivity is disregarded and ignored.

Secondly, there is the utopian dream of moving large segments of public life into electronically mediated environments. This dream refers to the transformation and substitution of everyday actions from the material world into global and local electronic networks. Taken to the extreme, this transformation would let the inhabitants to live their lives online. Rhetoric surrounds by media hype that is often generated by 'visionaries' like science fiction novelists or overly optimistic 'computer prophets'. For example, in June 2000 the Time magazine published a collection of articles dealing with digital futures. Some of the articles were entitled as "*Will my PC be smarter than I am?"* by Kurzweill; "*Will we plug computers into our brain*" by Gibson and "*Will everything be digital*" by Negroponte. These voices are strongly brought to Finnish public attention also by national newspapers:

- "*Enter the fourth dimension of the city*" (Helsingin Sanomat 7.7.2000, translation by TI)
- "*Information technology frees us from the constrains of location*" (Turun Sanomat, talousliite 26.9.2000, translation by TI)
- "*The surfer on the sites of European cities of culture navigates between information and travelling advertisements*" (Helsingin Sanomat 23.2.2000, translation by TI)
- "*A city tour on the net is an experience* " (Turun Sanomat 3.11.2000, translation by TI)

The substitution dream is related to the contemporary space theory (e.g. Simonsen 1996; Harvey 1989). The electronic city-space relies heavily on visualised properties, and thus the loss of significance of other senses, such as taste and feeling, should be acknowledged. Therefore, the equality between real- and cyber-space in terms of social interaction might be challenged and reconsidered. I would emphasise the role of the mental impact that Internet interaction brings about. These impacts cause an experience that I would define as the core of mental space. Indeed, that the perception or experience is *not* the same if Internet communication is compared with actual face-to-face conversation. However, this does not imply a lesser importance of informational significance being achieved by these non-material interactions. It is important to understand and evaluate the meaning of the information gathered from the net, and via that indirectly take into consideration the impacts on the real-world caused by these electronic encounters (Kitchin 1998: 387).

Thirdly, the public/private dialect is important. Evaluating the traditional 'public' nature of cities in relation to newly emerged tendencies of private actors using cities in their development projects is a challenging new field of study. Different types of virtual city models are of importance in this respect. In the 3D Turku project, one fundamental objective has been to mimic the real city in as detail as possible. This extends to function as well as appearance and so the virtual streets of Turku are also designed to be market places. In this way these electronic environments are seen as a tool for generating future income for the companies. This development will be interesting. For instance, will the spatial services in the virtual cities be 'leased' to the companies located in the physical analogy? An entrepreneur may be offered a chance to 'locate' his virtual firms access point in this space, for an extra charge. The privatisation of space debate seems quite relevant in the case of Internet cities that are constructed on private bases.

2.1 The virtual image of Turku: the public web-site project

Two interpretations of a city's public web-site purpose are suggested. On the local level, the site can be regarded as a way of bringing the city administration closer to inhabitants, providing a means to improve city planning and public debate. On the national (or global) level, city web-sites are often used as a supplement to traditional travel guides. In this sense, the city's homepage works as an advertisement: a means to improve the image of the city – a marketing strategy. In the case of Turku the marketing aspect seems to be secondary. The site is not very ambitious technically and most of the information is presented in text form. The visualisation is limited and the purpose of the site seems to be a portal to other locations and sub-locations.

The 'official' site of Turku is mainly a local project. This argument is based on the fact that most of the information is related to local issues and is available only in Finnish. However, there is also an option for an English version, but the amount of the information is minor compared to the Finnish version. The web-site deals with the statistical properties of Turku, events that are taking place in Turku administration and other official information. An essential theme is the attempt to use the Internet as a tool of gathering information for improving and developing public locations. There is a survey being conducted in the Internet related to this on the Turku site. This demonstrates the idea of using the Internet as a medium of participating planning. The researcher who is conducting this 'click on the map to build a better Turku' project was one of the experts interviewed for this paper.

The transformation of common urban affairs into the net has potential future. However, based on the conducted interviews and statistical material (e.g. Tilastokeskus 2000; Taloustutkimus 2000) it seems that the computerisation of society is still under way. The computer is thought of more as a tool for work, a substitutive means of performing accounting, word processing, etc. Civic participation, based on information technology, will have more impact in the near future, probably when younger generations that have experienced these technologies from the early age reach decision making role in society. Common thought among the interviewees was that this 'information generation' refers to those born from 1970s onwards.

2.2 The private footprint of Turku: the virtual project

Turku is the third Finnish city to have developers building a virtual analogue of its physical space. The other two projects are of Helsinki and Tampere. These interactive 3D models of actual city space are unique. Virtual Turku covers approximately 50 hectares of the city centre. The system requirements for using the model are demanding. They include a 3D graphic adapter card and 200 MHz processor, minimum. An empirical connection can be drawn here to point out that only 46 % of Finnish households even possess a personal computer (Tilastokeskus 2000) and only a fraction of them are powerful enough to run the model. It seems that the project is accessible only to few in practice, even though it is theoretically open to everyone. The low dial-up connection is also a problem. From a technical point of view virtual Turku is based on streaming technology. The server downloads the part of the city that the user is 'virtually' located in, and therefore, provides more efficient way of creating 3D models than VRML (*Virtual Modelling Language*) for instance, in which case the whole 'packet' must be downloaded at one time. However, the usability of this implementation is low. This was clearly indicated in the interviews.

From an international perspective, virtual Turku seems to be a local project. There are no options for languages, other than Finnish. This limits the use of instructions and other textual locations on the site. This is strange, because the 3D model has most to offer to someone who is not familiar with the city. Several interviewees pointed this out. In addition, local inhabitants argued that they are aware of the existence of the virtual city models, but they have not used them. In addition, those who had visited the model felt that it is nice looking and funny to use for a while, but nothing more. It seems that developers of these projects are not taking the ordinary citizen into account. The information society must develop further so that the computer-orientated action is a *real* reality to normal people, not to high-end professionals only.

In figure 1 four scenarios are presented from virtual Turku. The upper two are taken from a touring session and the lower two are 'advertising' clips provided by the site developer. Evidently, the lower pair is more attractive, having higher resolution, a filled skyline, more objects and more colourful appearance. This is a clear example of marketing hype confusing the creation of 'virtual society'. Fine advertisements and pictorial cavalcades promise more than user actually gets.

Figure 1: Virtual Turku project illustrated (www.virtuaaliturku.fi).

3 CONCLUSIONS

The public–private dialect is essential in the creation of 'virtual' representations of the city space. The market-oriented tendency in the 3D project is evident, while the idea of civic participation through the net is the focus of Turku's official web-site. According the development executive in the 3D model project, the final goal is to create an "exact copy of the real city on the net, in which normal people can really meet each other and do shopping". This idea of purchasing things in a 3D world combines the themes of e-commerce and 'market locations'. This is one of the major reasons for private actors to fund the virtual Turku project. The question has been raised about who actually owns or determines the parameters of public/city space in the Internet analogies of cities. Can anyone create one's own 'virtual city'? Cities are, in their essence, public entities. Therefore they are not, or at least rarely, trademarks and their names are not copyrighted, yet. This development could take place also in negative sense and might lessen the image of the city. An example of this might be a web-site announcing "Welcome to Turku, the city of sin and corruption".

The Internet is a challenging object of research, because it contains a vast amount of information on several aspects of human life. The diversity of geography as a synthesising science between nature and the society provides extensive opportunities to expand and discover new dimension in geographical knowledge*s* (see Harvey 2000), particularly in the urban context. In addition, new ideas emerge rapidly, and the dynamic evolution of this new branch of geography is gaining further interest. However, a critical standpoint should be maintained and the danger of 'embracing' the technological hype has to be acknowledged. There should be considerable critical discussion about the role and essence of the information society as whole. The modern tendency seems to heavily weight the financial attributes, and in the common media forums, such as television, discussions stress the role of information technology as a tool to gain profit. The ultimate purpose of some web-sites is to provide a portal that mimics the physical reality. However, these virtual shopping streets are still quite a distant dream if an ordinary inhabitant is considered.

To conclude, there are the following points have been addressed. Firstly, the nature of the Internet combines several theoretical aspects of spatial reasoning. One possible approach is to enter the cyber-realm through concepts of public – private. However, it should be noted that these are related and interwoven concepts and therefore several questions can be asked. Secondly, the dualistic nature of the terms public – private can easily lead to misinterpretation of the fuzziness of the two. This means that it is illogical to assume that anything could be identified as purely public or private in the network. All actions and exchanges performed in the net include attributes of both concepts. Thirdly, cities use their Internet pages primarily for two purposes: 1) as repositories of official information related to the services, or 2) as an advertisement to promote their image and to 'sell' the city to tourists, corporations or in-movers. During the past decades, advertising has developed in a more visualised direction, away from a textual form (Fleming and Roth 1991: 290). The final step in this process is the emergence of virtual city models. As explored in this research, such virtual analogies are early (and exlusive) versions at the present but they posses a potential for tomorrow.

4 REFERENCES

C-I-A.com (2000) Computer Industry Almanac, Inc. 15 leading countries in Internet users per capita. <www.c-i-a.com/19980319.htm>, 17.10.2000.
CRANG, M. (2000) Public space, urban space and electronic space: would the real city please stand up? Urban Studies 37, 301–318.
FLEMING, D.K. & R. ROTH (1991) Place in advertising. Geographical Review 81, 281–291.
FOUCAULT, M. (1978) The history of sexuality, Vol 1. Pantheon, New York.
FOUCAULT, M. (1979) Disipline and punish, the birth of a prison. Vintage, New York.
HARVEY, D. (1989) The condition of postmodernity. An enquiry into the origins of cultural change. Blackwell, Oxford.
HARVEY, D. (2000) Cartographic identities. Geographical knowledges under globalization. Publication of the 29th International Geographical Congress, Seoul, South–Korea, 14–18.8.2000.
KITCHIN, R.M. (1998) Towards geographies of cyberspace. Progress in Human Geography 22, 385–406.
MCLUHAN, M. (1964) Understanding media: the extension of man. McGraw-Hill, New York.
MIDS.org (2000) Matrix Information and Directory Services, Inc. (MIDS). <www.mids.org> 20.9.2000.
MITCHELL, D. (1995) City of bits: space, place, and the infobahn. MIT Press, Cambridge.
SIMONSEN, K. (1996) What kind of space in what kind of social theory? Progress in Human Geography 20, 494–512.
TALOUSTUTKIMUS (2000) Internet tracking 2000. <www.tay.fi> 22.8.2000.
TILASTOKESKUS (2000) Statistical library. <www.stat.fi> 28.9.2000.