Editorial

New Media Cultures in Eastern, Central and South-Eastern Europe

Almost ten years after the revolutionary changes of 1989, this special issue of *Convergence* focuses on the recent cultural, social and political implications of new media technologies in the post-socialist countries of Eastern, Central and South-Eastern Europe. One of the first lessons to be learned as the Iron Curtain rose was that the east bloc was hardly a bloc at all in the sense of a homogeneous, solid whole. Strategies and forms of media culture were quite different in the individual countries due to the varying possibilities of access to new media (eg video cameras, computers, xerox machines, etc) as well as the varying degrees to which 'independent' mass media and 'divergent' opinions were tolerated. While, for example, the subcultural or alternative scene in Yugoslavia – especially in Slovenia – had been working with video since the early 1980s, the situation in Czechoslovakia, the GDR, or Romania[1] was entirely different because access to the technologies was not possible, for either political or economic reasons. In the past few years, new media centres and initiatives have been set up in several post-socialist countries in Eastern Europe. They focus on various forms of media culture and internet projects and are increasingly taking an active role in global digital culture.[2]

The diversity of the emerging media culture that surfaced since the early 1990s is reflected in the variety of the topics presented in this special issue of *Convergence*. The contributions do not represent a coherent body, but rather its opposite: they critically reflect a complex and heterogenous terrain, thus revealing the diversity and the speed of recent cultural developments in Eastern, Central and South-Eastern European media. The debates pieces, research articles, feature reports and reviews highlight the problematic areas connected to the growing implementation of global media networks, and address questions of access to new information and communication technologies and their subsequent use in various local contexts.

In the debates section, Lev Manovich, from the University of California, San Diego, USA, raises the question of whether a different response to new media than in the West can be expected on the part of Russian artists.[3] Analysing the current re-thinking of the historical tradition of 'screen culture', he offers a compelling vision of how Russian new media artists can negotiate between the extreme materialism of Western computer art

practice and the historicism and conceptualism characteristic of Russian art. Geert Lovink, a new media activist with Adilkno, the Foundation for the Advancement of Illegal Knowledge, amongst other things, interviews János Sugár, artist and lecturer at the Intermedia Department of the Academy of Fine Arts, Budapest, Hungary. The discussion looks at the relationship between traditional and digital media and questions whether a combination of artistic practices gives a greater freedom to the artist in a country with a legacy of censorship of access to both audiences and to media art technology. Sugár's advocacy of 'intermedia' – which he defines as 'interdisciplinary plus media' – offers a refreshing perspective on the integration of new media into art practice and art education, and one which contrasts with the 'multimedia' approach often taken in the West. Eric Kluitenberg, who works with the Society for Old and New Media in Amsterdam, The Netherlands, and the Academy of Media Arts, Cologne, Germany, reports on the recent emergence of a critical discourse about the social and cultural aspects of networking, and the emancipatory claims connected with the propagation of new ICTs in the three Baltic States. Discussing the term of 'misrepresentation' derived from feminist film theory, Marina Grzinic, from the Slovenian Academy of Science and Art in Ljubljana, Slovenia, who, as a post-doctoral fellow is currently based in Tokyo, Japan, reflects on the reconstruction and re-invention of the body in video art during 'communist' times and offers a critical outlook on the confusion of decentered bodies at the end of the millenium. Feeling the lack of theoretical works and appropriate terms for approaching new media art phenomena, Igor Markovic, executive editor of the political and cultural magazine *Arkzin*, Zagreb, Croatia, proposes to reactivate the terms of 'peripheral', 'border-line' and 'provincial arts' originally coined by the Croatian art historian Karaman some 30 years ago, for the evaluation of contemporary artistic practices on the internet.

In the articles section, Ágnes Gulyás, from Napier University, Edinburgh, Scotland, examines Hungary's response to the opportunities of the information revolution since the end of communism from an economic point of view reflecting on cultural aspects as well. She argues that there have been significant advances in the development of the information sector in the country. However, because of the legacy of communism, economic difficulties and the unclear policies and disconcerted efforts of the first post-communist governments, the information revolution has made limited progress. Oliver Marchart, from Essex University, UK, and the International Research Institute for Cultural Studies, Vienna, Austria, maps out the West European techno-imaginary in its differential relation towards both the 'Oriental' (or 'Techno-Orientalist') and the American ('New Frontier') myth of electronic space. Marchart seeks to explore Central Europe's role and location within the imaginary cartography of techno-colonialist discourses on electronic networks. Laura B. Lengel, from the American International University in London, UK, questions the empowering capabilities of the internet in East Central Europe, presenting the voices from this region who

assert that only with widespread access can the internet fullfil its democratic promise. Her article highlights women's organisations in Hungary, Bulgaria and the Czech Republic, which are creating spaces for collaboration and connectivity, and providing a forum for new voices which have previously been silent.

In the feature reports section, Andreas Broeckmann, who works with the V2_Organisation in Rotterdam, The Netherlands, describes efforts on the part of the media cultural community to tackle the lack of understanding for social and cultural dimensions of new technologies at the official level of European politics, and discusses the results of the conference 'From Practice to Policy', which aims to overcome this deficit in awareness. Kathy Rae Huffman, freelance curator, writer and networker, based in Vienna, Austria, discovers a new generation of young media artists emerging from Sarajevo, Bosnia, who are struggling to re-enter the international flow of life and communication.

I hope that in all its variety, this special issue of *Convergence* contributes to a better understanding of the diversity and the specificities of the emerging media cultures in Eastern, Central, and South-Eastern Europe. I also hope that it provides an insight into the crucial developments and the problems connected to the introduction of new media technologies in this part of Europe, which by now is also facing the much discussed effects of globalisation. Having witnessed the emergence of local media cultures and translocal networks such as the V2_East/Syndicate over the past few years, and being aware of their respective cultural backgrounds, I cannot help being an optimist.

Notes

1 Calin Dan, artist and member of the group subREAL from Bucharest, Romania, states that up until the beginning of the 1990s he 'had never processed a text on a computer, never sent a fax, never approached a photocopy machine, never owned a VCR.' (Calin Dan, 'Romania – A Right to Virtuality: Media Institutions are the Lab Pets of Social Research in Times of Peace because Media are the best War Simulators', in: Nina Czegledy (ed.), *In Sight: Media Art from the Middle of Europe*, Toronto: XYZ Artists' Outlet, 1995, p. 28)

2 The E-Lab in Riga, Latvia, the WWW Art Center in Moscow, Russia, C3 (Center for Culture and Communication) in Budapest, Hungary, the SCCA Media Labs in Skopje, Macedonia and in Sofia, Bulgaria, are just a few examples.

3 See also Bruce Sterling's report on Russian politics and St. Petersburg's contemporary art scene, 'Art and Corruption', in *Wired*, January 1998, pp. 119-140.

Inke Arns

In the Slow Lane on the Information Superhighway: Hungary and The Information Revolution

Ágnes Gulyás

Abstract: This article examines Hungary's response to the opportunities of the information revolution since the end of communism from an economic point of view reflecting on cultural aspects as well. It will argue that there have been significant advances in the development of the information sector in the country. However, because of the legacy of communism, economic difficulties and the unclear policies and disconcerted efforts of the first post-communist governments, the information revolution has made limited progress.

Introduction The close of the century has brought substantial opportunities in Hungary and in East Central Europe. 1989 saw the end of the communist system and the establishment of democracy. However, such political change has not been a rare event in the turbulent history of the region. For example, in 1989 Hungary had the eighth change in her political system since the beginning of the 20th century. What makes 1989 different, in the context of this article, is that the end of communism coincided with the information revolution in developed countries. This coincidence opened the way for the former communist countries in Eastern and Central Europe to take advantage of the opportunities for a new democratic political and economic system in parallel with those of an information revolution. Because of the timing these countries now have a chance of fulfilling their century-long desire to 'catch up' with the West.

The global information revolution will greatly influence the future of East Central Europe. The question is what kind of role will the former communist countries take in this development? They can either be mere followers of the global information revolution, or take advantage of their late entry and become the vanguard. At the time of the industrial revolution in the 19th century Eastern European countries faced a similar opportunity. However, then they did not manage to leapfrog out of their economic backwardness. The information revolution now provides a second chance.

A developed information sector is important for countries like Hungary for various reasons. First, it is important from a political point of view. It is usually envisaged that on the basis of new media, a more free,

participatory and flexible democratic communication system could arise,[1] which could strengthen democratic traditions and enhance civil society. The importance of such developments are obvious in the former communist countries, where democratic traditions have been weak and democracy is still in its infancy. Second, a developed information sector is also important from an economic point of view. It can contribute to the modernisation of the economy and much needed economic growth and development. A modern information sector and the development of an information society would be suitable and advantageous for a country like Hungary, which lacks natural resources but has a well-trained work force and a good education system.

There are two basic requirements for advancing towards an information society. First, a modern integrated telecommunication network is required in order to provide the physical infrastructure for the information market. Second, a developed informatics industry is essential for equipping the information society. In both areas Communism left a poor inheritance. This meant that in 1989 the country stepped into the global information age largely unprepared.

The telecommunication network

One of the favourite topics of Hungarian jokes in the 1980s was the country's telecommunication system. At the end of the 1980s telephone line failures were everyday events; around 10 per cent of the exchanges were still operated manually; as many as 30 per cent of villages had no private telephone lines at all; and people had to wait on average 12 years for a line to be installed.[2] Hungary's telecommunication network was even poor by East Central European standards. In 1990, there were 23 main lines per 100 inhabitants in Bulgaria, 21 per 100 in Slovenia, 16 per 100 in the Czech Republic, and only 10 per 100 in Hungary. The picture was bleaker when the Hungarian telecommunications network was compared to Western European countries, where there was an average of 40 telephone lines per 100 inhabitants.

With the political and economic changes at the end of the 1980s the country's telecommunication industry and network entered a new phase of development. Politicians and business leaders recognised the need for rapid development in the field and the importance of telecommunications in contributing to general economic development. The main actor in improving the telecommunication network was the Hungarian Telecommunications Company, Matáv, which had a monopoly in the sector and faced a very challenging and expensive task in modernising its network. According to the International Telecommunication Union the estimated cost was about US$ 3.3 billion over the period 1992-2000. The task seemed especially daunting in the transition from a command to a market economy. The economic problems arising from the communist legacy affected industry. The

country's GDP, for example, fell by 3.5 per cent in 1990 and it further decreased by 11.9 per cent in 1991. Hungary has also had a considerable problem with foreign debt, and is the country with the highest per capita external debts in the region. All these factors placed constraints on long term and infrastructural investments, such as telecommunications.

Despite these difficulties the Hungarian telecommunications industry and network have come a long way from its communist past. Since 1991 the average annual growth rate of the telecommunications network has exceeded 14 per cent. By 1996, the number of telephone lines per 100 inhabitants reached 26, a huge increase from the mere 10 lines six years earlier. In fact this increase was the highest amongst the former communist countries, although Hungary is still only seventh in relation to telephone distribution in the region. Behind the dry figures a more important development took place. Digitalisation became a priority reflecting the aim of establishing a modern national network infrastructure. A high capacity digital backbone network interconnecting 54 regional exchanges was set up. Since 1991, only digital exchanges have been installed, which meant that by the mid-1990s Hungary had the highest degree of digitalisation of the telecommunication infrastructure in East Central Europe. It had increased from 5.3 per cent in 1990 to 39.8 in 1994.[3]

It is not only the wired telecommunication network which has shown substantial improvement since the late 1980s. The mobile phone network developed from nothing to become the most rapidly-growing sector of the telecommunications market. The East Central European cellular telephone market has been the fastest growing in the world since the early 1990s. The number of mobile subscribers in Hungary increased from two per thousand inhabitants in 1990 to 56 in 1997.[4] By 1993 a nationwide cellular network was in operation, and in 1994 GSM mobile phones services were started. The phenomenal growth can be partly explained by the backwardness of the wired telecommunication network, where modernisation obviously takes longer because of the physical work involved in building and improving the network. New businesses, which mushroomed with the advent of market economy, could not wait until new wires were laid down. For them, mobile telephones provided the only opportunity even if both the equipment and the subscription charge were more expensive. In addition, the success of mobile telephone network in Hungary and in other East Central European countries can be attributed to the role of mobile phones as status symbols of the new era.

The two main factors which contributed to the evident improvement of Hungarian telecommunications since 1990 were the privatisation of Matáv, the state-owned monopoly, and the partial liberalisation of the

market. Even in 1990 there was a consensus on the necessity to improve the Hungarian telecommunications network in business and political circles. There were, however, disagreements about how to finance the task. In its ambitious programme Matáv set out the aim of achieving 38 per cent penetration of telephone lines by the end of century. The capital investment for only the first three years of the programme, from 1990 to 1993, was 160 billion HUF. It was clear that the huge capital requirements for modernising the telecommunication network could not be financed by the cash-starved central budget or by Hungarian investors. Hence, there was an agreement on the need to involve foreign capital in the form of privatising a stake in the state-owned Matáv. Given its magnitude and far-reaching impact, the privatisation of Matáv was not regarded as a simple financial transaction. Prior to the event a new telecommunications law was adopted which provided the legal framework for both privatisation and the future development of the industry. After a parliamentary and public debate about the extent of privatisation, 30 per cent of Matáv was sold to a German-USA consortium of Deutsche Telekom and Ameritech for US$ 875 million in 1993. The price paid exceeded expectations especially considering the inferior state of the Hungarian telecommunication network and the poor financial results of Matáv. One reason behind the high price and considerable foreign interests in the privatisation was the excitement among powerful multinational telecommunication companies about the opportunities the opening up of the Eastern European markets could provide. The Hungarian telecom privatisation was the first major sell-off in the region and, given its geographic location, Hungary was also regarded as a possible starting point to penetrate other larger markets east of the Elbe.

Another reason why the Hungarian telecommunication company was so attractive was that Matáv kept its monopoly on its main services, which gave confidence to foreign investors. The privatisation deal included a concession for the provision of public international and domestic long-distance services, and local services in 29 areas.[5] The privatisation of Matáv to foreign investors brought two main advantages. First, foreign partners injected the most needed capital for modernising the network. Second, they brought expertise and helped Matáv to make maximum use of new digital technologies.

Along with the privatisation of Matáv partial liberalisation of the telecommunications market also helped to improve services. In those sectors where the markets were freed, private companies appeared and competition had a beneficial effect. There were three areas in which market competition was allowed: local service provision regional franchises, mobile telecommunications and alternative infrastructure. However, liberalisation only affected a small part of the market. Full liberalisation of the Hungarian telecommunication markets is due in

2002, which will probably result in a shake-up of the industry. In preparation for this free market, alliances have already been formed between different domestic infrastructural companies, such as the national oil, railway and electricity utilities, and foreign investors. Beside residential services, competitors in the post-2002 liberalised market are already paying special interest to telecommunications services to the business sector. Servicing the business sector constitutes only a small part of the turnover of the market now: from the 13.6 billion HUF revenue of the Matáv monopoly only ten per cent came from those services in 1995.[6] It is, however, estimated that this segment of the market could be worth 35 billion HUF by the end of the decade as a result of the growth of the Hungarian economy and the gradual participation of the business sector in the information revolution.

Similar to Matáv, a feature of the new private telecommunication companies is that they are increasingly allied with powerful foreign investors, which provide vital injections of capital and technical expertise. In the mobile telephone sector, for example, there is a foreign investor behind every major company and foreign investment in the cordless telecommunication network has exceeded US$ 0.5 million. This feature reflects the fundamental nature of the telecommunication industry: because of the huge capital requirements, only powerful companies with the backing of foreign investors can achieve success and reach a strategic market share. Although one can argue about the possible negative effects of foreign dominance in the long run, it is certain that without foreign investment in the Hungarian telecommunication sector both in the case of Matáv and the new private companies, the significant improvement in the network and services could not have been achieved. The other positive aspect of foreign investment was that by the end of the 1990s the Hungarian telecommunication network has become closely integrated into the Western European and global telecommunications industry. Indeed, Hungary has become more integrated into the European telecommunications sector than some European Union member countries on the fringes of the European Union such as Greece or Portugal.[7]

Informatics industry

As telecommunications at the time of the political system change in 1989 lagged behind Western European standards, so did the Hungarian informatics industry. What there was of an informatics industry, relied in large part on illegal copying of Western hardware and software products. In economic terms the market was very small. The use of computers spread only slowly, and ownership of a computer remained a remote possibility for most Hungarians. However, there were some success stories especially in the software sector and some of the Eastern European computer experts were highly regarded even in the West. During the communist era the sector did not get much support from the authorities. Development was also hindered by an international

ban on importing new technologies. Until 1989, Nato's export ban called COCOM (Coordinating Committee for Multilateral Export Controls) prohibited importation of IT into communist countries. The attitude of communist regimes towards new technologies coupled with general economic problems and the COCOM ban inhibited Hungary from participating in the early stage of the information revolution.

Since 1989 the informatics industry has developed significantly. While most of the sectors in the economy experienced a decline due to the general economic recession and structural problems of the immediate post-communist period, the informatics market grew by an annual 20 per cent between 1989 and 1993. The market was worth US$ 598 million in 1993, in 1995 it reached US$ 700 million. In 1989 0.81 per cent of GDP was spent on computer technology, in 1993 it reached 1.3 per cent.[8] Usage and ownership of computers increased as well and computer culture made considerable progress. By the second part of the 1990s most companies and state offices used computers. Computer science was also included in the national curriculum. The technological level and the type of computer equipment used in Hungary have improved significantly. Compared to Western European countries, computers in Hungary have always been of lower technological standards. Even in 1996 only 4 per cent of computers used in Hungarian households had Pentium processors. However a year later the per centage was 17 per cent,[9] a huge increase which is evidence of the rapid development of hardware technology. Computers are also better equipped. While in 1996 12 per cent of home computers had a modem and internet access; in 1997 the per centage had increased to 22 per cent. Similar improvements have occurred with CD-ROM players, in 1996 32 per cent of home computers were able to utilise CD-ROMs; a year later this had increased to 44 per cent.[10]

As in the telecommunications sector, foreign companies play an important role in the informatics markets. In almost every area of the industry sales are headed by big multinational companies.[11] All the major multinational IT firms are present in the Hungarian market. IBM, for example, has a disk-drive plant in Hungary, which is the largest European factory of the multinational company in this field.[12] The software market is dominated by major foreign programs. Most of the top hardware suppliers, for example, have software agreements with Microsoft. Local software companies had a head start over foreign companies, because the country's relatively small population and its peculiar language made local adaptation of international software programs not profitable enough for foreign firms, but this has changed. Sharp competition from foreign companies and brand-conscious customers have made the future bleak for many local firms. The exception from complete foreign dominance is the hardware market, where a local company, Albacomp has the biggest market share of more than 14 per cent.[13]

Despite the significant developments the Hungarian informatics industry still lags behind the Western European industries in its importance in the economy and its technological level. Sales per capita for the information industry were US$ 60.6 in Hungary in 1994, while in similarly small countries, like Austria it was US$ 371 and in Finland US$ 371.[14] Investment in information technology is far behind the desirable amount. Only ten per cent of R&D investment is spent in the field of information technology, while this per centage is on average 35 per cent in developed countries.[15] Although hardware sales have shown double-digit growth throughout the 1990s, the use of computers has increased only gradually. Figures about computer ownership and usage have improved, however we cannot speak of a boom. According to a survey conducted by the public opinion company, Medián, in 1997 only 18 per cent of the Hungarian population had access to a computer, while a year earlier the figure was 16 per cent.[16] Computer ownership is even lower. Nearly half of those with access to computers can use computers only at their workplace. Merely ten per cent of Hungarian households have a computer, which is far lower than in developed countries, such as Germany or Britain. Computer and IT literacy, an important factor in developing an information society, is also lower than in the West.

There are two main factors why the Hungarian informatics industry has not expanded to its maximum potential and so far has been unable to leapfrog its Western European counterparts. First, both the internal and the external markets of the industry have been hampered by problems. Second, the development of the informatics industry did not get priority and the desirable attention from the post-communist governments. There have been problems in the internal market with price-conscious demand. Although there has been significant growth in demand, cash-starved business and private customers tend to choose on the basis of price and less on the technological level of the product. There is no difficulty in finding the most up-to-date computer hardware or software in the Hungarian market today, but finding money to buy it is a problem for many local companies and individuals. Prices are at Western European levels, while company revenues and wages are much lower. Probably the biggest obstacle to the more rapid development of the informatics sector and advance of an information society has been the lack of capital in the private sector to invest in modern information technology.

Because of the small size of the internal market it is essential for the Hungarian informatics industry to obtain export markets if it wants to reach Western European levels. It is clear that Hungarian informatics companies, given their small size and their lack of capital cannot compete with powerful multinational firms. What they can do is to specialise in niche markets with knowledge-intensive products.

Hungary's human resources are strong in the computer field, particularly in software engineering, thanks to the country's good education system, and Hungarian software engineers have had some success in the international market. For example, in 1995 a software package for designing buildings developed by the Hungarian company, Graphisoft, won the American magazine MacUser's Eddy Prize, which is referred to by many as the Oscar of the international software industry.[17] The programme has been translated into 15 languages and sold 16 thousands copies in some 60 countries. This kind of success, however, is rare. Although the potential is there, substantial export markets for the Hungarian software industry have not materialised yet. One main problem is that many Hungarian software engineers lack and are slow to learn the managerial skills which are necessary for market success.

The second factor why the Hungarian informatics industry has not maximised its potential was the lack of a national strategy and concerted effort to develop an information society on the part of the post-communist governments. The policy declaration of the NIID programme – described below – identified the fourfold role of the state in advancing information society as: (1) the state as a user of information technologies; (2) as a law-maker and regulatory body; (3) as an information supplier, and (4) as a promoter of the information society through subsidising research and development projects and the use of informatics in society, especially in education.[18] The successive post-communist governments did manage to fulfil some of these roles, however it can be argued that these efforts lagged behind what they could have done for the information revolution. One indication of the relatively low profile of the information revolution is that none of the major political parties included the information society and sector in their national modernisation programmes.

The most successful and concerted effort from the state has been the Information Infrastructure Development (IID) programme, which later became the National Information Infrastructure Development (NIID) programme. The IID programme was launched in 1986 by the Hungarian Academy of Sciences and the National Committee for Technical Development. The programmes have been subsidised by the state, but after 1989 it also got support from foreign organisations, such as the World Bank and the European Union. In the first phase, between 1986 and 1990 the programme was allocated 1.3 billion HUF from the central budget, in the second phase, between 1991 and 1994, 952 million HUF and in the third phase, between 1995 and 1997, 1.6 billion HUF. The decrease in the amount of subsidies, which was quite substantial considering the high inflation rate of the period, was due to the fact that the programme had begun to be phased out in the second half of the 1990s, because of the declared aim of the state

to give private capital and market forces the determining role in developing information networks. The state subsidy was supplemented with support from the World Bank to the value of US$ 6.5 million and the Phare[19] programme provided 1.3 billion Ecu.[20]

Initially the IID programme was set up to facilitate the establishment of an up-to-date information infrastructure for the entire Hungarian research and academic community. In the first phase of the programme results were hindered by the COCOM restrictions on importing modern technology. However, as a result of the programme by the end of 1990 a network-based information system was established for the academic and research community.[21] The second phase of the programme focused on acquiring up-to-date hardware equipment as well as software programs for Hungarian network users. Also during the second phase, the Hungarian academic and research community was connected to the internet. Between 1992 and 1994 the number of internet hosts increased from zero to around 5,000.[22] In 1995 the IID Programme was succeeded by the NIID programme with somewhat altered aims and a wider scope to support the development of information technology and networks not only in the academic and research community but at a national level. The successive programmes contributed greatly to the spread of computer networks, e-mail services and international connectivity of the Hungarian academic and research community. The programmes also facilitated the development of government information infrastructure and cooperation between domestic suppliers. Also within the framework and with the support of the IID and NIID programmes, more than 150 databases and several hundreds of web-sites and gopher servers were developed by the second part of the 1990s.[23]

Apart from supporting the IID and NIID programmes the Hungarian state has also helped the informatics industry by being one of its most important customers. In 1995 the different state institutions and organisations spent 30 billion HUF on informatics products and on developing their information network.[24] The largest projects in recent years included an e-mail system set up by the Inter-Ministry Committee in Information Technology, a US$ 29 million investment by the tax authority aimed at modernising the tax administration system, a US$ 9.5 million project of the National Institute of Statistics, and a US$ 4.8 million tender aimed at computerising the main police stations.[25] The fact that in only seven years the number of computers used in the state administration increased from a few thousand to more than 55,000 demonstrates the rapid technological development. During the mid-1990s orders from state administration constituted approximately 35 to 40 per cent of the total turnover of the Hungarian informatics market every year, whereas this per centage in Western Europe is only about eight to nine per cent – making clear the dominant purchasing role of the Hungarian state in the market.

Considering the small size and weaknesses of the Hungarian informatics industry and the badly equipped nature of the state administration in relation to modern information technology, this might seem a natural development. However, it poses questions about the future of the industry and whether in the long run, when state orders eventually decrease, it will be able to support itself solely through demand from the private sector. There is another problem with the boom in computerisation of the state administration. While, the intention of the post-communist governments to improve the computerisation and networking of the state administration is a positive development, as Heimer points out, these different unconcerted projects have resulted in a state information system which is divided and appears impossible to integrate.[26]

Apart from the lack of capital in the private sector and the lack of coordination in state projects, the development of the informatics industry and of an information society in general has also been hindered by problems associated with a lack of IT skills and a negative attitude towards new technologies. For instance in the early 1990s, some institutions and companies kept computers as status symbols rather than tools. At this time computer literacy was quite poor, at some institutions – especially in state administration – computers were used as a mere substitute for typewriters. There were also incidents where donated network equipment was kept under lock and key, with access denied to all but top-level administrators – a situation which reflected communist-era attitudes toward access and sharing information.[27] However, since then attitudes have improved, and while there have been problems with the lack of technical knowledge and IT management skills, as training of IT professionals has spread and progress has been made.

Piracy One of the major problems of the Hungarian information industry has been piracy, which is still common both in the hardware and the software business. Piracy has been widespread in every former communist country for two main reasons. Firstly, because of the pre-1989 COCOM ban on exporting modern technology to communist countries, piracy was often the only option to obtain modern Western hardware and software. This legacy of widespread use of illegal technology and software attributed to the fact that piracy is accepted and not condemned in these societies. Secondly, financially stretched companies and lowly-paid customers are not able to afford Western prices leaving piracy as the only option. For example, cheap clone PCs can be half the price of branded computers. Obviously it is difficult to assess the exact extent and size of the black market for the information industry, but estimates suggest that the illegal market is at least as big as the legal, and probably larger. According to the Information Enterprises Association, for example, the illegal market accounts for up to a quarter of computer sales and 90 per cent of chip imports in

Hungary.[28] Another estimate suggests that 80 per cent of all software stock in Hungary is illegal.[29]

Although software piracy is a criminal offence by Hungarian law, the fight to curb illegal trade has not been successful. The law is clearly not enforced, partly because there has not been a concerted effort from the authorities. The contradictory position of the authorities is shown by the fact that, as Bodoky points out, even state organisations and offices, including the police, use illegal software.[30] The large foreign software companies, which dominate the market, even set up their own organisation, the Business Software Alliance, to suppress illegal trade already at the end of the 1980s. The Alliance launched a billboard campaign in 1995 and set up an anonymous hotline where callers can report illegal software use.[31] However they have not had much success. Companies also try different sales strategies to curb piracy. Microsoft, for example, introduced a system, where they package software sales with hardware though this is part of their worldwide commercial strategy to dominate software markets, it is also meant to curb piracy. Hungarian hardware assembling companies who have signed a deal with Microsoft to use this system, can only install popular applications such as Windows, with their hardware system.[32] However, a major breakthrough in curbing illegal trade in the information industries is not expected in the near future. For such a change would require not only a major concerted effort on the part of the authorities, but a change in the attitude of society as well as greater economic prosperity. As long as companies and individuals are not able to afford the prices of legally distributed software products, piracy will always be a more viable option.

Internet One indicator of a developed information sector and information society is the country's number of internet connections. Hungary has made significant progress in this area and in general in networking systems. However, as Bodoky points out, there is still ten times more data travelling into the country than out of it on the information superhighway.[33] The main backbone of the country's internet network was established in the framework of the Information Infrastructure Development programme, described above. Eastern Europe's first internet 'node' was actually established in Hungary in 1986 at the Institute of Computer Automation and Design in Budapest.[34] Today the Hungarian internet network is quite well developed and commensurate with those of many European countries.[35] Through the first half of the 1990s the increase was steady, 80 to 100 per cent growth annually, but from 1995 there has been a boom in the number of internet hosts and users. It is estimated that between 1995 and 1997 internet access and subscription levels grew six-fold in the region.[36] By the end of 1997 Hungary had 67,887 hosts and the annual growth in the number of hosts was 118 per cent between 1994 and 1997.[37] The Hungarian

hosts per million population ratio was 6,857 at the end of 1997, which was the third highest – after Estonia and Slovenia – in the region. In international comparison Hungary's ratio is well placed. The ratio was 13,892 in Germany, 10,261 in Slovenia, 5,521 in the Czech Republic, 2,286 in Poland, 1,031 in Russia.[38] The on-line magazine, *Internet Kalauz*, set up a directory for Hungarian URL addresses in March 1997 then with approximately a thousand addresses. By January 1998, the directory numbered more than 2200 entries.[39] Bearing in mind the obvious problems with such a voluntary directory, the growing number of addresses in it is another indication of the fast development of internet in Hungary. The expansion of the internet would not have been possible without the significant improvement in telecommunication services. The telecom monopoly, Matáv has also been active in developing computer networks offering different on-line services. As a result of the increased size of the internet market, competition between suppliers also intensified. The Hungarian internet market is still small in economic terms but growing fast.

The economic importance of the network is outstripped by the development of internet culture. Although it is still behind the more traditional forms of mass media, the internet already provides an important arena for disseminating information and for public discussion.[40] There is a large amount of information on the cultural, political, social, economic life of the country available through an increasing number of on-line magazines, forums, discussion groups. The growing importance of the new media has been acknowledged by the Prime Minister, Gyula Horn, when he gave a live interview to the Internetto[41] on-line magazine. Unfortunately the interest from the public was so great that the server crashed. Nevertheless, the success and popularity of on-line magazines is evident from their growing readership. There are also on-line services and organised events dealing with the cultural aspects of the new media. The Metaforum conferences, for example, discussing the development of the new media from different perspectives have been organised every year since 1995. Similarly, the Soros Foundation maintains the Centre for Culture and Communication (C^3) which provides non-profit internet services (see Miklos Paternak's review in this issue).

Besides on-line magazines traditional media are also represented on the internet. Every major newspaper and magazines and even broadcasters have web sites, where they not only publish, but provide other services as well. Many museums and libraries are also on the internet. An important initiative of the NIID programme was to establish a national electronic library providing not only common services supporting fast and easy retrieval but full texts as well.[42] The library has been on-line for years now and it is regularly updated. As a result, for example, Hungarians today all over the world can access a vast amount of their

national literature or read current research papers of Hungarian academics and scientists through the internet.

As in Western Europe, the first users of the internet were academic and research institutions. Thanks to the IID and NIID programmes, network services were provided free of charge to higher-education and research institutions and most universities and research institutes now have access to the internet. Outside academic circles, the bulk of the internet users are from the state administration. State administration was slower to hook up to the internet. Nevertheless by the second half of the 1990s every major state institution and organisation, such as the Parliament, governmental offices, the National Statistics Institute or the tax authority, had a web site.

The use of the internet in the business community developed more slowly and later than in the academic and research communities and the state administration. The bulk of on-line users are still academics and civil servants, while in Western Europe paying business customers dominate. The first commercial users of the internet in Hungary were often foreign residents, foreign companies, and international institutions, and they still provide a substantial share of commercial internet hosts today. However, the number of Hungarian commercial users has mushroomed in the last two years. Many companies now have their own website. For most companies it is still mainly a status symbol rather than a commercial tool. The commercial use of the internet was also slow to spread in Western European countries but Hungary and other East Central European countries face an additional problem in this area: on-line payment is highly problematic due to the less developed banking system and limited distribution of credit-cards.[43] However, this situation will probably change in a few years time, when the technological level of the Hungarian banking system catches up with the West.

The internet will not only expand in Hungary through increased commercial use but through further state initiatives. Realising the importance of the internet for future generations in particular, the government announced a programme to connect all secondary schools – approximately a thousand institutions – to the internet and provide eight computers with the connection by the summer of 1998. While a number of schools are already connected to the internet, through, for instance, grants from the Soros Foundation, most Hungarian teenagers could not access the internet and the government's plan is most welcomed. The programme has a budget of over 10 billion HUF, which makes it not only the biggest state project in the area, but the biggest internet 'business' the small Hungarian market has ever experienced and companies are anxious to benefit from the state initiative. The provision of computers and

internet connections for the schools was finished by the end of 1997. During the first part of 1998 teachers are going to be trained, educational programmes written and data bases created as part of the programme.

There remain problems for the further growth of the internet. There are still technical and non-technical obstacles preventing its full development. One of the main problems is that despite the improvement in telecommunications networks there are still difficulties with the network infrastructure's capacity to support high-speed data transfers over telephone lines. Another problem is that awareness of the internet is still relatively low. According to a survey carried out by Medián, 61 per cent, of the population had not even heard about the internet in 1996, and from those who heard about it only 34 per cent were able to give a correct definition of it.[44] According to the same survey only 42 per cent of the 18 to 29 age group had never heard about the internet, while this per centage in the 60 plus age group was 78. Education, however, is also an important factor, 83 per cent of people with higher education knew about the internet, while only 25 per cent of those with basic education had heard about the network at all.[45]

Conclusion

The Hungarian telecommunication and informatics sectors were underdeveloped at the end of the 1980s. Arguably the very poor state of the telecommunication sector, was the main obstacle to launching an information revolution in Hungary. While significant achievements have been made since the fall of communism, both sectors still – although to different degrees- lag behind Western standards. However their developmental levels are higher then those of Third World countries and many former communist countries as well. From an international comparative point of view Bodoky is right to argue that Hungary is neither a data-rich nor a data-poor country, but somewhere in the middle.[46]

Despite its achievements during the post-communist period, Hungary has not managed to build up a modern information 'superhighway'. What exists in its place is a 'bumpy road' network. Perhaps it would have been unreasonable to expect Hungary to develop a sophisticated information sector and network in a couple of years given the legacy of communism, the lack of capital and the serious economic problems of the post-communist period. Nevertheless, one can argue that with its human resources and key geographic location, Hungary could have made greater advances in the information revolution if the state had been more proactive. Given the financial weaknesses of the private sector it is clear that the state has an essential role to play in advancing the information society. State involvement has achieved some positive results. For example, it has created the legal framework for the

information and telecommunication industries, it has contributed to the development of the informatics sector through the IID and NIID programmes and has been the most important customer for the industry. However, the authorities and political parties have failed both to prioritise the development of an information society and to coordinate the implementation of its separate programmes. More considerable and better coordinated efforts are needed if the country wants to develop a modern information sector which is an integral and not a peripheral part of the buzzing international information superhighway of the developed countries.

Notes

1 See for example Dennis McQuail, *Mass Communication Theory* (Sage, 1991); N Jankowski, O Prehn, and J Stappers, (eds), *The People's Voice* (John Libbey, 1992).
2 Anna Canning, *Privatisation and Competition in Hungarian Telecommunication*, Discussion Paper in Economics, No. 96-9, Heriot-Watt University, 1996.
3 *National Information Infrastructure Development Programme; An Overview of Computer Networking and Information Services in the Academic and R&D Community of Hungary*, prepared by the NIIDP Coordination Centre and the Hungarian HUNGARNET Association, April 1996, <http://www.iif.hu/dokumentumok/> (December 1997).
4 'Lining up; A Survey of Telecommunications', in: *Business Central Europe*, 9/1997, pp. 39-50.
5 Canning, 1996.
6 'Hazai verseny-elökészületek' (a survey on the telecommunication market), in: *Heti Világgazdaság*, 2/8/1997, pp. 63-66; <http://www.hvg.hu>.
7 *Business Central Europe*, 9/1997.
8 György Heimer, 'The Information Industry', in: *The Hungarian Quarterly*, Vol. 36, Summer 1995, pp. 100-108.
9 'Komputerpraxis', (survey on the information technology), in: *Heti Világgazdaság*, 11/10/1997, pp. 75-95; <http://www.hvg.hu>.
10 *Heti Világgazdaság*, 11/10/1997.
11 Heimer, 1995.
12 'A Survey of Information Technology', in: *Business Central Europe*, 3/1997, pp. 41-50.
13 'A luxury for some; A Survey on Information Technology', in: *Business Central Europe*, 11/1996, pp. 3-12.
14 Heimer, 1995.
15' Bájtkorszak', (a survey on the information technology), in: *Heti Világgazdaság*, 25/2/1995, p 67-96; <http://www.hvg.hu>.
16 *Heti Világgazdaság*, 10/1997.
17 Heimer, 1995.
18 *National Information Infrastructure Development Programme*, 1996.
19 Poland/Hungary: Assistance to the Restructuring of the Economy (Phare) programme is coordinated by the Commission of the European Union. The Programme's aim is to asist in the economic transforation of the former

communist countries in East Central Europe.

20 *Heti Világgazdaság*, 2/1995. The development of computer culture and information networks was very much helped by the fact that IT and the new media has been a favourable area for obtaining support from Western organisations. All of the main international organisations and institutions, which have been providing aid and loans to the former communist countries, such as the World Bank, EBRD [European Bank for Reconstruction and Development], EU, the Soros Foundation or the different programmes of individual Western governments – only mentioning the biggest ones – offered help in developing information technology. Given the number of organisations and institutions and the similarly high number of different projects, grants and funds involved it is difficult to estimate the extend of foreign help, but it can be safely argued that without it the Hungarian information infrastructure and society would not have been able to demonstrate the same development as it did.

21 *National Information Infrastructure Development Programme*, 1996.

22 *National Information Infrastructure Development Programme*, 1996.

23 *National Information Infrastructure Development Programme*, 1996.

24 *Heti Világgazdaság*, 4/1996.

25 Heimer, 1995.

26 Heimer, 1995.

27 Colin Woodard, 'The Internet's Explosive Expansion', in: *Transition*, 6/10/1995, pp. 84-87.

28 *Business Central Europe*, 3/1997.

29 'Hétköznapi komputer', (a survey on the information markets), in: *Heti Világgazdaság*, 19/10/1996, pp. 71-108; <http://www.hvg.hu>.

30 Tamás Bodoky, 'Fear & Loathing in Hungary', lecture presented at *the Data Conflicts – Eastern Europe and the Geopolitics of Cyberspace* conference, Potsdam, 13-14 December 1996, in: *Telepolis* <http://www.heise.de/tp/english/inhalt/te/> (January 1998).

31 John Horváth, 'Data Conflicts and the Hungarian Techno Police State', in: *Telepolis*, 1997, <http://www.heise.de/tp/english/inhalt/te/> (January 1998).

32 Heimer, 1995.

33 Bodoky, 1996.

34 Woodard, 1995.

35 See also *Hungary.Network*, <http://www.hungary.com> (5 May 1998)

36 *Business Central Europe*, 9/1997.

37 'Central Europe on the Net' *in: Business Central Europe*, 3/1998, map supplement.

38 *Business Central Europe*, 3/1998.

39 *Internet Kalauz*, <http://www.ikalauz.hu> (5 May 1998).

40 An important part of Hungarian network culture and networking system is the country's quite extensive 'off-line' Bulletin Board Service (BBS) networks, which numbered 133 in 1996. Horváth argues that BBS networks act as alternatives to the internet, which he views as too slow and anglocentrist (Horváth, 1997). Indeed, offline networks served well civil organisations

and institutions, however it can be argued that their importance is decreasing with the development of the internet, as is shown by the fact that their number decreased to 112 by 1998 <http://www.hix.com/hungarian-faq/comm-providers> (January 1998).

41 *Internetto*, <http://www.internetto.hu> (5 May 1998).

42 *National Information Infrastructure Programme*, 1996.

43 Hungary — as other East and Central European countries — still has a cash economy. Bank cards became widespread by the mid-1990s, and by 1998 one in five people had a bank card. However, most people still use it only for cash withdrawals from ATMs.

44 Medián, 'Survey about the Internet', 1996, <http://www.median.hu> (December 1997).

45 Medián, 1996.

46 Bodoky, 1997.

Pioneers Revisited

Documenting Aspects of the First Two Decades of Media Art in Germany

Inke Arns

Rudolf Frieling and Dieter Daniels, *Media Art Action. The 1960s and 1970s in Germany*, Goethe-Institut and ZKM | Zentrum für Kunst und Medientechnologie Karlsruhe (Vienna / New York: Springer, 1997), 251 pp. (German and English) and CD-ROM[1] (German, English, French, Spanish), ISBN 3-211-82996-2

Instead of repeating the myth of media art being merely a shadow of informational and technological revolution – as most of the (technologically oriented) German media theory is tirelessly emphasising,[2] Dieter Daniels and Rudolf Frieling in their new publication *Media Art Action. The 1960s and 1970s in Germany*, give a refreshing angle on the early beginnings of 'intermedia art'. Quoting John Cage, who, back in 1958, while searching new ways for assembling sound material, wrote that 'it is a striking coincidence that just now the technical means to provide such a free-ranging music are available',[3] Daniels and Frieling open up the spectrum of a rich creative and visionary potential of a past (but very important) period.

So far, as the authors notice in their foreword, 'only individual aspects of Media Art have been examined ... While media festivals obviously need to focus on contemporary production, historical representations are either personalized and in consequence restricted to major names, or else confined to partial aspects ...' (p 10). There exists no comprehensive written history of media art yet. This is one of the reasons why this publication, which is documenting the media art of the 1960s and 1970s in Germany, may be called crucial. From New Music, Fluxus and Happening to concept art, performance, TV experiments and video, a range of positions emerge that have 'particular significance for the multimedia and non-linear narrative modes of the 1990s' (p 10). Precisely for this reason, to enable us to discern parallels and differences in contemporary artistic strategies, it is so important to re-consider the history of early media art.

For obvious reasons, Dieter Daniels (professor at the Hochschule für Grafik und Buchkunst Leipzig, Germany) and Rudolf Frieling (ZKM | Center for Art and Media, Karlsruhe, Germany) chose to combine the

print medium – for a collection of longer essays – with the possibility of presenting the actual material in vision, sound and words on CD-ROM; the two being complementary elements of *Media Art Action*.

At first sight, any attempt to describe the genre of 'media art' within national boundaries might seem quite inappropriate, because from the beginning onwards, intermedia art forms have been international *per se*. However, the focus on Germany is less rigorous than the topic might suggest, as Frieling and Daniels write in their foreword:

> At all events, the Federal Republic of Germany was in the 1960s and 1970s the site of key events in the international development of media art.... Non-German artists, by contrast, left behind important traces in West Germany; they include the Korean-born Nam June Paik, who commuted between the FRG and the USA, the American Nan Hoover, and the Austrian film experimentalists and media artists Valie Export and Peter Weibel. Thus, the selected materials shown by *Media Art Action* in Germany were produced in a country which acted as the nodal point in an international network of important events. (p 11)

The book *Media Art Action* places a focus on historical writings by artists. Most of the artists' texts are derived from rare or out-of-print publications. To convey an impression of the diversity of the discourse of the period with all its connotations, it is divided into several thematic chapters, each one supplemented with an introduction by one of the curators, attempting 'to place the relevant subject as far as possible in the context of the period and art-historical perspective' (p 11). (Re-) reading the texts by, for example, Ulrike Rosenbach, Joseph Beuys, Valie Export, Wolf Vostell, Klaus vom Bruch and Nam June Paik, one cannot help wondering about the visionary qualities contained in these documents, which still today seem so very up-to-date.

The CD-ROM archive contains more than 330 individual art works, consisting of stills, video clips and short descriptions of the works by the editors or the artists themselves. There are three possible ways of accessing the documents: either by the name of the artist, the year, or through using key words such as: 'aggression', 'closed circuit', 'body' or 'alternative media'. This proves to be a very stimulating way of accessing the works, and there are some extremely interesting and rare materials to be found here such as, for example, a film recording of a performance Nam June Paik did in the Ramsbott home in 1961.

In 1974, working as a consultant for the Art Program of the Rockefeller Foundation, Nam June Paik in his visionary paper 'Media Planning for the Postindustrial Society – The 21st Century is Now Only 26 Years Away' proposed the building of 'Electronic Super Highways' – twenty

years before this topic was made a political issue by the Clinton administration. Back in 1974, of course, Paik saw these highways as a 'basic social structure' (Bateson/Ruesch), and not merely as channels for e-commerce.

Unfortunately, the interface design of the CD-ROM does not prove to be very user-friendly. The user has to 'catch' the artists' names, the year and the terms contained in two horizontal and one vertical navigating bars – most of the attempts just fail. An interface which is perfect for an artistic CD-ROM (the interface design for *Media Art Action* was done by the same programmer who developed the interfaces for Bill Seaman's CD-ROMs), here, puts itself much too much in the foreground, which can run counter to the idea of an archive. Nevertheless, the fact that *Media Art Action* is a combined publication of texts *and* audiovisual material, with A wealth of the documents contained in the book and the CD-ROM, in itself makes it a very important publication. IT also serves to remind the reader of the utopian and visionary aspects of the early beginnings of 'media art'.

Notes

1 CD-ROM system requirements: IBM-compatible PC, Pentium recommended, 16 MB RAM, min. 256-colour S-VGA graphics, CD-ROM drive min. double speed, min. Windows 95. Or Apple Macintosh Computer, Power PC suggested, 14" colour monitor, 640 x 480 pixel, min. 256-colour S-VGA graphics, 6 MB available RAM, CD-ROM drive min. double speed, Mac OC version 7 or higher.

2 A good example would be the media theorist Friedrich Kittler, who argues that concerning the establishment of norms, 'those self-proclaimed artists, who, on the radio, promise radio art and, using the computer, promise computer art, are always late' (p 98, my translation). Friedrich Kittler, 'Gleichschaltungen', in: *Fritz Balthaus*, exhibition catalogue, Neuer Berliner Kunstverein, Berlin 1994, pp. 95-103.

3 John Cage, *Silence,* Middletown: Connecticut, 1961, p 8; quoted in *Media Art Action*, p 21. At that time, recording tape was the most important of these new means.

Garden of Communication

Anna Bálint

Artpool Art Research Center web site <http://www.artpool.hu>

Artpool Art Research Center, Budapest, Hungary, is one of the best known alternative art and publishing centres in East Europe. After 20 years of more-or-less tolerated activity, organising, archiving and publishing contemporary art, it was eventually officially recognised following the political changes of 1989. In 1992 it was established as an institution open to the public, and since then Artpool has continued to organise new media exhibitions and art events including intermedia, network, performance, installation works and related art activities such as fluxus, happenings, mail art, and video. At the same time they have continued to add to their collection of avant-garde and marginal artworks from the 1970s and 1980s of both Hungarian and international origin.

As Artpool has always been specifically concerned with mixed genres and new technology, it was natural for it to join the net, and once it could lease an internet line in January 1996, it started to build a home page containing information, documents and artworks for public access. As a tool for self-expression and self-construction, the web site mirrors the institution itself, and its past and present activities define the content, basic structure and visual appearance of the pages. Great care and attention has been given to the position and connective value of the pages. There is hardly any independent, 'floating' information, and every component is connected with another at one or more levels and the pages are nested within internal and external links. Each element of the content is reinforced by others which transforms the mass of information into a consistent value system, offering multiple interpretative possibilities for the user.

The key role of Artpool in organising and documenting artistic activities both in the past and the present is evident on the web site through the short history of the institution (since 1979), the list of related publications and the description of its collections. Artpool's wider aim is to focus/collect texts and links related to experimental art, and the

ground-breaking artistic movements of this century – Futurism, Dada, Surrealism, Situationist International, Concept Art, Pop Art, Fluxus, Mail Art, Neoism and Computer Art.[1]

The close relationship between the content and the design metaphors is evident from the first encounter with the web site. The 'home page' acts as a visual trademark, incorporating the main features of the institution. Artpool's first two self-memorial artistamp images, guide the user to links related to Artpool's activities, signifying the connections and relationships of the institution, and at the same time referring to one of the special collections of the Artpool Archives, the Artistamp Museum. This collection, consisting of about 20,000 items, comprises the material of both the World Art Post exhibition (1982) and Mike Bidner's collection devised for Artpool (1990).

The current events pages list the exhibitions and projects arranged by Artpool since 1992 and contains some on-line artworks. For instance the *Networker Bridge*[2] is a web adaptation of a bookwork published by Artpool in 1994, consisting of 64 Tarot cards with motifs by 64 artists. There is also the web version of the *UNI/vers,* the Peacedream project 1988 by Guillermo Deisler[3] and the *Bookworks* of Barbara Rosenthal.[4] Other artworks were adapted for the on-line medium specifically to illustrate lectures held at the Center. See, for instance, Tomas Konart's T3,[5] published on-line for an exhibition and a lecture given by Piotr Rypson on Polish avant-garde books. Also worth looking at are the pages of *Correspondence Art of Ray Johnson* based on a show held at the Ernst Museum in Budapest and the *Dadaist Picture poems by Lajos Kassák (1920-1922)* on-line following the dadaist visual poetry open air exhibition at the Liszt Ferenc Square in Budapest (both held in Autumn 1997).

The Ray Johnson site[6] offers various sources related to the artist: the Ray Johnson Chro No Logy, biography and a bibliography, a chronology of the New York Correspondence School, the Budapest story of Ray Johnson (1982-1994) which describes the Buda Ray University project, Artpool's Ray Johnson Space, all illustrated with copies of Johnson's correspondence art and memorial pieces made after his death. In addition, on-line theoretical texts and critiques about Johnson's correspondence art are collected to help research, together with material from the Artpool archives, which they provide an easily accessible was of exploring mail art culture and its context.

In 1994 some of the work of outstanding Hungarian artists from the 1970s and 1980s was exhibited at Artpool. Given special prominance was Miklon-line theoretical texts and critiques about Johnson's correspondence art are collected to help research, togeth sound documents had finally become available. This provided the opportunity

to put some of the sources and related texts, formerly published in the *Alternative/Actual Letter of Artpool*, onto the net – currently only in Hungarian.[7] Appropriately, Erdély's text about conceptual and formal auto-poetic systems could stand as metaphor for Artpool's way of constructing their web site.

For, in contrast to the widely used and well-worn urban net-metaphors (digital city, café, saloon, electronic agora), the Artpool site employs a variety of fresh, open metaphors. For instance on the main page the two main entrances have images representing night and day which guide the user into the spiritual world of the institution, suggestive of the ways of access to transcendentality known in gnostic tradition. Elsewhere, as part of the Ray Johnson web-pages, the conceiver and designer of the site György Galántai explains his use of an organic interface symbol in a manifesto entitled *The Garden of Correspondence Art*. The synergy of media and the instantaneous connectivity of each manifold reference and link is expressed in the interface metaphor of the garden. The metaphor redefines the linguistic, symbolic and aesthetic perception of the Johnson narrative. It charges the context of the visual and textual data enriching the amount of information so that effectively avoiding authoritarian display, the site retains its informative status.

The layout of the pages often metaphorically refers to their content and the analogy of the material world is counterbalanced by the immateriality of the digital media. For example the page showing Artpool's location in Budapest places the image of the building against the background of Spring – the icon of nature is a subjective allusion to avant-garde. Similarly the materiality of a noticeboard is recreated on the page listing recent events 'pinned' with virtual drawing pins. Appropriately for an art research centre with its constantly changing exhibitions and events, the site is also continually changing, unfolding and assembling. This is symbolised through the recurring icon of a man digging the garden.

Notes

1 In a research site linked to the main web site. The research site is in Hungarian.

2 *Networker Bridge* <http://www.artpool.hu/bookwork/bridge/bridge.html> (22 April 1998).

3 *UNI/vers,* <http://www.artpool.hu/univers/uni.html> (22 April 1998).

4 *Bookworks* of Barbara Rosenthal <http://www.artpool.hu/Rosenthal/RosBooks.html> (22 April 1998).

5 Tomas Konart T3 <http://www.artpool.hu.bookwork/T3/1.html> (22 April 1998).

6 The Ray Johnson site <http://www.artpool.hu/RayJohnson.html> (22 April 1998).

7 Miklós Erdély <http://www.artpol.hu/Erdely/EMcontenthu.html> (22 April 1998). See for instance the lecture *Self-Assembling Afternoons* which recalls his memory.

Towards a European Media Culture - which Culture, which Media, which Europe?

Andreas Broeckmann

Introduction Since the early 1990s, the European Union has been responding to the USA project of the 'Information Superhighway' with an apparently less technology-driven policy on the 'Information Society'. In the vision expressed by papers of the European Commission in Brussels, and especially by the group around Martin Bangemann, information and communication technologies (ICT) ought to enhance people's lives in terms of work, entertainment and education. However, the EU is an economic and industrial consortium that is trying to remain competitive in a globalised economy, therefore most funding programmes of the different General Directorates of the Commission are geared to the development of new and marketable products, whether on a medium- or a long-term basis. Anybody who has moved from one EU country to another and who has tried to sort out all the red tape knows that it is easier for a banana to be standardised or an aeroplane to be built in five different countries simultaneously, than to achieve compatibility within the EU on a social level.

In the ICT sector this means that there is a blatant lack of understanding of the social and cultural dimension of new technologies, as well as a lack of awareness of the highly active and critically productive European media culture. To enhance the profile of media culture is a project that is now high on the agenda of the Council of Europe (CoE). Unlike the European Commission, the CoE has little political or executive power, but is rather a lobby organisation for culture and human rights whose membership goes beyond the 15 EU states. Founded right after the Second World War, the CoE is a network of well-meaning, travel-happy intellectuals, organisers, national government officials and eurocrats from more than 40 different countries who defended the morality of the old Europe during the Cold War and who are now trying to regain the ground that they lost since the late 1980s. Questions of cultural diversity and the politics of identity, within Europe and outside of it, play a major role in the CoE's discussions.

The CoE has formed a Project Group on 'New Technologies: Cultural Co-operation and Communication,' whose goal it is:

> ...to analyse the inter-relation between culture, education and new technologies, focusing on the promotion of innovative projects and products that are European in content and of cultural value, in partnership with the communication industries. It aims to seek ways to replace a passive approach with a positive one – helping artists and educators to harness the potential of new technology for themselves. Its approach is multidisciplinary – finding common ground between policy-makers, artists, scientists, sociologists, philosophers and both sides of industry.

Through the Project Group, the CoE is trying to raise awareness about the social and cultural impact of new technologies – an endeavour that is as worthy as it is vague. In November 1996, a large conference in Prague brought together experts from across Europe to discuss 'New Ideas in Science and Art,' with the aim of developing a better understanding of the 'new space' emerging in relation to new technologies. This event was an overkill: too many topics debated and too many people. For two days, a very substantial assembly of theorists and practitioners hovered through the aesthetics of quantum physics, media art of the 1960s and Pierre Lévy's cyberspace philosophy. Significantly though the discussions in Prague were almost completely isolated from the actual developments within media culture as it is being practised and experienced by independent organisations in many countries. Instead of recognising current developments, the conference tried in a rather futile way to define what the 'new space' might be in the future.

As a result of the discussion following the Prague conference, the Dutch Virtual Platform,[1] an informal group of seven media cultural institutes in the Netherlands, took the initiative to organise a follow-up conference which took place in Rotterdam and Amsterdam in November '97 under the title 'Towards a European Media Culture: From Practice to Policy' (P2P).[2] The conference, which was strongly supported by the Dutch Cultural Ministry, took a more pragmatic approach towards the development of a media cultural policy, recognising the fact that the impact of ICT on social, cultural, political and economic contexts is reflected by media culture in a multiplicity of ways. Media culture shows that the social and cultural dimensions of the 'Information Society' are frequently articulated by small and medium-size, independent institutions. The P2P Conference's aim was to present and analyse existing 'good practice' within the fields of culture and new media, and to use the presented case studies to develop concrete policy guidelines for national and European government agencies. It provided an overview of current media practice in Europe and thereby facilitated the evaluation of national media policies and practices in an international context.

The following report will not so much summarise the discussions and results of the P2P conference, which can be looked up elsewhere (see links below), but it will raise some issues which might be of more general interest for the discussion about media culture in Europe. Special attention will be given to comments made in e-mail interviews conducted after the conference, by participants from Eastern European countries – a categorisation which, as we will see in a moment, is precarious in itself.

Defining terms: which Europe? which Culture?

The question of which (and whose) language one should speak when dealing with new technologies (the language of art, the language of the market, the language of politics, etc.), and the problem of the dangers of a pure 'linguistic pragmatism', remained contested throughout the conference. Miklos Petarnak, director of the C^3 center in Budapest, Hungary, maintains that the divisions created by terms like 'East', 'West', 'EU', etc., are often debilitating for the work that is being done in the cultural sector.

> The context we intend to create goes far beyond political, geographical, economical or even historical terms. Beyond borders and temporal governmental agreements, state terminology and control. Terms like 'Eastern Europe' are not understandable in a cultural context – except by politicians. 'EU-Europe' and similar words are terms in a very important new communication language which we have to use only when we speak to journalists and/or bureaucrats in studios, offices, in public spaces. This is also the language of applications and of fund-raising – and I wish it would soon be automated by someone.

Similarly, the notion of 'media culture' that appears in the title of P2P was criticised for its lack of clarity. 'Culture' can stand for artistic creativity, for forms of communication, and for groups of people, and all three notions were often used side by side. The productive heterogeneity of the field in which, as one conference participant remarked, 'all sorts of people are doing all sorts of creative things with new technologies', may not require a more precise definition at the moment, but there is a danger of adopting a language of empty words and phrases.

There are also significant differences in viewpoint, knowledge and experience regarding 'media'. During the P2P Seminar, some participants tended to think only about the internet when they talked about 'media culture', writing off everything else as 'old media'. And all but omitted from the discussions was the entire market of mass media, a field which is at the heart of the general perception – and a large industry – of 'media culture'. Drazen Pantic, internet coordinator of

Radio B-92 in Belgrade, Yugoslavia, pointed to the political danger lurking in limiting one's view:

> It was visible from the start that participants were biased towards an artistic attitude of the Web and electronic media. That means that media issues in general were touched only very marginally, and that we totally failed to build up some activist pressure on the EU towards legislative unification. The media situation is not so bright in Europe now, and saying that I do not mean only in Eastern European countries. The general orientation of P2P was to check whether there is an open link towards more funds, and that means industry.

Political tools The P2P Conference discussions were summarised in a common document, the *Amsterdam Agenda*, which describes the current situation and suggests desirable future developments within the field of European media culture. At the end of the conference, the *Amsterdam Agenda* was offered to policy makers of the European Commission, the Dutch government, and the Council of Europe, and was discussed by a forum of Dutch and European policy makers, representatives of industry and education and media experts.

The *Amsterdam Agenda* has the problems of many such documents. It was reached by compromise rather than by consensus, and leaves aside many of the disagreements and differences of opinion that surfaced during the conference. Furthermore, it uses a language that is designed to be understood by policy makers, which means that it is diplomatic at points where it should be angry, and celebratory where it could be self-critical. However, it might serve its function as a tool in future discussions with policy makers, as indicated by Violetta Kutlubasis-Krajewska of the Open Studio/WRO in Wroclaw, Poland:

> We are of the opinion that the *Amsterdam Agenda*, despite being too comprehensive and, at the same time, too vague, may become a useful instrument in the everyday activities of cultural institutions. The content of the *Agenda* and the very fact of drafting it expanded the public awareness of the modern, turn-of-the-century art, alerted the Polish decision-making bodies to the emergence of a strong new current in cultural life, and provided a background for potential financial support decisions. The *Agenda* also helped these decision-making bodies and politicians to understand the role of culture in the transformations leading Poland to the membership of the EU.

At the moment it is being used in negotiations with the Polish Ministry of Art and Culture about the establishment of the Polish Media Centre in Wroclaw; in the public discussions in Budapest about the importance of

new media culture for notions of the state and citizenship during the *Internet.Galaxis* festival (1998); and to promote the development of a local media cultural policy in Rotterdam. How effective it will be in these situations remains to be seen.

The initiative falls at an opportune moment when the attempt to build new cultural and media structures is on many local and national political agendas. Evaluating the strategic possibilities from the perspective of a young and small organisation in a local environment, Jaanis Garancs from the E-Lab in Riga, Latvia points out:

> Strategically, the situation in many of the so-called ex-socialist countries is rapidly improving, though the path of development is not un-questionable. Many things can go wrong by changing (or not changing) media/culture/education-related legislation. At the moment we can use the will to 'join Europe' (i.e. guaranteed attention to P2P-like events from local government representatives) to make 'that different Europe' which we were thinking about during P2P.

Which media? Public or private sector

In order to allow for a focused discussion among media practitioners during the P2P Seminar, the number of participating organisations had to be limited to around 20. The member organisations of the Virtual Platform (VP) selected 15 exemplary European initiatives and organisations drawn from their international network of partners. The differentiation within the VP guaranteed the representation of a broad spectrum of projects specialising in socio-cultural, educational, design and artistic fields, a relatively even distribution of institutes based in East and West, North and South Europe, and a wide spectrum of small and large-scale initiatives. Unfortunately, this restriction meant that many important media cultural institutions active in Europe today could not be invited. Nevertheless, the selected initiatives were exemplary and represented both the strength and diversity of Europe in this emerging cultural field.

The Dutch Virtual Platform, a small and informal network of media organisations, had been taken as a model for the kind of dialogue and co-operation that P2P tried to initiate on a European level. However, the P2P participant organisations were much more diverse than the VP, and such organisations cannot be expected to enter into a dialogue based on shared ideas and trust within a few days. Most importantly, there was a clear division between organisations oriented towards art and critical culture which expect mainly public support for their work, and others looking for cooperation from industry and the private sector, for the development of ICT applications and products. Also the different sizes of the organisations represented meant that the funds and forms of cooperation which are almost 'natural' for some, were way out of reach

for others. Therefore in the discussion of (joint) political strategies, it was crucial to recognise the differences between media cultural institutions, and not to ignore them and make all-embracing, generalist statements.

In the conference discussions, there was a stronger emphasis on Western, 'EU' Europe, than the broader CoE-European dimension. This was, to a large degree, due to the fact that Brussels is a common, however imaginary , target as a main financial source, and that – at least in the general discussions – the focus was more on relations with EU-policy makers than on locally specific problems and conditions. However, as Jaanis Garancs from Riga commented:

> It was noticeable that the conference was not bi-polarised along East/West (EU/non-EU) lines, but divided according to different ways of existence of the participating organisations. Often I saw more 'mutual fellowship' among organisations who existed on similar funding and responsibility formulas: i.e. between state/official/sponsor money and individual/independent/private funding and responsibility!

The politics of cooperation

Like many of such politically motivated events, the P2P Conference discussions were often predictable and repeated the mantras of common sense, cultural critique and political strategisms. At the same time, it was a get-together that offered ample opportunity for informal conversation and for setting up new, or improving existing, working relations between media practitioners. According to Drazen Pantic:

> A good aspect of P2P was that it opened a possibility for the gathering of professionals from different countries, different lines of work, different backgrounds and similar problems. In my view, all the best things that happened there were located outside the official programme. And that means plans for joint projects, links with people we did not know up to that moment and checking actual problems people have.

The degree to which such cooperation relied on personal relations was indicated by Violetta Kutlubasis-Krajewska, who found that there was no general move to establish new links between artists and institutions. Her evaluation of the potential for the horizontal cooperation between corresponding institutions participating in the meeting was more critical:

> In my contribution at the last session, I attempted to establish a framework for co-operation with (usually well-equipped) Western European media centres, in the form of workshops for Central and Eastern European artists, who are for the most part, denied access to such tools. My appeal, not surprisingly at all, met with a weak response. The recently established

> Western European new media centres seem so exhausted with the fight over the status quo and the equipment, that they are generally not very much interested in an international co-operation with Central and Eastern European artists who may bring in little by way of the equipment or innovative solutions for using it. Therefore the main form of such co-operation will probably be direct, individual contacts fuelled by an interest in the other culture. I think that such individual contacts will be the best method for creating common projects with Central and Eastern European partners and for applying to EU bodies for support.

Tactics While the map of Europe remains fractured, the dividing lines do not always run along the well-worn political, economic or cultural borders. The media cultural field displays a more diverse, more complex political topology in which access to new technologies is seen as a – sometimes token – guarantee for cultural diversity, individual freedom and social justice. Jaanis Garancs is cautious about a united European perspective but does see some recurrent and familiar responses from across Europe. There is, he says:

> ...much similarity of context in the kind of discussions about cultural, legal, economic, political issues regarding the individual, state, industry, commerce, international organisations. I have heard exactly the same arguments in discussions in context of, say, municipalities of Rotterdam and Riga, or some local newspaper in Sweden or reports from ex-Yugoslavia. Some people are confused and upset, some people see an enticing opportunity for 'big money' when they hear words like 'Internet Art' or 'Information Society', or 'pornographic e-mail'.

An important strategic question that the P2P conference raised and for which people have to find their own answers, is that of the support and allegiance that can be expected from policy makers. In many places there is an honest interest on the part of politicians – partly fuelled by the anxiety not to miss the boat – to talk to media practitioners and learn from the expertise that they have. It is too early yet to decide whether the initiative fuelled by the Council of Europe, and the subsequent national and local initiatives, will lead to much more than more meetings, reports, seminars and documents, while the politically relevant decisions are being taken elsewhere, or whether these discussions will have an effect on cultural relations and on cultural policies in the long run.

During the final discussion of the conference, a representative from the European Parliament encouraged artists to work together with

commercial enterprises to develop a more accessible, more 'user-friendly' media culture. The Amsterdam artist David Garcia retorted that it was not the task of art to be 'user-friendly', and that quite on the contrary, the history of great art was a sequence of user-unfriendly and often offensive gestures and works. Garcia insisted that this is a domain that art has to defend for itself in order to survive.

Drazen Pantic advocated a similarly strong and affirmative stance:

> A tactical mistake we all made was that we were so nice and mild towards the EU representatives during the final gathering. Except David Garcia who really stepped out of this chick-face presentation, others tried to communicate with Eurocrats in the language EU people are masters in, abstract meaningless phrases. The EU people tried to assure us that they are doing a lot for us, in a situation where only very few of the participating organisations got actual funding from EU! The final session was very similar to my recent experience with British Airways. In a disastrous two-day return from London to Belgrade, in which everything bad you can imagine happened to us, including an emergency landing, the crew of BA kept repeating that they were doing everything within their power for us.

Notes

1 Dutch Virtual Platform <http://www.dds.nl/~virtplat> (20 April 1998).

2 P2P Conference <http://www.dds.nl/p2p> incl. *Amsterdam Agenda* (20 April 1998).

Connectivity, New Freedom, New Marginality

A Report from the Baltic Cyber-Corridor

Eric Kluitenberg

On the far north-east corner, bordering on the territories of the Russian Federation, the three Baltic breakaway states of the Soviet Union, Estonia, Latvia and Lithuania re-appeared on the European map in 1991. In the radical transformation process taking place in these mini-states, networking technologies would seem ideally suited to connect these societies to the rest of Europe – and this is currently what is happening. Viewed from a cultural perspective, networking technologies also hold the promise of aiding the social and cultural transitions facing these countries. Though hardly any less profound than their economic and political counterparts, the consequences of employing such networking technologies appear to be much less tangible. Recently a critical discourse has started to emerge in the Baltic states about the social and cultural impact of networking, and the emancipatory claims connected with the propagation of new information and communication technology (ICT). At stake is the question of whether this emerging cyber-corridor can make a substantive contribution to the social and cultural development of the Baltic states?

Context The break-up of the Soviet Union threatened the Baltic states with cultural isolation, both from the former East as well as the former West. In the new socio-political and economic groupings of post cold-war Europe, connectivity might prove to be one of the more helpful instruments for the re-appraisal of the formerly rigorously repressed cultural and national identities of the Baltic states within the larger context of the cultural framework of contemporary Europe. But networked media also pose a new threat to the reclaimed identities of these new states – the perils of globalisation. As a result the culture of connectivity has been received with mixed emotions.

To get a clearer understanding of the context of the debate it is useful to explore the demographic and political situation in the Baltic states a bit further. All three Baltic states have a large Russian minority living within their territories. Estonia has a total population of approximately 1.57 million, out of which 66 per cent are Estonian, and a little over 30 per cent are Russian. Latvia has a total population of 2.57 million, out of which 52 per cent are Latvian, 34 per cent are Russian, and 4.75 per cent are Belorussian, while 3.5 per cent are Ukrainians. Finally,

Lithuania has an even smaller Russian minority: out of its 3.71 million inhabitants, 81.4 per cent are Lithuanian, 8.3 per cent are Russian, 7 per cent are Poles, and 1.5 per cent are Belorussians.

Less well known is the politically tense situation of Kaliningrad – the Soviet name for the former Prussian city of Königsberg. Situated on the Baltic coast, disconnected from the Russian territory, the city is an isolated Russian enclave, closed off by Lithuania from the north and by Poland from the south. Today, the city is primarily a strategically highly important military harbour for the Russian Federation. The absence of a transit corridor to the rest of the Russian Federation and the crucial strategic interests invested in this city, turn the region into a continuous zone of political tension.

Obviously, the large Russian minorities in Estonia and Latvia are a matter of great concern for the Russian Federation. There is particular concern about nationalistic tendencies in the Baltic states and the effect this will have on the status of the Russian minorities. The Baltic national cultures, identities and languages were severely repressed after the Soviet annexation of the Baltic states at the end of the second world war, when the Russian language was rigorously imposed as the official language in these countries. Since then language has become a focal point for unresolved social tension and political debates. All the Baltic states have connected the civil status of their inhabitants with the mastery of their national language, a policy specifically targeted at the Russian speaking minorities.

On an international level, tensions once again became apparent in the discussions about the expansion of the sphere of the NATO alliance, and the recent negotiations over EU expansion. Both NATO and EU membership are declared goals of the foreign policy of all three Baltic states. Estonia in particular has been very active in this area. Economically the most successful of the three Baltic states, it has been admitted to the first group of countries from the former East to be eligible for future EU membership. In contrast, the Russian Federation has made its strategic and political interests clear by threatening war upon Baltic states included in the NATO alliance.

It is not possible to go further into this complicated situation at any length here. However, it is clear that the resolution of such conflicts and tensions can only be achieved in a comprehensive settlement of Russian, Baltic and European interests, a solution which, at the moment, does not seem to be close at hand.

A wider perspective

Until 1995, the cultural and social dimension of digital networking technologies was largely ignored. This lack of an interdisciplinary and cultural perspective was the incentive for two *Interstanding* conferences

that took place in Tallinn in 1995 and 1997. The conferences, sub-titled 'Understanding Interactivity', tried to address the social and cultural implications of computer-mediated communication and interactivity from a broad interdisciplinary perspective, bringing together art, design, media theory, media activism, philosophy, and political theory and action.

Each of the three days of the first *Interstanding* conference[1] covered part of the basic territory of the emerging network culture: 'The Design of Interactivity', 'Community and Identity in the Global Infosphere' and 'Strategies for Participation'. The first day was an overview of the phenomenology ('application areas') of the guiding notion of interactivity and its philosophical and media-archaeological meaning. The second day focused on new definitions of identity in local culture, modes of 'identification' and how these related to new forms of networked communities and social relationship in virtual environments. This led on to the discussion of political questions of access and media-literacy on the third day.

The question of identity and of identification with collective signifiers is crucial in the context of the Baltic states. It will be hard to describe with any degree of accuracy the reversal of identity that seems to qualify the personal experience of the Baltic people who lived under Soviet rule, after the political and social transformations. It was explained to me as a reversal of roles. In the Soviet era the native Baltic inhabitants were forced to assume a double identity. The outward version was the official 'Soviet' identity, connected to a strict definition of the social position and role within the rigid structure of Soviet society. The inward version, instead, was connected to the personal realm, the family ties, and very importantly to language (the use of native Baltic languages was forbidden by Soviet rule) and religion (the dominant religions in the Baltic states being Protestantism and Catholicism, as opposed to the dominance of the Orthodox church in Russia).

With the disintegration of the Soviet empire and the successful struggle for independence of the Baltic states in the late summer and fall of 1991, these 'identities' were reversed. The inward native Baltic identity became the official social code. The native languages were restored as the official languages of the Baltic states, while the Russian language quickly fell out of use, at the very least for official conduct. To further strengthen the social integration of the new states, both Estonia and Latvia adopted legislation allowing the Russian minority populations only a temporary citizenship. Official 'naturalisation' and recognition of their citizenship was made dependent on mastery of the native language, for which a much-hated official test had to be passed.

In this process the old identity, the official social roles performed in the Soviet era did not disappear. Instead they became part of a new

inward definition of identity. This new inward identity would seem close to a relocation into the sub-conscious, a collectively shared repressed memory, if not a trauma, which remains invisibly present behind the rapidly changing face of everyday reality in the Baltic states.

As a result, questions of identity in a (potentially) global communication network became a focal point of discussions. George Legrady's famous CD-ROM project *An Anecdoted Archive from the Cold War* was one of the art projects presented at the first Interstanding conference, and it provided an allegorical framework of Cold War memorabilia for the discussion. The gravity of such identity questions was made clear through an intervention by representatives of the Zamir peace network, active in the terrain of the former Yugoslavia. In their experience dividing lines in the violent Yugoslav conflicts were drawn exactly along lines of definitions of identity. They summarised their uneasiness in the remark that 'nothing divides people more than identity'.

Again the question of language is important here. The so-called culture of the net is not reflected in the quantity of native tongues in the global 'infosphere' as it is still heavily dominated by the hegemony of anglo-saxon culture and the English language. In small nations such as the Baltic states, this inspires fears of a loss of a newly regained national identity and the net can become an easy target of hatred and scepticism, being perceived as an invasive force rather than a cultural life-line. It was no coincidence, therefore, that a coalition of writers and conservative politicians severely criticised the first *Interstanding* conference in the Estonian press.

'freedom'

The second *Interstanding* conference (1997),[2] part of a larger media art and culture event in Tallinn and Tartu, sought to interrogate the discourses of 'freedom' that have developed around the net, and to discuss their emancipatory claims.

An important starting point for the discussion was taken from *The Temporary Autonomous Zone*,[3] Peter Lamborn Wilson's pirate utopia originally published in 1985. Lamborn Wilson stressed the demands of the sensual, and the recognition of the embodied nature of experience. Neo-Platonic or neo-Gnostic notions of disembodied spheres of experience are rejected in this view. Yet, many of the emancipatory claims about the net (or in the global vocabulary 'Cyberspace'), rely heavily on the disembodied nature of the social interactions via the net.

In these arguments the net is portrayed as a new space or sphere of freedom; freedom from biological determinacy (gender-bending), freedom from local censorship (because of the mobility of data to travel over borders and out of jurisdictions), and personal freedom (because of the many subcultures connecting across the geographical divide).

Such notions were already strong in the cyber-utopia proposed in *Cyberspace First Steps* (Michael Benedict's anthology published by MIT Press, 1992). It reached full momentum, however, around the publication of John Perry Barlow's 'Declaration of Independence of Cyberspace'.

Barlow wrote his manifesto in protest against the USA Telecom 'Reform' Act of 1996. This law, he argued, would impose serious restrictions on the free flow of ideas and information via the internet and other media in the USA. In his cyberspace independence declaration Barlow characterised the net (cyberspace) as the 'new home of the mind'. He emphasised the uncontrollable flow of information, beyond the control of nation based politics 'in a world soon blanketed in bit bearing media'. Though the politics of the nation state may still exert control over the bodies of its citizens, according to Barlow it would no longer be able to control the free deployment of the mind in cyberspace.

Barlow's manifesto has already been heavily criticised, the text and materials relating to the subsequent discussion can be found in nettime's *ZKP* 2 collection.[4] What is important to note here is that this view, though politically critical in itself, implies a complete denial of the physical rootedness of lived experience. The embodied sphere of the nation-bound politics of repression are disengaged from the discourse of the disembodied sphere of networked communications. This separation is questionable to say the least, as if the latter could exist independently of the first at all. It also points towards a confusion, a misunderstanding of the complex interactions that qualify the politics and everyday life in networked societies. The two spheres coexist and interact continuously, but how the conflicts that result from these continuous and often stressful interactions can be resolved remains largely unclear.

The 'freedom' conference emphasised the point that any emancipatory potential of digital networking technologies is unlikely to emerge from considering the net as a new sphere of experience of cultural, political and personal freedom. While the liberatory potential of a decentralised information and communication system is not denied, the real value of the medium appears to be its potential to function as a strategic device for political and cultural action. As a tactical medium it can strengthen the pluriformity and diversity of social and cultural practices in societies where these values are neglected, denied, or under threat, often for a variety of reasons. The interaction of lived social reality and networked social interactions – what Manuel Castells has called 'the space of place' and 'the space of flows' respectively[5] – are at the heart of this debate.

Resonances

How ill equipped society currently is to deal with the discontinuities between these two 'spaces' can be illustrated by two local examples

from the Baltic region. The first comes from Estonia, and is recorded for history as Estonia's first internet scandal. It unfolded in the summer of 1996. The scandal revolved around a satirical poem by the Estonian writer Sven Kivisildnik. In the poem, originally written in 1990, he exposed the members of the Soviet Estonian Union of Writers by turning the list of names into a poem.

The point, Heier Treier notes in her account, is that many of the names on the list never published any work locally, nor internationally.[6] Most of them in fact should be identified as spies. Remarkably the original publication of the poem (in print) never aroused a big stir. But the news that the poem was now available over the internet, because Kivisildnik had decided to make his work available on the net, incited outrage. The people on the list felt exposed before a worldwide audience, even though the text was published in Estonian, and on an obscure Estonian web site.

Police action was taken to remove the poem from the internet. As the police were, however, unable to come up with any 'material' evidence when they stormed the writer's house, they decided to 'arrest' his computer and peripherals to ban the poem from the internet. An act, not only undeniably comical, but also rather senseless, as the information could reappear on the net at any time, outside of the jurisdiction of the Estonian police, via foreign servers specifically dedicated to censored cultural and political materials.

The second example comes from Latvia where the E-lab artist organisation started real-audio net cast experiments in 1997 (Ozone – net radio Open Zone)[7]. Ozone used the real-audio servers of the Internationale Stadt Berlin and Xs4all in Amsterdam for their first programmes. After their first net cast of audio experiments by young Latvian artists and musicians, the organisers were warned by the Latvian authorities that continuation of their net-casting experiments would be subject to judicial prosecution. Apparently Latvian law includes a clause stating that any audio server opening more than 25 lines is regarded as a radio station and is not allowed to function without an official state permit, regardless whether these servers reside within Latvian territory or not.

It is questionable how far this legislation is indeed in place, but the significance of media models to the regulatory bodies is the most interesting aspect here. Apparently, the average use of a web site, the number of people visiting a site to obtain information or download files, seems less important than the fact that an existing recognisable media model – the radio – is emulated in a new medium. Millions of people visiting a regular web site seems to be less of a control problem for the media regulators than the harmless micro scale distribution of copyright

free public cultural content, as in the Ozone case. The redefinitions of media policy appear to lack an understanding of the dynamics and nature of the medium they seek to come to terms with.

Heie Treier notes that the new nations arising from the former East find themselves suddenly plunged into the information society, without a clear understanding of the context or a proper frame of reference. The Baltic case illustrates that the impact and development of networking technologies cannot be separated from local specificities, nor from the socio-political framework at large. The assimilation of the new communication environment in these societies will therefore remain the subject of intense and critical debate.

Notes

1 *Interstanding 1* (1995): <http://www.artun.ee/center/i1/i1.html> (19 April 1998).

2 *Interstanding 2* (1997): <http://www.artun.ee/center/i2/> (19 April 1998).

3 Peter Lamborn Wilson's TAZ text and other materials can be found at: <http://www.cia.com.au/vic/taz/index.html> (19 April 1998).

4 The discussion of Barlow's 'Cyberspace Independence Declaration' can be found in the section 'Threads' of nettime's ZK *Proceedings* 2, ed. by Diana McCarty, Pit Schultz and Geert Lovink, distributed at *5Cyberconf,* Madrid, June 1996, pp. 156-186. The online version is located at <http://www.Desk.nl/~nettime/zkp2/toc.html> (19 April 1998).

5 Manuel Castells, *The Rise of the Network Society: The Information Age: Economy, Society and Culture,* vol 1 (Oxford: Blackwell, 1996). Reviewed in *Convergence,* 4, no 1 (Spring 1998) pp. 129-132.

6 A detailed account of the scandal is given in Heie Treier's text 'The Case of Sven Kivisildnik – Or how the conceptual poet of the Internet became a scapegoat of Estonia', in *Deep Europe: The 1996-97 edition,* ed. by Inke Arns and Andreas Broeckmann, Berlin 1997, pp. 53-56. See also Timothy Druckrey's forthcoming review of *Deep Europe in Convergence.*

7 Xchange / OZONE: <http://xchange.re-lab.net/>. Art + Communication 1: <http://www.parks.lv/home/E-LAB/events/fest.html> (19 April 1998), Art + Communication 2: <http://xchange.re-lab.net/festival/> (19 April 1998).

The Representation of the Body Under 'Communism'[1]

Marina Grzinic

To understand the representation of the body in new media, the body immersed in the specific totalitarian context of Eastern Europe's Socialism and Communism, we must first of all decode the intersection of cultural, political and theoretical strategies lying beneath such representation. We can talk of the common heritage of totalitarianism, as we talk of the common platform of (European) democracy. I propose to reflect on Communism as an oppositional, differential setting, and to do the same with the body.

To start with we need to clarify what we mean by the 'body' and 'Communism', both concepts which have strategic and political value. Today Communism is being commodified for consumption and this is part of the process of circulation of cultural stereotypes. It seems that Communism was in the past the "lingua franca" and yet for those of us coming from the 'so-called' Eastern European context, it is losing its status of "lingua materna". Ironically, Communism and its big brother Socialism were developed as clear patriarchal systems.

Whereas, the body today is like nature, a commonplace and powerful discursive construction. The body is a topos and a tropos, a figure, construction, artifact, movement, displacement. So the question 'how to squeeze the body and fill it with oil and blue vitriol?' is not a rhetorical, but strategic question for the answer will give us the path of the relation of the representation of the body in and through the electronic media.

From the answer we will see that how we fill the body, from where we insert the blue vitriol in the image, we will get oppositional strategies from its reading.[2] This reading, however, will be partly utopic as we are trying to work on the concept of the 'so-called' rudimentary body, which lived in the Communist context. Firstly, we need to look at the political body, to trace out the interference between the body and the Socialist/Communist system in order to focus ourselves on the body as a topos of different deformations and usurpations.

Misrepresentation

The aim of the new generation of video artists has been to investigate the means by which a subject and the body is produced and articulated in electronic moving images – especially, to investigate the ways of visualisation of the 'so-called' absent body, object or history. To fulfil this

task many video artists developed alternatives to the dominant forms of (post-)Communist visual strategies, by utilising different methods of misrepresentation. The term misrepresentation, derived from feminist film practice and theory, is, according to Griselda Pollock,[3] unlike some expectant models of identification with a positive narrative or a heroic character. 'Misrepresentation' seldom provides an anticipated pleasure of identification. Instead, the aim of misrepresentation , according to Jo Anna Issak, is to effect the 'ruin of representation'[4] precisely on the grounds of what has been excluded, of the non-represented object.

This creates a significance out of absence, and in this way investigates the means by which a subject and the body is produced. Corporate systems of representation, however, are subject to radical break-down or deconstruction. This allows for new discursive practices, which are able to function in between forms of high culture and mass culture. Such counter-narratives are resistant to the point that they could no longer be included within a philosophically, binary opposition, but which, however, inhabit philosophical oppositions resisting and disorganising it without ever constituting a third term (Jacques Derrida[5]). The achievement is thus the decentralisation of the subject to the point where instead of outside or inside there exists a powerfully dynamic relation to both outside and inside, dependence and independence, art and nature and, finally, to what is real and what is not.

On the other side when misrepresentation forms a fictitious path, (semantic and semiotic opposite coinages[6]) the video medium allows for a mode of display and analysis of the manipulation and the duplication of history itself, as practised by the Communist authorities.

Body is an artifact

The body is an artifact cobbled from other artifacts rather than from a profound experience of life. In contrast to the mass media produced idea that the body connected with new media achieves a natural totality, processes of post-Socialist visualisation of the subject and of his/her body in the media underline this artificial, mediatised, constructed and non-natural human body and his/her thoughts and emotions.

The place where many of these video works were made is also a negative one. It was not the place clearly visible in the structure of the social system, it was the bedroom or bathroom of a private apartment.

Bodies that featured in the video works of East Europe are not only mapped as territories, not only producing a kind of intersection of outer and inner space, nor our visibility and invisibility, but these bodies were reconstructed and re-invented again and again in the video medium. From them we tried to squeeze out monumental effects – to make them modern relics, sexual fetishes, encrusted and filled with substances such

as oil, blood and blue vitriol. As metaphorical territories these bodies condensed history and a strategy of suspense in that we wonder to which history the faces belong to and to whom these bodies were delivered. The bodies were/are chains of eternal replacement of meaning in the same way that history is itself articulated by partially readable faces and bodies!

The body is a fleeting physical-material fact

At the end of the millennium the body has found itself in the chaos of fear, pain and wars, being attacked and decentered. Above all it is a fleeting physical-material fact. A credit-card sized processor has taken our body materiality. By a single key we can plug into any high-tech appliance. So our dreams of going somewhere far away, of escaping the dimensions of ourselves as nothingness are realised here by reversals of the body in time and space, and space in time. And you can see how a tremendous impact can be achieved by technically reverting the linearity of time. Sometimes a backward move by the simplest video switch is the most adequate measurement of our feelings and thoughts.

'Everything, everywhere, everybody' is the 1990s slogan that results in a confusion of bodies, concepts and strategies, a type of out of joint situation for the subject. We find ourselves within all media, in all bodies, in all possible spaces at once. This puts into question some fundamental arguments concerning art and culture. Operating in the new mode, the positions of identity are also showing us other internal media and social processes. We are faced with leaving a historically defined position, which imitates the natural world of our senses. With new media and technology we have the possibility of an artificial interface, which is dominated by non-identity or difference (Peter Weibel[7]). Instead of producing a new identity, something more radical is produced: the total loss of identity. The subject is forced to assume that he or she is not what he thought himself to be, but somebody-something else.

Notes

1 Cf. M. Grzinic text in the book of the *Artintact* 4 CD-Rom edition series by the ZKM, Karlsruhe; see also the CD-Rom project by Grzinic and Smid *Troubles with Sex, Theory and History in Artintact 4* CD-Rom edition series by the ZKM 1997.

2 This is possible to understand in a literal, though twisted way, as the video blue box system allows through digitally produced blue holes in a single frame of the video picture to encrust or to synthesise another image; what verité is behind the image on the surface depends, metaphorically speaking, on the content of the image that will be inserted in the empty blue hole, and also from the position of the blue hole in relation to other images around it. The structure, the meaning of the picture is, therefore, an effect of the content of the synthesised or encrusted image and not merely of the technological process itself.

3 See Griselda Pollock, 'Feminist Film Practice and Pleasure: A Discussion', in

Formations of Pleasure, (eds.) Tony Bennett et al. (London: Routledge & Kegan Paul, 1983), pp. 157.

4 See Jo Anna Isaak, 'Women: The Ruin of Representation', in *Afterimage,* April 1985, p. 6.

5 See Jacques Derrida, *Positions* (Chicago and London: Althone 1981), p. 43

6 That means that the analysis is not a matter of effacement of the elements of the Communist history or reality but of replacement and substitution, where the perceived elements are recontained through familiar representational forms. What we are witnessing in the video medium is the act of taking into possession documents, photographs, images, faces and bodies which are constantly produced as types, stereotypes and prototypes. Consequently, in the video there is (contrary to the anticipation of the realistic doctrine) no psychology, except when it is a constituent part of a 'quotation' or 'stereotype'. It is a question of working, of using the elements of Communist history itself in order to deal with this history.

7 See Peter Weibel, 'Ways of Contextualisation', in *Place, Position, Presentation, Public,* ed. Ine Gevers (De Balie, Amsterdam 1991-1992)

Video from Bosnia

A meeting point of memory and reality

Kathy Rae Huffman

Meeting Point, 1st annual exhibition of the Soros Center for Contemporary Arts, Sarajevo, Bosnia-Hercegovina, 24 – 27 July 1997.

The twenty video works presented at 'Meeting Point', the first annual exhibition of the Soros Center for Contemporary Arts Sarajevo (24 – 27 July, 1997) gave voice and presence to the young artists of Sarajevo.[1] The selection, which represents a number of poetic, artistic and documentary style works, evidence that the first generation of media artists, after UN peace keeping forces became residents, has emerged in Sarajevo. Their desire to communicate is strong, and through their personal stories they show life as it is. As their incentive, provocation, and enticement to create, and as revealed in the works presented, Sarajevo is the central metaphor ... for absolute possibility!

'Meeting Point' video artists are the survivors of the Siege of Sarajevo, experienced by most while they were teenagers. Whether or not they were in the city itself during the war, or safely sheltered abroad, each and every one suffered loss. These young Sarajevo residents, however, were not only cut off from water, food and electricity, they were cut off from their international cultural connections: from MTV, from computer games, from McDonalds, and from taking the train to Belgrade (or just about anywhere else) to visit relatives, friends, or to attend film school. As a collective group, they were reliant upon independent radio stations to bring them alternative news, information and new sounds, keeping them informed about the British and American pop music scene (sometimes from bootleg versions brought in by journalists).

In Sarajevo, the main means of communication is the Balkan social practice of evening meetings in the streets, cafes and bars throughout the heart of the old town. This has been the tradition for centuries. Not only curfew, but also extreme danger limited unnecessary movement on the inner streets of Sarajevo from Spring 1992 through the cease fire in 1995. Yugoslav army sniper fire and random shelling from hillside bunkers made the daily fetching of food, fuel and water a deadly activity. It also prevented the surrounded, mainly Muslim-Bosnian population, from communicating socially for four years. 'Meeting Point' re-established this tradition as a strong point, and brought the communal process of

information exchange – typical among the young and old – to new public attention with its energetic programme of interventions and video works. These programmes activated the intellectual artistic community, and served to revitalise the creative spirit, rebuild the media art community, and to spark fresh energy with new and personal moving images.

> The Balkans are more and more self-absorbed and inward looking because of the war, the economic situation, and the blockage... [yet] artists must communicate, they can't remain isolated.
> (Zoran Petrovski, Director of the Museum of Contemporary Art, Skopje, 1993)

A recurring theme, and thematic thread throughout the 'Meeting Point' video programme is how individual personal decision provided a method to cope with daily life under such war circumstances. But, these are not propaganda tapes. They are a far cry from the familiar, narrated (CNN style) short docu-info-brief telling about the latest death toll through a fixed camera (with a smiling reporter positioned against the background of burning rubble or fleeing refugees). No sensationalist images here, just sensational, ordinary people. The artists works rather than show you military strength take you into their bedrooms, and show you the inside of their homes and their heads, with images that reveal their dreams and nightmares.

> Wars have left their scars and war is NOT broken houses, it is broken MINDS. Living in a 'war zone' is living in a virtual reality.
> (Wam Kat, peace worker and communications activist, 1995)

The 'Meeting Point' video programme also includes works by a few artists working during the war, at a time when they probably did not know what would happen next, or if they would live to finish them. Some works were finished abroad, others were not finished until after 1995. Although there is no stated theme, or title to the programme, it clearly represents the mental experiences of those who lived through the long and devastating war in which no Bosnian – of Muslim, Croat or Serbian descent – escaped family tragedy. This was a war of war-crimes, and terrible devastations, especially upon the Muslims (by both Croatian and Serbian military raiders) told to us time and time again on international television news reports. From the Spring of 1992, the collective consciousness of the survivors, those who remained to behold unspeakable and brutal incidents, grew. The numbers of foreign correspondents, observers, humanitarian workers (especially through Soros funded projects) and camera crews also grew. The world watched passively as the white, armoured vehicles of the UN observers delivered and then returned heads-of-state into to the 'safe streets' of Sarajevo, ...in 1995, I realized that I survived the war (Jasmila Zbanic, *Autobiography*, 1995).

The videotape programme reveals an astoundingly fresh internal vision. For instance, *Autobiography* (1995, 6:00 minutes) by Jasmila Zbanic, to which the jury awarded the first prize to, is full of poignant vision. She pro-actively takes back her right to walk in the city, by anointing Sarajevo, the ruined buildings, the street, and even the air, baptising it with precious life-giving water, once – not so long ago – a precious luxury in the city. A performance for video, she concludes by drinking her own saliva, and in a toast she salutes the camera, 'Jivolie', which declares her right to exist and to be productive. In *After, After* (1997, 18:00 minutes), she portrays another survivor, a small girl who has been brought to Sarajevo from the occupied territory of eastern Bosnia, and who suffers post-war trauma due to her experiences. We are left without knowing the fate of this child, but we realise she has began the long road to recovery.

While the spirit of the work is simple and straightforward, one suspects that several drew on, or mimicked MTV. They lacked sophisticated technical facilities, training, and the experience to create that kind of 'professional' or polished work, some tried! They used VHS cameras, or Video 8, and some very minimal editing to create impressive visceral works that evoke an honest compulsion to use the medium with music. Because they also have limited access to sound production, an abundance of popular (or at least familiar, if not cliché) music accompanies many of the works. Although international video works rely strongly on sound as an essential element, and an essential creative component, the sound in most of the Bosnian videos reminds us that the repetitive and familiar radio melodies are a legacy we share, and they are our common pop music mental bookmarks, which know no borders. The Bosnian video makers, Timur Makarevic and Amer Mrzljak, collaboration *Mindless* (1997, 9:30 minutes) – a short drama enacted in the most desecrated streets of Sarajevo – is associated through music to a wider cultural withdrawal, one that youth around the world confront.

> KRAJ [graffiti scrawled: cry]
> (Timur Makarevic and Amer Mrzljak, *Mindless,* 1997)

A strong mix of personal and documentary reflection, the overwhelming need and desire to communicate the experiences through which they lived, and to talk openly predominated in these works. Like the artists who first used the Sony porta pak in the early 1970s, this private/public subjective viewpoint uses the video medium to express what is – now. Smail Kapetanovic's two minute mini-portrait, *Hobby* (1993, 2:10 minutes), for instance shows the ingenuity of young boys to find excitement in their surroundings, no matter what. The youngster's collection of spent artillery shells – found in his front yard – is a chilling reality of wartime playground activity. It is presented very matter of fact,

without apology, as if he was discussing his bug collection, or baseball cards. On the other hand, the documentary work *Trams — My Favourite Turn* (1993-95, 11:00 minutes) by Nedzad Begovic chronicles the war by observing the destruction of Sarajevo's public transportation system, and follows through to the first car back on track. It is positive and affirms his faith that normalcy will reign again. In Sarajevo, the 'war attitude' and 'war ingenuity' was expressed many times in the works, and often with a great sense of humour. It was a demonstration that anything can happen, and solutions were found, and while searching for one thing, they don't stop looking for something else. In the autobiographical work of Enes Zlatar, *24 Hours with Bure* (1993-97, 21:00 minutes), we follow him down the streets of Sarajevo, on his way to work at the local fire station, and he points out the places where the bombs are coming from:

> '... over there !' [he points while running and ducking]
> '... that's where they try to kill us from...'
> (Enes Zlatar, from *24 Hours with Bure*, 1993-97)

The subjective camera, as well as his direct communication with the viewer, creates a special relationship that no news commentator is able to create. It is not a message meant to be sent over international satellite transmissions, but one that should reach far and wide. Enes and the others will inherit Sarajevo, it is their future. By telling us so straightforwardly how they survived, they take over the responsibility to, someday, become leaders. Nebojsa Seric, in his videotape *Shovel* (1997, 4:00 minutes), acts out his need to (ritually) bury his observer, and to escape from the constant surveillance and media attention. He performs for the camera, with the camera, and ironically 'buries the hatchet' by just doing it! In the process, we witness the grim surroundings, and the frustrations inherent in the competitive wartime living situation.

The search for the answers to 'why me' and 'why here' are questions all youth ask, but most do not need to witness death and destruction, and endure such an extended struggle. Without the personal expression through the media, they remain victims, but by picking up the camera and using it as a tool they find answers by working through the issues. The work *Paradox* (1997, 5:05 minutes), by Selimir Sokolovic, Admir Halilovic and Danilo Kreso, uses the theme of 'the hunted' becoming the hunter. By using image distortions, psychological states of mind are expressed, delusions and persecution are hinted at. We are unsure if this is irrational or paranoiac behaviour, and an ever present 'eye' relentlessly observes everything. Dejan Vekic created a collage of images, from photographs, in his work *X-Why* (1997, 7:00 minutes), an ironic title that links Sarajevo and Paris by youth culture and fashion. Zlatan Filipovic's work, also using photographs *The Road in Between* (1997, 7:00 minutes), takes a complete diversion into the abstract. His

computer-processed video, using photographs only as the source material, evokes transcendental ideals, rising above the ugliness of the war and reframing common scenes from a conceptual perspective, giving new value to personal viewpoint.

By using video, television, computers, and internet – mediated communications technology – artists gain de facto political connectivity. In this process they also gain practical knowledge and experience of how to express themselves. The war in Bosnia produced the largest movement of people in Europe since the Second World War, with over two million refugees and displaced persons scattered throughout the world. The country, which tolerated several ethnic subcultures for centuries, will never be the same. The crisis of war, which most of the population sought to avoid, became the topic of concern for others. An independently produced television programme, *Streets of Fire* (1996, 42:00 minutes), created by Adnan Sarajlic and Sasa Kaljanac, through continued effort, is broadcast nationally in Bosnia-Hercegovina, and not only in Sarajevo. The regular programme, which continues to be broadcast, is about one hour each edition. It gives voice to the public, and is a street chronicle of the war, its victims and its survivors. The introductory 'wraparound' is an artistic collage of disparate scenes without transitions, of various streets where the daily battles were waged against the common citizens. It has reached wide audiences at home, and abroad, bringing the poignant message clearly to the point. War is bloody hell.

> The twentieth century began in Sarajevo.
> The twenty-first has begun in Sarajevo, too.
> (Susan Sontag, from *Spring in Sarajevo*, 1993)

'Meeting Point' reveals how the video medium is capable of gathering up the collective memory, how it represents a personal point of view, and how it can – by viewing the programme collectively – allow the Sarajevo community to witness their collective memory together, as a group, and feel empowered with new directives. The works become the agent for the youth, and the survivors, to metamorphise their history, to expend it, and 'go on' to find solutions in a still very difficult situation: post-war society. It is almost impossible to think about video or media art from Sarajevo without thinking of the news media. But the artists in this programme wish to be distinct from the peace activists who have found a haven in their environment, a humanitarian pleasure park. Instead, they have given us a personal sample of how young individuals are reconstructing their daily lives, their memories, and how well prepared they are to building a future and return to normalcy, like their ancestors who shared stories face to face, in the streets of Sarajevo for hundreds of years.

Now that Sarajevo has ceased to be a war zone, and has become occupied under foreign military control, the residents live in a peculiar twilight zone. They can create, take hot baths and evening walks. They go to school, bars, and even pop stars are coming back to give benefit concerts. But, besides the minor annoyance of having the water turned off during the day, and irregular telephone service (and never to their neighbouring Yugoslavia), the youth suffer from widespread unemployment, and limited travel possibilities because of severe visa restrictions. Most countries have their fill of 'refugees' and no longer even grant transit visas to residents of Bosnia for fear of new demands for political asylum. Peace has been declared, and Bosnia has lost its 'most favoured charity' status on the front pages of newspapers around the world. Still, hundreds of foreign NGOs (non-governmental organisations) and special humanitarian efforts continue throughout Bosnia. For the most part, the local population of artists would prefer use of the Soros Humanitarian Foundation's professional video editing suite (created to train journalists), or to have a few of their own High 8 cameras (to share) rather than see millions of dollars invested into competing educational programmes that give them no personal voice.

The SCCA of Sarajevo has committed resources to provide a basic video editing set up, and cameras. Under the direction of Dunja Blazevic, artists in Sarajevo will benefit from professional direction and the connections to distribute their work internationally. She has years of valuable experience as a culture editor for the former national television (under the old Yugoslav system), where artists from around the republic of Yugoslavia were given access to professional production and post-production facilities, and broadcast their work. The videotapes that will be produced on the newer digital format will serve as emissaries for the artists, and the people of Bosnia, until they themselves are free to work, travel and re-enter the international flow of life and communication – until the return to normalcy.

Note 1 A shortened version of this text will be published in the *Annual Exhibition Catalogue*, Meeting Point, the Soros Center for Contemporary Arts, Sarajevo, 24 July – 12 September 1997.

Access to the Internet in East Central and South-Eastern Europe
New Technologies and New Women's Voices

Laura Lengel

Abstract: Researchers are beginning to examine the impact of the internet in regions experiencing economic change and struggle. However, broad assumptions about opportunity and access to the internet in these regions still exist. An unproblematised 'global village', where equal opportunity to engage in an open dialogue, is yet to be achieved. This article examines these issues in East Central Europe and the electronic discourses emergent in and about this region.

The article questions the empowering capabilities of the internet in East Central Europe. The article will present the voices from this region who assert that only with widespread access, can the internet fulfil its democratic promise. Women's access to the internet will also be discussed. Finally, the article highlights women's organisations in Hungary, Bulgaria and the Czech Republic which are creating spaces for collaboration and connectivity, and providing a forum for new voices which have previously been silent.

Introduction As a researcher with familial roots in Hungary and Poland, I have watched with great interest the growing presence of East Central and South-Eastern Europe on the internet. Firmly planted in the West after my ancestors emigrated to the USA in the early part of this century, I began this study of the impact of the internet on East Central and South-Eastern Europe from a position of a Western researcher, ignorant from a lack of direct lived experience in pre- and post-socialist social, economic and cultural conditions.[1] Such partial knowledge can lead researchers to assumptions and simplifications. Lack of lived experience in regions outside the technology-advantaged West has left many researchers with broad assumptions about the so-called 'global village' and how the internet affords an opportunity for open and equal dialogue between West and East, North and South.

In the East and the South, however, the 'global village' is a problematised notion, and the ambiguities of the 'global village' and its requisite new media technologies are questioned. Access to and negotiation with new media technologies in the East and the South requires careful examination. Whilst scholars and practitioners are beginning to examine new media technologies like the internet in these

regions, broad assumptions about user opportunity and access are still made. These assumptions result in an imagined and idealised 'global village' where all have equal opportunity to engage in an open dialogue.

In an earlier edition of *Convergence,* Nyaki Adeya notes that much debate into new media technologies, primarily the internet, assumes that user opportunity and access are very much taken for granted and, under that assumption, scholarship tends to focus on the '"problems" of *being* connected'.[2] Adeya argues for the importance of keeping 'sight of the fact that for much of the world's population there are also very real problems in simply connecting up to what already exists'.[3]

Whilst scholars like Adeya have critically assessed access to new media technologies in regions like Africa, Latin America, India and the Middle East,[4] very little has been done to apply similar lines of inquiry to East Central and South-Eastern European nations. Work examining communication flow and media in the region[5] does not address technology and the complexities of intercultural and international communication through new media. Conversely, work specifically addressing new media technologies[6] essentially ignores East Central and South-Eastern Europe and the former Soviet bloc. Thus, the importance of this special edition of *Convergence* on new media technologies in the region, and this article in particular, as a key to understand how post-socialist Europeans are struggling in their complex negotiation with new media technologies. This challenge runs parallel to their negotiation as post-socialist citizens, faced with vast socio-economic changes that are forcing citizens in the region to redefine their roles and identities against a backdrop of relative insecurity. Emerging from the legacy of state socialism, East Central and South-Eastern Europeans now have the opportunity to be active participants in the infancy of democratic practice in the region, active participants of the civic discourse previously oppressed under Soviet rule.[7] This ability to participate in an open dialogue, however, is juxtaposed with the problematic socio-economic conditions of the region.[8] In reality, it is *not* a glorious new age but a period of frequent confusion and occasional defensiveness.

This confusion and defensiveness emerges from a history of Soviet technological initiatives, particularly the development of computer hardware and software in Bulgaria. Since the fall of communist rule, the Soviet technological initiatives have died. Once in the centre of technology, post-socialist Europeans are now on the 'outside,' left behind the technological developments in the 'West,' unable to engage in the dialogue of so-called 'global village'. The opportunity for such dialogue, many argue,[9] provides spaces for communicative power, to have a 'voice' that would normally be silent in traditional

communicative contexts. However, 'empowerment' through the internet, a term often applied uncritically, needs to be questioned. Certainly, getting 'on-line', in and of itself, provides no more 'empowerment' than picking up the telephone. This 'virtual empowerment'[10] is only empowering if some pro-social benefit emerges from computer mediated communication. In other words, it is not ownership of new media technologies that is so important, but how it is used and by whom.

Further analysis of the possible 'empowering' capabilities of specific internet services are also important. Just as getting 'on-line' is not empowering in and of itself, surfing the web has little social benefit. However, unlike predominantly user-passive services of the internet like the World Wide Web, e-mail and synchronous communication services such as internet Relay Chat, Usenet and newsgroups can provide an active space for equal dialogue. Such a dialogue affords those with access to the internet the ability to interact without the constraints of race, class, ethnicity and gender bias. Whilst scholars discuss how computer-mediated communication (CMC) is capable of creating a means for all persons to be equally heard in a global arena, the opportunity to be equally heard is, in fact, unequal. The opportunity to engage an on-line 'voice' is granted to merely a select few, excluding both global regions and communities which have been traditionally marginalised socio-culturally and economically. Whilst the internet provides a forum for voices outside the dominant powers that typically control international mass communication, the minimum needs to access this technology require maximum expense including computers, modems, telephone lines and electricity. In post-socialist East Central and South-Eastern Europe where economic changes have been vast,[11] computers and links exist only at a premium, and internet service costs more than monthly rent. Cybernetic 'empowerment' is not an option for most.

Infrastructural considerations

Along with the costs of accessing the internet, insufficient infrastructure creates further challenges. For instance, the Ukraine has only one telephone for every seven or eight citizens, which falls far below the telecommunications access of developed countries.[12] More economically advantaged areas in the region, particularly in major urban centres like Prague and Budapest, telephone lines reach far more citizens. However, the infrastructural problems in the Ukraine are similar elsewhere in East Central and South-Eastern Europe and the former Soviet bloc, where electricity is inconsistent, telephone lines are poor, and technology generally is primitive. At present, national governments may be too consumed with economic and political survival to address these problems.

Infrastructural problems and economic disadvantage are some of the roadblocks to the so-called Information Superhighway. Despite its often-hyped democratic structure, this Superhighway, like traditional

transportation systems, contains some 'roads' which are quicker and can carry more traffic.[13] Other 'roads' are structured more like one-way alleys or dead-end lanes. In technology-advantaged regions, the roads are wider, faster and transport more information. To those on the 'outside' of these regions, argues Walter Uncapher, 'that far off world of massive data flows seems enwrapped in the mystery of complex network protocols and hardware, probably best left in the hands of the giant firms and governmental agencies'.[14]

Giant firms and agencies have stepped in to assist the construction and improvement of East Central and South-Eastern Europe's technological 'roads'. The World Bank, for instance, has donated monies to put computers in universities in Hungary and elsewhere in the region[15] (see also Ágnes Gulyás' article in this issue). Similarly, the Open Society Foundation and NetSat Express, a supplier of internet access via satellite, is providing new internet technology throughout East Central Europe.[16] Despite assistance from these organisations and corporate leaders like the Director of the Open Society Foundation, Hungarian-American George Soros or Andrew Grove, a Hungarian refugee turned chairman and CEO of Intel, 'roads' on the so-called Superhighway are certainly not 'super'. Soros' funding is a particularly interesting case. Said to earn £2,500 a minute, Soros reportedly loaned the Russian government a billion dollars in its efforts to privatise telecommunications.[17] Through the Open Society Institutes in New York and Budapest and the Soros Foundation, he has funded technology-focused educational initiatives and non-governmental organisations throughout East Central Europe, South-Eastern Europe and the former Soviet bloc. Soros is seen as an ambiguous figure, a one-man IMF saving the region. Clearly he will gain from funding privatisation moves and, arguably, is solidifying a financial dependence on the industrialised world generally and on him specifically. Despite his financial self-interest, however, his commitment to developing opportunities to use new technologies is not insignificant. As will be discussed further in this article, in the case of women's NGOs'(non-governmental organisations), Soros' funds have allowed traditionally silenced communities to be heard globally.

Thanks to such funding and despite the still evident infrastructural challenges, new voices from this region are represented on the internet. Whilst it is difficult to measure the number of 'wired' nations as the numbers are changing constantly,[18] the international connectivity table developed by the Internet Society[19] reports that the entirety of East Central and South-Eastern Europe and the former Soviet bloc have some level of connection to the internet, either through Internet Protocol (IP) links on the open internet, or through Unix to Unix Copy Protocol (UUCP) with e-mail and Usenet newsgroups, or FidoNet, a store-and-forward e-mailing wide area network (WAN) with gateways to the internet.

Seizing opportunities: local developments

Based on the above connectivity assessment, post-socialist nations are connected and the few windows of opportunity that do exist appear promising. World Wide Web sites from the Open Media Research Institute and from news services like Radio Free Europe/Radio Liberty and Peredatsja are emerging from the region, affording opportunities for new voices to be heard globally. Within the region, conflicts may be resolved by the internet. ACCESS, a non-governmental organization in Sofia, promotes national and ethnic relations through the internet.[20] Veran Matic, a leading Serbian journalist and editor-in-chief of B92, an independent Serbian radio station, announces that 'the internet is today's key to bringing down totalitarian regimes and breaking the state's monopoly on the media'.[21] With the breakdown of state monopolies and the increase of privatisation,[22] the economy-building capacity of new media technologies can, as David Dyker argues, 'provide one of the most valuable resources currently available to east European economies'.[23] Both the political and economic opportunities opened up by new technologies allow activists and entrepreneurs to enact change, a change perhaps only possible after the fall of the old regimes.

Such regimes and unwieldy bureaucracies, coupled with economic need, have led some to seize their own opportunities, including telephone-line piracy, internet-account piracy and the subversive elements of non-institutional networks in the region. With their entrepreneurial attitude[24] and keen technological savvy, East Central European youth have resisted the sanctioned route through local telephone authorities and internet service providers by pirating lines and accounts. Following the sanctioned route requires necessary resources, primarily capital, telecommunications equipment approved by the local authority, and the persistence and patience to navigate through sometimes unwieldy bureaucracies. This sanctioned system excludes (or marginalises) the majority of potential users in East Central Europe and elsewhere in post-socialist nations.

Resourceful individuals and groups in this region, lacking economic means, have found ways around this system and have, through non-sanctioned means and methods, 'appropriated' internet connectivity. These range from smuggled modems, other telecommunications devices and computers, to the pirating, or illegal connection, of telephone lines. The case of Bulgaria is worthy of discussion, particularly when considering the history of the nation as the designated 'Silicon Valley' of the Soviet regime. Until the 1980s, the Politburo positioned Bulgaria as the centre of 'socialism's first and only centrally planned home-computer industry'.[25] Because of this designation, Bulgarian students and technology professionals had far more computer access than their counterparts elsewhere in the region. Whilst the Soviet initiatives have ceased, Bulgarians have retained a level of technical brilliance known

internationally, if only for their infamous computer viruses that swept the world in the early 1990s. Today, the viruses are no longer produced. However, the nation outputs other items, like 25 million pirate audio CDs and CD-ROMs,[26] which are sold on the street in Sofia. Internet accounts are also pirated. In Bulgaria, where monthly service charges of ISPs like Bulnet and Eunet can cost more than monthly rent, the technologically astute connect phones into telecommunications networks illegally, pay a lower fee to black market 'unlimited' service providers and have affordable access. In other instances, e-mail accounts are created on servers through an 'insider' – an employee of the ISP doing so – in what might be construed as 'democratization' of the means of communication. Other, more legal initiatives are also developing in Bulgaria. Those who were once the students of the Soviet computer initiatives, are now forming their own, in many cases more affordable ISPs. Such moves, as David Bennahum contends, are 'sparking a small renaissance of entrepreneurial activity, showing, by example, that there are economic alternatives to emigration or collusion with criminal enterprises'.[27] The end result is that some users who would otherwise be denied access to the sphere of the internet have equitable access.

Equitable access/equitable discourse?

Equitable access, however, does not necessarily mean equitable discourse. Stokes and Stokes argue that networked computers are 'reproducing rather traditional disparities in opportunity'[28] based on a lack of language, national and ethnic diversity. Internet users in the USA still comprise the majority of all activity on 'the allegedly worldwide web'.[29] Further, 90 per cent of content on this 'allegedly worldwide web' is in English.[30] Perhaps this majority base explains why East Central Europeans have been overlooked in research on opportunity and access to new media technologies. Their new roles and identities in post-socialist societies and their ability to participate in civic discourse after years of Soviet-imposed silencing, are key to communication research. Fortunately, albeit slowly, the predominance of the English language is changing. The Radio Free Europe/Radio Liberty web site includes news scripts in Russian and RealAudio live radio broadcasts in Armenian, Azerbaijani, Belarusian, Bosnian, Croatian, Kazakh, Kyrgyz, Russian, Serbian, Tajik, Tatar-Bashkir, Turkmen and Uzbek.[31] Similarly, NGOs are developing non-English language web material and, when resources are thin, ask members to volunteer to translate web sites into Russian and other languages, widening readership and, where interactive web sites are concerned, affording more opportunities for open dialogue.

Gender and the technology gap

Opportunities for open dialogue, even through traditional media, have been a particular challenge for those on the margins of dominant discourses, such as women, both in East Central Europe and throughout the so-called 'global village'. In this 'village' dominant discourses tend to render invisible or misrepresent women who have not enjoyed the

discursive freedom and power as do their male counterparts. In many regions throughout the world, gender difference is becoming, albeit slowly, less problematic through the many advances women have made toward equality. Yet today, however, women's voices are for the most part muffled by those in power in such areas as politics, education and professional development.

In East Central and South-Eastern Europe, gender difference in many ways has become more problematic since the fall of the old regimes. The status of women in the region is a deeply ambiguous phenomenon at present and there is much work to be done to achieve gender equity in the future.[32] In her study on citizenship, gender and women's movements in East Central Europe, Barbara Einhorn argues that gender 'has in practice operated as an exclusionary mechanism, hindering female entitlement to citizenship rights'.[33] In many cases, women in this region may be enjoying far less power since the fall of socialist rule. Similarly, Renata Salecl's study of feminism in the post-socialist era reveals a problematic situation for women:

> In my opinion, the communist society ... only relied on the entrenched patriarchy of the society ... The difference between East European and Western societies lies in the East European refusal to acknowledge the problem of patriarchal domination. Just as communist ideology erased the problem of patriarchal domination, today's post-socialist societies also erase the problem of sexual inequality. The post-socialists act as if emancipation of women is not an issue for them at all. The only force addressing the status of women is the nationalist right, although its major concern is, of course, to help women rediscover their 'natural' mission.[34]

Other scholarship parallels Salecl's argument that East Central and South-Eastern European women are being encouraged to return to their '"natural" mission' of staying home and bearing children. In the late 1980s in Bulgaria, for instance, women were encouraged to return to their 'authentic culture' of homemaking and child rearing.[35] After 1989, Dimitrina Petrova notes, the so-called 'revolution' 'left the patriarchal system of power intact, transforming its more superficial manifestations from bad to worse'.[36] Throughout the region the return to 'family values', along with a new emphasis on nationhood are positioned as key in the search for new identity in the post-socialist era.[37]

These 'family values' are reflected in women's work conditions after 1989. Under communism, women benefited from job security, stable child care, and pro-woman welfare policies. Since then, Minton Goldman argues, 'women have been especially hard hit by the movement toward a free-market economy'.[38] Goldman contends that women 'seem to be better off under Communist rule. At least under

communism there was a pretence of fostering equality, with communist governments providing women opportunities to work outside the home and earn income that could help improve living conditions for them and their families'.[39]

Women's working conditions in 'pre-' and 'post-' times can be examined more closely within the realm of women working in technology. Women engineers, mathematicians, pilots and other professionals in science and technology were encouraged under Soviet rule. For instance, Inke Arns notes, the 'so-called Soviet "Night Witches", a women-only bomber pilot battalion [that] fought the Nazis during the second world war. After the war, when "times had changed", no one wanted to hear about what these "equally heroic" women did during the war.' This 'silencing' in late Stalinism, Arns argues, reflects the challenge for a patriarchal society to accept the image of a woman fighting rather than in their traditional roles.[40]

With the contemporary hegemonic discourse encouraging women to return to their traditional roles, this 'silencing' has become even more intense since 1989. Through field research in the region, I have heard women confirm the problems of gender inequality in both the post-socialist and technological eras. Women contend they are 'outsiders,' 'isolated from the world' that hails both advances in technology and advances for women.[41] Access to and education about computers, granted primarily although not exclusively to their male counterparts in environments like Bulgaria's National Mathematics High School during socialist rule,[42] have been generally off-limits to post-socialist women students in nations like Bulgaria, Hungary and the Czech Republic. Now that the changing economic situation in the region has all but closed down sites like the National Mathematics High School, neither young men nor women have access to the technology once enjoyed by the young hackers at the Mathematics High School. Despite the death of the Soviet technological initiatives, the hackers have grown up and mentored younger men to rebuild discarded computer hardware, develop their own software, and encroach upon the territory of other people's computer systems, destroying them with deadly computer viruses.

Women and girls, by contrast, have been somewhat on the margins of technology. Whilst many women under Soviet rule held the high positions mentioned above, most women employed by Soviet owned-and-operated software and hardware firms were positioned in mundane factory-line positions, a situation consistent with women's low-level production work in the West and elsewhere.[43] If not working to piece together computer chips women were, in many cases, discouraged from high-level creative, research and development contact with technology. Now, since the fall of communism, there is a dual-levelled

discouragement, firstly from the 'family values' discourse and, secondly, from the economic crises that have enveloped East Central and South-Eastern Europe. Technology factories are closed, standing still, awaiting a re-charge from the ever-growing privatization moves.[44] Women, too, are standing still, with neither access nor educational opportunities to new communication technologies.

Despite the stationary position of women amidst the changes following socialist rule, women in post-socialist nations do see the possibility of using the internet to participate in a previously oppressed civic discourse. Such participation, however, is hindered by gender inequality inherent in the local cultures. Considering this ambiguous situation of women pre- and post-Soviet rule, Barbara Einhorn argues despite 'improvements in the civil and political rights associated with democratic citizenship, in the short run at least' women in the region 'stand to lose economic, social welfare, and reproductive rights'.[45] For instance, Czech and Slovak women have been ignored by new political parties.[46] According to Goldman, these parties, led by Czech and Slovak men, 'distrusted women and had few incentives to address their concerns, much less share power with them'.[47] In Poland, Goldman writes, 'the Catholic Church has been a big obstacle to gender equality, having literally gone on an offensive against the social and political advancement of women since 1989'.[48] The obstacles to gender equality are thus significant in post-socialist Europe and true civic discourse for women in the region has yet to be achieved.

East Central and South-Eastern European women realise that one way to gain citizenship rights is to participate in a dialogue which critiques political silencing and loss of rights. Whilst women in the region are beginning to find opportunities to express themselves through politics, commerce, education and the media, they acknowledge the liberating capacity of CMC as a way to have their voices heard by a wide, global audience. Where access is available, women are acting to create proactive internet discourse. One example is Mariana Lenkova, an editor of the Greek Helsinki Monitor, an on-line service from the Greek National Committee of the International Helsinki Federation which provides information about the Balkans both within the region and 'outside' to the world. As mentioned earlier, Lenkova has developed and continues to coordinate 'Balkan Neighbors'. She developed the project in October 1996 with ACCESS, a non-governmental organisation in Sofia, with funding from the George Soros' Open Society Foundation, to promote national and ethnic relations through the internet. One of the Balkan Neighbors reports, 'Balkan Neighbors: Positive and Negative Stereotypes in the Media of Seven Balkan Countries,'[49] has been distributed through a listserv since late 1996. The project analyses the media representation of Balkan countries including Albania, Bulgaria, Greece, Macedonia, Romania,

Serbia and Turkey. Lenkova prepares monthly regional summaries of the media analysis, including possible misrepresentation of the Balkan nations by the media. It also addresses issues such as racial and ethnic prejudice against Roma communities, attitudes to what she terms 'internal minorities' within Balkan nations, and media coverage of Bulgaria's 'mafia'.[50] The project also focuses on, relations between Macedonia, Bulgaria and Greece and the diversity within East Central Europe, South-Eastern Europe and the diversity within these nations. This focus provides those outside the regions with a deeper understanding that they are not monolithic entities, but are vastly differing culturally, economically and politically.

Lenkova is optimistic that computer-mediated projects like Balkan Neighbors can enact social change, when users can gain awareness through access to information about the ethnic, racial and nationalistic tensions within the region.[51] She considers herself fortunate to be a person with rare opportunity and access to the internet in Bulgaria. Unlike her counterpart professionals in Sofia, her involvement with access and funding from Soros' foundation has provided her with the connectivity she desires, both to work on Balkan Neighbors, and for her own communication. She is a self-proclaimed 'info-elite,' but works to use that elite status only to enact socially-conscious activities on the internet. She says, 'there is no doubt that the internet is one of the greatest achievements of humankind in the end of the 20th Century'.[52] Whilst this comment perhaps reflects the uncritical stance of Soros and the Open Society Foundation's 'global village' missions, Lenkova does realise that the internet can provide opportunities for new voices to be heard by a wide global audience.

Women's networks

Other women like Mariana Lenkova have collaborated through the internet for political action and change. Jean Brunet and Serge Proulx[53] maintain that new communication technology supports a grass-roots model of civic discourse that women prefer over more formal communicative means. Such grass-roots communication, many feminist scholars articulate, provides a strong ground for political activity. Similarly, Lynda Birke and Marsha Henry argue despite challenges of gender marginalisation, the internet 'allows women to communicate and spread information across the globe; among other things, this mode of communication is relatively cheap and can dramatically expedite political actions by putting women quickly into contact'.[54] This contact, through new media technologies, makes links between women's communities possible.

Organisations and individuals are attempting to narrow the gender and technology gap and the gaps between East and West through supporting dialogue, electronic information exchange and activism for women's issues. Women have developed a growing presence on the

internet, through such fora as Magyar Nõk Elektronikus Lapjai (Hungarian Women's Pages), Free Feminists, Prague's Gender Studies Centre, and the Gender Project for Bulgaria.[55] This presence is critical, as more traditional fora such as print media and word of mouth limit the growth potential of women's organisations. For instance, in the case of the Gender Studies Centre in Prague, support for the Centre has been thin since its founding in 1991 by Siklová, a Charles University professor who in 1981-82 spent a year in prison and seven years thereafter working as a cleaning woman, charged with smuggling literature in and out of Czechoslovakia.[56] Now women like Siklová have the freedom to disseminate literature without threat of imprisonment. Alongside this freedom of information and political thought, there is currently a resistance to feminism. Einhorn notes 'Siklová feels there is a great need for education so that women overcome their misgivings about feminism and begin to understand some of the issues at stake'.[57]

Like the Prague Gender Studies Centre, other organisations are using the internet to work against anti-feminist and anti-woman discourse in East Central and South-Eastern Europe. The Magyar Nõk Elektronikus Lapjai is linked with the site for NaNe! which stands for Nõk a Nõkért Együtt az Erõszak Ellen (Women Working With Women Against Violence) and also means, roughly, Don't Do That! in Hungarian. The NaNe! organisation's most significant accomplishments include establishing Hungary's first telephone hotline, to aid women and children surviors of violence, organizing an international conference on 'Violence and Democracy', to raise public awareness of domestic violence in Hungary.[58] Éva Thun, creator of the Magyar Nõk Elektronikus Lapjai and NaNe! sites, in Hungarian and English, announces:

in Hungary discussing women's issues and advocating the importance of public discourse on women's lives and women's experiences are still not considered to be popular modes of thinking and action. Yet, there is a growing number of women who are determined to foster changes and persistent and enthusiastic in their pursuit of making their voices heard and their demands met. By launching the HÍR-NÕK Homepage we would like to offer yet another (hopefully powerful) channel for discussion in order to be able to step out of invisibility.[59]

Like Mariana Lenkova, Éva Thun's opportunity to develop the Magyar Nõk Elektronikus Lapjai site may have been the result of World Bank funds to Eötvös Loránd University in Budapest, where she is in the Teaching Training College. Similarly Nõk a Nõkért Együtt az Erõszak Ellen is funded by a number of sources, mainly Soros' Open Society Foundation. Whatever the source of funding, these women are using their internet access to benefit women's advances. Lenkova, Thun and others sense the impact of their voice in the international arena and the possibilities of enacting change.

The Network of East-West Women (NEWW) is another organisation that voices concerns of women in the region. With offices in Warsaw, Moscow and Washington, DC, the NEWW is creating links between women in East Central, South-Eastern Europe and the former Soviet bloc with others worldwide. The home page of the NEWW site highlights an announcement from Slavenka Drakuliæ, internationally known Croatian journalist and writer: 'Democracy without women is no democracy'.[60] The mission of the organisation follows Drakuliæ's statement. Because 'post-communist countries have imposed a harsh life upon women in their societies,' NEWW's mission is to bring a wide global understanding to users 'directly, not via the mass media, the efforts of these women to abolish the injustices and inequalities they face in their homelands'.[61] Updated frequently, the site has included an on-line discussion space, 'Sister Links,' regional and global news relating to women's issues and links to listservs such as the Majordomo Mailing List, which addresses gender in post-communist societies and offers an On-Line Legal Resource Service, about women's legal and human rights issues in the region. NEWW also supports women's organisations through the NEWW site. For instance, the Krakow-based Polish women's foundation and feminist group 'eFKa' houses its web site on the NEWW site. The 'eFKa' site discusses the activities of the group which are 'aimed at changing stereotypes on gender, particularly by supporting women's solidarity and independence, anti-discrimination actions and a development of women's culture'. It also focuses on the current projects 'eFKa' is developing, which include a counselling and advice centre for women and a hot-line run by female psychologists and lawyers.[62] Another organisation supported by the NEWW site is ZiF (Zentrum für interdisziplinäre Frauenforschung), founded in December 1989 by a group of East-Berlin women academics from Humboldt University and the Academy of Science as the first women's studies centre in the then GDR. Prior to the foundation of ZiF, the women academics had been doing research on feminist issues for over a decade, individually and collectively. 'Up to today,' the site announces, 'the ZiF is one of the few examples of a successful institutionalisation of women studies in East Germany'.[63] ZiF sets an example of collaboration both within and outside organisations.

Opportunities to develop collaborative 'East-East networking links between women, as well as East-West dialogue,' Barbara Einhorn notes, ground the 'search for new understandings of women's situation' both within and outside the region'.[64] The NEWW 'Sister Links' exemplify how women in both the 'East' and the 'West' are engaging in dialogue and finding collaborative possibilities. For instance, the Netherlands' Vrouwen ontmoeten Vrouwen (Dutch for Women meet Women) project is a forum for women's organisations to disseminate news and discuss issues. Vrouwen ontmoeten Vrouwen was developed

by a group of five women from the Dutch organisation Milieukwartet, a national organisation concerned with women and the environment. The group's aim is to work worldwide on the implementation of results emerging from the Fourth World Conference of Women in Beijing 1995. The group's web site announces 'we think it is important that women support and have a stimulating role to achieve implementation of the Platform for Action. This project gives us the opportunity to exchange ideas and strategies with women' not only between East and West regions, but North and South.[65] The organisation's electronic newsletter, VOVNews, highlights collaboration between the International Women's Centre in Nijmegen with discussion partners Lenka Prusova in the Czech Republic and Vashty Maharaj in Trinidad. Pauline Loeffen of Milieukwartet announces, 'with the exchange of this information we hope to come to have a good contact in which we can learn from each other's experiences and start an interesting discussion. We hope this gives us more ideas on how we can improve the situation of women and how to deal with the problems we have to face'.[66]

This collaborative spirit can foster both gender equity and, more broadly, the future growth of participatory democracy, whether it be in the East or West, North or South. Through increases in access and opportunity, women can communicate as active, vital dialogic agents. Women in post-socialist nations realise that there is much work to be done now to seize opportunities to participate in truly open dialogue in the future, and that future rests on this collaborative spirit. With such spirit, Dimitrina Petrova announces, 'we can only try to keep the flame burning – the small flame of sympathy, of simple concern for the other. Sisterhood may play a powerful part in this commitment'.[67]

Future voices Though organisations like the Network of East-West Women, collaborative contacts through the internet benefit those both within and outside East Central Europe. Collaboration, understanding and change are key to the empowerment promised by new media technologies. Participation in an open computer-mediated dialogue affords both women and men, whether in economically advantaged or disadvantaged regions, a space to enact change, and enhance both global and local understanding of national, ethnic, race, gender and class difference. This dialogue, however, is only possible through widespread internet access and opportunity. The future of internet access is uncertain, considering the present state of constant economic fluctuation within the region. However, with the growing interest of those organisations and individuals who wish to voice their concerns to a wide global audience, the internet creates a space for enacting social change, only if those that wish to enact this change have access and opportunity to be a 'new voice' through new media technologies.

Notes

1 The author wishes to thank Inke Arns, Alice Tomic and the referees whose extremely insightful comments shaped this article and my knowledge of East Central and South-Eastern Europe and, particularly, of women's issues in the region.

2 Nyaki Adeya, 'Beyond Borders: The Internet for Africa', *Convergence: The Journal of Research into New Media Technologies*, 2, no. 2 (Autumn 1996), p. 23 [author's emphasis]. See also Steven Quinn's review in this current issue.

3 Ibid, p. 23.

4 Daniel Fedak, 'Africa in the Third Millennium: Organizing New Communication Technologies for the Future', paper presented at the International Communication Association/National Communication Association Conference, Rome, Italy, July 1998; Raul Gonzalez-Pinto and Marco Roman, 'Digital Citizens Down the Border: How they See the World Now and in the Future', paper under review for the National Communication Association Convention, New York, November 1998; Priya Kapoor, 'The Future of the Internet in the Indian and South Asian Women's Movement', paper presented at the International Communication Association/National Communication Association Conference, Rome, Italy, July 1998; Laura Lengel and Daniel Fedak, 'The Politicization of Cybernetic Discourse: Discourse Conflict and the Internet in North Africa', paper under review for publication in *Civic Discourse & Discourse Conflict in Africa*, ed. Michael Prosser (Norwood, NJ: Ablex, forthcoming); Marwan Kraidy, 'Glo/calization, New Technologies and Lebanon', Paper presented at the Speech Communication Association Convention, San Diego, California, 23 November 1996; Ananda Mitra, 'Nations and the Internet: The Case of a National Newsgroup, "soc.cult.indian",' *Convergence: The Journal of Research into New Media Technologies*, 2, no 1 (Spring 1996) pp. 44-75.

5 Fred Casmir, *Communication in Eastern Europe: The Role of History, Culture and Media in Contemporary Conflicts* (New Jersey: Lawrence Elbaum, 1995); Nicholas Hopkinson, *Strengthening the Media in the Developing World and Eastern Europe*, Wilton Park Paper 115 (London: HMSO, 1996); and David L. Paletz, Karol Jakubowicz and Pavao Novosel (eds.), *Glasnost and After: Media and Change in Central and Eastern Europe* (Creeskill, NJ: Hampton, 1995).

6 American Political Science Association, *A New Way of Talking Politics: Democracy on the Internet*. Washington, DC: APSA, September 1994; R. E. Anderson, et al. 'Equity in Computing', *Social Issues in Computing: Putting Computing in its Place*, eds. C. Huff and T. Finholt (New York: McGraw-Hill, 1995), pp. 352-385; Brian D. Loader, '*The Governance of Cyberspace: Politics, Technology and Global Restructuring*', in The Governance of Cyberspace: Politics, Technology and Global Restructuring, ed. Brian D. Loader (London: Routledge, 1997), pp. 1-19; Z. Sardar, 'Alt.civilizations.faq: Cyberspace as the Darker Side of the West', in *Cyberfutures: Culture and Politics on the Information Superhighway*, eds. Ziauddin Sardar and Jerome R. Ravetz (London: Pluto, 1996), pp. 14-41.

7 The terms East Central and South-Eastern Europe are used, not uncritically, throughout this article to address a broad region. This region, however, is

extremely diverse and unfortunately this diversity and the problematic notion of nationhood within the region cannot be fully addressed in this article. Please see Inke Arns and Andreas Broeckmann, 'Small Media Normality for the East', in ZK *Proceedings 4: Beauty and the East*, eds P. Schultz, D. McCarty, V. Cosic, G. Lovink (Ljubljana: Digital Media Lab, 1997), pp. 17-21 and in *Rewired - The Journal of a Strained Net*, June 9 - 15, 1997 <http://www.rewired.com/97/0609.html>. See also Slavoj Zizek, 'The Malaise in Liberal Democracy', in *Heaven Sent*, no. 5 (1992), pp. 44-50.

8 For discussions on the socio-economic conditions of Central, Eastern and South-Eastern Europe, please see Barbara Einhorn, *Cinderella Goes to Market: Citizenship, Gender and Women's Movements in East Central Europe* (London: Verso. 1993); David S. Bennahum, 'Heart of Darkness', Wired, November 1997, pp. 226-277; Minton F. Goldman, *Revolution and Change in Central and Eastern Europe: Political, Economic, and Social Changes* (London: M.E. Sharpe, 1997); A. Heitlinger, 'The Impact of the Transition from Communism on the Status of Women in the Czech and Slovak Republics', in *Gender Politics and Post-Communism*, eds. N. Funk and M. Mueller (London: Routledge, 1993), pp. 95-108; Ekaterina Ognianova and Brian Scott, 'Milton's Paradox: The Market-place of Ideas in Post-Communist Bulgaria', *European Journal of Communication*, 12, no. 3, 1997. pp. 369-390; David L. Paletz, Karol Jakubowicz and Pavao Novosel (eds.), *Glasnost and After;* J. Perlez, 'Central Europe's new generation: driven and smart', *New York Times*, 1 January 1998; Field research in Bulgaria also provided the author's understanding of changing economic conditions.

9 cf. Brian D. Loader, ed., *The Governance of Cyberspace: Politics, Technology and Global Restructuring* (London: Routledge, 1997); D. Richardson, 'Community Electronic Networks: Sharing Lessons Learned in Canada with Our African Colleagues', paper presented at the MacBride Roundtable on Communication: Africa and the Information Highway, Tunis, Tunisia, 16 March 1995; Carlton Reeve, 'Democracy through the Information Superhighway', paper presented at the 'Shouts from the Street: Popular Culture, Creativity and Change' Conference, Manchester Metropolitan University, Manchester, England, 7 September 1995.Vivian Sobchack, 'Democratic Franchise and the Electronic Frontier', in *Cyberfutures: Culture and Politics on the Information Superhighway*, eds. Ziauddin Sardar and Jerome R. Ravetz (London: Pluto, 1996), pp. 77-89; Bernard Woods, *Communication, Technology and the Development of People* (London: Routledge, 1993).

10 Brian D. Loader, 'The Governance of Cyberspace', p. 11.

11 In-field interviews with a range of lecturers, professionals and students in Bulgaria, Hungary and Bratislava indicate how East Central Europeans are directly hit by vast economic instability of the region following the fall of Soviet rule. Respondents include: Michael Daley, Maagnum Resources, personal interview, London, 14 November 1997; Angi Malderez, Senior Lecturer, School of Education, Leeds University and former Director of English Language Teaching, Eötvös Lorand Scientific University in Hungary,

personal conversation, Leeds, England, 16 December 1997; Daniela Brevenikova, University of Economics, Bratislava, Slovakia, personal conversation, Leeds, England, 16 December 1997, Madeleine Danova, St. Kliment Ohridski University, personal interview, Sofia, Bulgaria, 25 April 1997; Kornelia Merdjanska, St. Kliment Orhidski University, Sofia, Bulgaria, personal interview, Sofia, Bulgaria, 24 April 1997; Also interviewed were English language teachers in Bratislava, Slovakia, October 1993 and students at St. Kliment Orhidski University in Sofia 24 and 25 April 1997.

12 New Europe Group, 'Ukraine to streamline telecoms sector in 1998', New Europe On-Line, Daily Release, No. 24. 7, (980107:19). 7 January 1998. E-mail to Laura Lengel (7 January 1998).

13 Walter Uncapher, 'A Geodesic Information Infrastructure: Lessons from Restructuring the Internet', paper presented at the International Communication Association Conference, Albuquerque, New Mexico, May 1995.

14 Walter Uncapher, 'A Geodesic Information Infrastructure', p. 1.

15 Angi Malderez, Senior Lecturer, School of Education, Leeds University and former Director of English Language Teaching, Eötvös Lorand Scientific University in Hungary. Discussion, Leeds, England, 16 December 1997.

16 Julie Moffett, 'Eastern Europe: Internet - Testing New Technology', Radio Free Europe/Radio Liberty. (14 August 1997). <http://www.rferl.org/nca/features/1997/04/F.RU.970404192806.html > (14 December 1997).

17 Phil Reeves, 'A good man to know if you're broke.' *The Independent*, 6 March 1998, p. 3.

18 Daniel Fedak, 'The Politicization of Cyber-Power: Government Control, Technological Advancements and the Internet in the Arab World', paper presented at the 'Communication, Technology and Cultural Values' Conference, Rochester Institute of Technology, Rochester, New York, 12 July 1997. p. 5.

19 Larry Landweber, 'International Connectivity, Version 16', 15 June 1997. lhl@cs.wisc.edu (23 January 1998).

20 Mariana Lenkova, 'Balkan Neighbors: Positive and Negative Stereotypes in the Media of Seven Balkan Countries', e-mail to Laura Lengel (24 October 1997).

21 Natashia Borchanin and Julie Moffett, 'Serbia: Internet Plays Key Role In Belgrade Politics', Radio Free Europe/Radio Liberty. 4 April 1997. <http://www.rferl.org/nca/features/1997/04/F.RU.970404192806.html > (8 January 1998).

22 New Europe Group, 'Bulgaria seals 33 privatisation deals in two days', New Europe On-Line, Daily Release No. 25 full version, (980108:25), e-mail to Laura Lengel (8 January 1998).

23 David Dyker, 'The computer and software industries in the East European economies: A bridgehead to the global economy?' *Europe-Asia Studies*, 48, 1996 pp. 915-930.

24 J. Perlez, 'Central Europe's new generation: driven and smart', *New York Times*, 1 January 1998.

25 David S. Bennahum, 'Heart of Darkness', *Wired,* November 1997, p. 228.
26 Ibid, p. 230.
27 Ibid, p. 266.
28 Peter Stokes and William Stokes, 'Pedagogy, Power, Politics: Literate Practice Online', *Computers & Texts.* No.13, December 1996, p. 5.
29 Ibid, p. 5.
30 Robin Frost, 'Web's Heavy U.S. Accent Grates on Overseas Ears', *Wall Street Journal.* 26 September 1996.
31 Please see the Radio Free Europe/Radio Liberty Site, http://www.rferl.org (20 February 1998).
32 Inke Arns, e-mail to Laura Lengel (16 March 1998).
33 Einhorn, *Cinderella Goes to Market,* p. 258.
34 Renata Salecl, *The Spoils of Freedom. Psychoanalysis and Feminism after the Fall of Socialism* (London: Routledge, 1994), p. 26.
35 Dimitrina Petrova, 'The Bulgarian Case: Women's Issues or Feminist Issues,' in *Gender Politics and Post-Communism,* eds. Nanette Funk and Magda Mueller (London: Routledge, 1993), pp. 22-23.
36 Dimitrina Petrova, 'The Farewell Dance: Bulgarian Women in Transition', paper presented to the Conference on 'Mary Wollstonecraft and 200 Years of Feminism', Sussex University, Sussex, England, 5-6 December 1992.
37 Einhorn, *Cinderella Goes to Market,* p. 256.
38 Goldman, *Revolution and Change in Central and Eastern Europe,* p. 210.
39 Ibid, p. 75.
40 Inke Arns, E-mail to Laura Lengel (16 March 1998) cf Barbara Angelberger and Ilka Röbler 'Nachthexen in Nähmaschinen' in *an.schläge,* November 1997, pp. 40-41; Bruce Myles, *Night Witches* (Academy: Chicago Publishers 1990).
41 Laura Lengel, 'Gender and the Technology Gap in New Europe', in *Culture and Technology in the New Europe: Civic Discourse in Transformation in Post-Communist Nations,* ed. Laura Lengel (Norwood, NJ: Ablex, forthcoming).
42 David S. Bennahum, 'Heart of Darkness', *Wired,* p. 226.
43 E. Malinowska, 'Socio-Political Changes in Poland and the Problems of Sex Discrimination', *Women's Studies International Forum,* 18., no. 1, 1995, pp. 35-43. p. 35.
44 cf. New Europe Group, 'Bulgaria seals 33 privatisation deals in two days.'
45 Einhorn, *Cinderella Goes to Market,* p. 1
46 Goldman, *Revolution and Change in Central and Eastern Europe;* A. Heitlinger, 'The Impact of the Transition from Communism on the Status of Women in the Czech and Slovak Republics', in Gender Politics and Post-Communism, eds. N. Funk & M. Mueller (New York: Routledge, 1993); pp. 95-108; S. L. Wolchik, 'Women in Transition in the Czech and Slovak Republics: The First Three Years', *Journal of Women's History,* 5, no. 3, pp. 102-5.
47 Goldman, *Revolution and Change in Central and Eastern Europe,* p. 133.
48 Goldman, *Revolution and Change in Central and Eastern Europe,* p. 41.
49 Mariana Lenkova, 'Balkan Neighbors.'
50 Ibid.

51 Mariana Lenkova. Personal interview. Sofia, Bulgaria, 24 April 1997.
52 Ibid.
53 Jean Brunet and Serge Proulx, 'Formal versus grass-roots training: women, work, and computers', *Journal of Communication*, 39, 1989, pp. 77-84.
54 Birke, Lynda and Marsha Henry, 'The Black Hole: Women's Studies, Science and Technology', *Introducing Women's Studies: Feminist Theory and Practice*, eds. Victoria Robinson and Diane Richardson. 2nd Edition (London: Macmillan, 1996), pp. 230. See also Rian Voet, 'Women as citizens and the role of information technology', *Computers and Society*, eds. Colin Beardon and Diane Whitehouse (Oxford: Intellect, 1993), pp. 15-26; and Sadie Plant, *Zeros + ones: Digital Women and the New Technoculture* (London: Fourth Estate, 1997).
55 Magyar Nõk Elektronikus Lapjai (Hungarian Women's Pages) are available at <http://kazy.elte.hu/personal-home/eva/women/> (24 March 1998); the Prague Gender Studies Centre at <http://www.ecn.cz/gender/> (23 February 1998) and the other organizations mentioned above are found at the Network for East-West Women site at <http://www.neww.org/> (24 March 1998).
56 Einhorn, *Cinderella Goes to Market*, p. 188.
57 Ibid.
58 The NaNe! site is available at <http://kazy.elte.hu/personal-home/eva/women/medium/english/nane-e.html> (24 March 1998).
59 Éva Thun, 'Welcome', Magyar Nõk Elektronikus Lapjai (Hungarian Women's Pages). No date. <http://kazy.elte.hu/personal-home/eva/women/medium/english/index.html> (19 February 1998).
60 Network of East-West Women. Home page. 21 February 1998. <http://www.neww.org> (23 February 1998).
61 Ibid.
62 'eFKa'. Home page. <http://www.neww.org/ceewomen/efka.htm> (20 March 1998).
63 ZiF. Home page. <http://www.neww.org/ceewomen/zif.htm> (20 March 1998).
64 Einhorn, *Cinderella Goes to Market*, p. 13.
65 Pauline Loeffen. 'Experience of a dutch partner: Milieukwartet.' Vrouwen ontmoeten Vrouwen. Home page. <http://www.vrouwen.net/ebg/ebg-cos> (18 January 1998).
66 Ibid.
67 Dimitrina Petrova, 'The Farewell Dance: Bulgarian Women in Transition'.

Intermedia: The Dirty Digital Bauhaus

An E-Mail Exchange with János Sugár

Geert Lovink

Introduction The Hungarian artist János Sugár is a founding member of the Media Research Foundation[1] and a lecturer at the Intermedia Department[2] of the Academy of Fine Arts, Budapest, Hungary. Together with Geert Lovink and Diana McCarty he co-organised the MetaForum Conference Series in 1994, 1995, and 1996. Sugár is the co-editor of *Bulldozer,* as well as the editor of the *Hypermedia Reader,* two recently published books containing texts on media theory, translated into Hungarian.

The following e-mail interview took place in the winter 1997/98 between János Sugár, who, at the time of the exchange, was living and working in New York as an artist in residence, and Dutch media activist and theorist Geert Lovink. The discussion looked at the relationship between traditional and digital media and questioned whether a combination of artistic practices gives a greater freedom to the artist in a country with a legacy of censorship of access to both audiences and to media art technology. Sugár's advocacy of 'intermedia' – which he defines as 'interdisciplinary plus media' – offers a refreshing perspective on the integration of new media into art practice and art education, and one which contrasts with the 'multimedia' approach often taken in the West.

Geert Lovink: Can you describe for us the way you encountered the media in Hungary in the late-1980s? In my view, you started working with film and video at a time when the dark period of the early 1980s was over and the new era was about to begin.

János Sugár: It wasn't so dark. Only access by the general public and mainstream media was censored, not production. Public culture was strongly controlled: censorship, bans, but a vital underground art scene (the second public) existed – art shows, pop and contemporary music, performance, samizdat etc. with real personalities and with a strong moral position. Having no space for the ambitions, no practical perspectives, we had lots of time. For me as a young artist, it was an idyllic training – everyone was approachable, ready for dialogue. It wasn't difficult to survive, lots of time for talks, meetings, discussions, intensive contacts, partying and of course in most of the cases not the slightest hope of a practical result. No contacts with the so-called first public, which was the realm of general or mass society or however you want to express it.

After 1956 the single and most cruel restriction for culture was the blocking of avenues to reach the broader public. No competition between the old and new, no aggressive cultural memes, no random spread of cultural inspiration. Only insiders knew about the best things going on in art. It's somehow like a philosophical problem: can anything be valid if no one knows about its existence? Schrödinger's cat in the art world. This situation caused serious damage, not just in art, which became hermetic and context bound, but also the general public. People couldn't know anything about this booming period, about this creative capital. If you go to a library and look through the papers and the magazines of that period you won't find any reference, any news or mention about what was really happening, what was important for us.

I started to work with film in the beginning of the 1980s. In parallel with my sculptural studies at the Art Academy, I worked with the Indigo (interdisciplinary thinking) group and we did shows, happenings, films together. Since the leader of the group was Miklos Erdely who himself was partly a filmmaker (conceptual artist, writer, painter - the most influential artist of his time and since) he pushed us, the group, a bit in the direction of filmmaking. He did his films in the Béla Balázs Studio (BBS)[3] and so in the early 1980s I started to attend the regular Tuesday BBS meetings. My father had taken me to see Michelangelo Antonioni's *La Notte* (The Night, Italy 1960) when I was sixteen. And after this, the film that made the greatest impact on me was Jean-Luc Godard's *Masculin Feminin*, (France/Sweden 1966) which I saw in the late 1970s. It changed my view about film and filmmaking. Finally in 1985, I made my first film, a 50 minute long 16mm piece, *Persian Walk*, which caused such an unprecedented scandal in the BBS that I had no chance to make anything there for years (and had to wait four years before I could obtain a final print of the film).

GL: Do you recall your first encounter with computers? Was it in an artistic or academic context?

JS: In the mid-1980s, computers appeared in my horizon. In 1986, I was given (along with other young artists) some computer time to produce works for the first Hungarian computer graphic show. The officials wanted a computer graphic show, at least some smart people sold them the idea. The only problem was there were no computer artists, because there had been no computers available for many years due to the rigid regulations. You just saw hardware parts and even they were sold mostly second-hand. Anyway, they managed to give limited access to some IBM PCs in a state computer-research institute and timetabled access for the invited artists. The only software was 'PC paint' and I have never heard of it since.

From the mid-1980s, besides my solo shows of installations, I participated in several such national computer art shows ('Artistes Hongrois et l'Ordinateur' for example, classical cold war) but not having regular access, I wasn't so excited about it. Once I had a little job (with the help of Tamas Waliczky) to draw new backgrounds for an existing karate game. I did it, but it took so much time. I nearly bought an Amiga, but for a long time the only computer around me was a C64 which I used with a TV and an external drive as a typewriter. Actually, this was my real experience with a computer. I realised that using a word processor changed my attitude towards writing totally.

GL: So you had little access to technology, was this true too of media theory in the late-1980s? Did you miss it?

JS: No, what I really missed was real access to video. That's why I didn't do any real video art work, which requires in my view a sort of daily practice, a kind of coexistence with the medium. I didn't really miss the computer. Regarding media theory, the situation wasn't so bad, at least we knew that something called media theory existed. Miklos Peternak published some good essays and he had a rather different voice from the others. There were some rare publications, monthlies, small circulation textbooks, and Benjamin, Barthes, Baudrillard, Virilio, Feyerabend were somehow present.

GL: If these ideas were around, how did they affect your media awareness during the period of transition, the period from 1989 to 1992?

JS: This was the time when I had real life experiences in media theory: the early years of typical East European spindoctorship, watching the soap opera of changing political rhetoric. First the political then the financial fight for the mass media (the word 'media' first appeared in Hungary as 'media war', the general usage of the term was/is: 'press'); a more and more conscious usage of TV medium by the politicians; the Romanian TV revolution; the increasing financial difficulties of the BBS. Altogether, this produced a mixture of anecdotes, shocking experiences, and lots of incredible examples.

Before 1989, things like political commercials or massive ad campaigns were totally unknown in Hungary. And in 1991, in the summer, I was commissioned to do a five part series for the (state) TV in a few months. Judith Kopper, a very courageous producer, who (for a short time) had a relatively large amount of broadcast time, started to work with outsiders such as visual artists. She asked me to do a four-part series, and with Gabor Bora I made a proposal for Misunderstandings which

she accepted. I could work with professional TV production and – because everyone was busy with politics – not even my own producer saw it before it was aired.

We felt a growing competence and there were lots of opportunities to explain our approach, like inviting people and organising events such as 'The Role of TV in the Romanian Revolution,' conference (1990). This led to lots of contacts and information from abroad. And somehow this activity led us to establish in 1990 the Intermedia Department at the Academy of Fine Arts (from where, by the way, I was kicked out in 1984), which was the first programme of its type in the post-Communist region.

GL: You spent a lot of time building up the Intermedia Department of the Art Academy in Budapest. There, you have been teaching for years and years, perhaps even more then anything else. But what you have been doing with the students exactly somehow remained a mystery for me. Tell us something about your methodology and your conclusions?

JS: The starting idea was to create a media faculty which we did with Miklos using our strong interdisciplinary experience with Indigo, connecting art and thinking, in the sense of total competence. Art, technology, science with an undefined outcome. We used the word Intermedia as in 'interdisciplinary plus media.' Just after it became evident that Dick Higgins coined it in opposition to what multimedia meant at that time. For Higgins, intermedia was the positive pole. I am really pleased we are linked somehow to the Fluxus which is still flux.

I practically have a double job there. I am doing one two-year course where I teach art and another two-year series of media theory lectures to the same bunch of 15 students, for their whole first and second year. Besides this, I have steady consultations with five advanced students who have chosen me as their advisor. Of course, there are other obligatory courses for our students in photography, multimedia and web design, art history etc.

My goal is to enhance the consciousness of the students, to be able to go radically beyond their own unconscious sympathies and choose unpopular, less easy solutions. I think the presence of the unprecedented, referenceless media, and the emergence of the work-entertainment-education conglomerate manifests itself more in a general media consciousness than in the use of one or another so-called new medium. Its social impact is bigger than the cultural. With this new experience we can see and treat the other genres (or if you like the old media), as a medium.

The first thing students have to do is to write a fictional biography; then I ask them to collect analogies. Then, there are various exercises in video: such as analysing a real life action by montage; making short video pieces using text, short cuts, raging on the mixer; a series of irresponsible plays with the equipment. It is like teaching a language. In the meantime, we watch and analyse classical video art and anything else they bring to discuss – works, objects, collages. To exercise control over the image, they have to create a narrative black and white photograph. I require them to make three-dimensional (plastic) scripts or models in addition to the classical storyboard for their videos. In addition to these studio exercises, there is a weekly lecture on media theory.

Last year, in the spirit of tactical media, which I was lecturing about, we did a media event. Since the most popular evening news uses a live background image of the city, we defined a point within the range of this backdrop camera and we gave flashlight signals. This was broadcast throughout the TV news.

GL: Is this how new media should fit into an art context? Or do you have other models in mind – digital media Bauhaus perhaps?

JS: I think still deep in the core of any art education is the good old 'nosce te ipsum'. For the Bauhaus technology that was a metaphor, the zeitgeist. But for today, we are learning how arbitrary a so-called functional design can be. Nowadays, technology is fast moving, constantly upgrading and development is a continuous act, like an open language whose grammar always changes with usage and whose new idioms evoke new syntax and new grammatical rules. Result – an endless spiral – a language that wants to tell everything, but is actually falsely transparent. Technology needs instant and powerful demonstration and promotion to evoke demand among buyers. Using artists is the cheapest and most efficient crash test for the software / hardware manufacturers. But art cannot really function in a mediated form. We can alienate form and content but not in art. That's very good for a visual artist.

The so-called new media should be treated equally in every sense: so digital kitsch is kitsch too, but let's not forget how the medial aspect changes our attitude toward the other ways of expression. In a certain sense I think our Intermedia is an ideal model for a higher art-education programme. Because we were in a traditionalist Art Academy, we were often accused of letting dilettantes, people who cannot really draw, into the church of art. Our poor financial conditions (we have never been given our full budget) force us neither to fear nor worship technology but to improvise makeshift configurations from our run-down hardware. We teach the practice and the theory of the so-called new media, but we encourage the use of old or traditional techniques too. In the case of new media, it's very difficult to forget the tools – they are sexy, pushy and

more and more capable – but the message is more an attitude than an immediately profitable limited expertise.[4] It seems to work as we have lots of visitors lecturing and our department is popular, probably because the students feel the freedom to work with the most appropriate medium. I think today's digital Bauhaus should be dirty. I don't really like the hospital/airport atmosphere of media labs, which suggest a sort of neutrality, distance – the ideology of design.

GL: You are very active in and around Budapest creating work, switching from one medium to the next – several times a day sometimes – moving from installation art, to writing, to teaching, to the theatre, to film and video, and increasingly working with the computers. You also organise events like the conference series MetaForum we organised together with Diana McCarty. In a way you yourself embody the very idea of Intermedia. Is 'Intermedia' an ideal for you?

JS: I would rather say I am working along the maximum-action freedom radius. Lack of time forces you to connect things, to solve one problem with another, there is no time to worship the medium, you just have to use it. To work with such freedom is a great luxury for me. In such a crowded environment only simple models and concepts can survive such as: treat the present as if it were already past. It's like laying down a very complex pattern whose regularities or laws are discernible only much later. Or living without feedback. It is a very good strategy in Budapest, because even now there is little public attention on art, but the creative possibilities are great. I like to be in people's blind spot. Limited means or restrictive surroundings are sometimes very useful to enhance and refine your radicality.

Notes

1 Media Research Foundation <http://www.mrf.hu> (27 April 1998).

2 Intermedia Department <http://www.intermedia.c3.hu> (27 April 1998).

3 BBS was a strange phenomenon: in the ocean of counter selection it was a little island for (state-sponsored) experiments in the sense of expression and political tolerance. The studio produced strong documentaries and strange short films which were rarely shown. It was the total opposite of the GDR as I found when I visited East Berlin with Miklos Peternak and Ildiko Enyedi. We asked about banned films - in Hungary it was normal to have banned films, they were shown to a so-called expert audience. In East Berlin, however, we were told that in the GDR, there were no banned films because they were stopped much earlier before completion.

4 There is a certain knowledge which you have to master when working in new media which is immediately profitable (think about web design for example) but which is still very limited – limited in the sense that to create art in the new media it is not enough just to know the technical side of it. [Ed]

Behind the Screen
Russian New Media[1]

Lev Manovich

Should we be surprised that as the new computer-based media expand throughout the world, intellectual horizons and aesthetic possibilities seem to be narrowing? If one scans internet-based discussion groups and journals from London to Budapest, New York to Berlin, and Los Angeles to Tokyo, certain themes are obsessively intoned, like mantras: copyright; on-line identity; cyborgs; interactivity; the future of the internet. This follows from the Microsofting of the planet, which has cast a uniform digital aesthetic over national visual cultures, accelerating the globalisation already begun by Hollywood, MTV, and consumer packaging: hyperlinks and cute icons, animated fly-throughs, rainbow colour palettes, and Phong-shaded spheres are ubiquitous, and apparently inescapable.

So, given its intellectual traditions, totalitarian experience, distinct twentieth century visuality (a particular mixture of the Northern and the Communist, the grey and the bleak), and finally, its continuing pre-occupation with the brilliant avant-garde experimentation of the 1910s and 1920s, can we expect a different response to new media on the part of Russian artists and intellectuals? What will – or could – result from the juxtaposition of the Netscape Navigator web browser's frames with Eisenstein's theories of montage? It would be dangerous to reduce heterogeneous engagements to a single common denominator, some kind of unique 'Russian New Media' meme. Yet a number of common threads do exist. These provide a useful alternative to the West's default thematics, while articulating a distinctive visual poetics of new media.

One of these threads is the attitude of suspicion and irony. Moscow's Alexei Shulgin writes of the excitement generated by interactive installations (and I quote from the web site): 'It seems that manipulation is the only form of communication they know and can appreciate. They are happily following very few options given to them by artists: press left or right button, jump or sit.' He views artists as manipulators employing the seductions of the newest technologies 'to involve people in their pseudo-interactive games obviously based on [the] banal will for power... [The] emergence of media art is characterized by transition from representation to manipulation.'[2]

Shulgin views interactive art and media as creating structures that are frighteningly similar to the psychological laboratories the CIA and the KGB operated during the Cold War era. I was born in Moscow and grew up there during Breznev's era, so I find his thoughts not only logical but enthralling. Yet my investment in his conclusions doesn't blind me to the limitations of his analysis, or rather, its cultural specificity: it takes a post-communist subject to frame interactive art and media in such stark terms.

For a Western artist, that is, interactivity is a perfect vehicle both to represent and promulgate ideals of democracy and equality; for a post-communist, it is yet another form of manipulation, in which artists use advanced technology to impose their totalitarian wills on the people. Further, Western media artists usually take technology absolutely seriously, despairing when it does not work; post-communist artists, on the other hand, recognise that the nature of technology is that it does not work, that it will necessarily break down. Having grown up in a society where truth and lie, reality and propaganda always go hand in hand, the post-communist artist is ready to accept the basic truisms of life in an information society (spelled out in Claude Shannon's mathematical theory of communication): that every signal always contains some noise; that signal and noise are qualitatively the same; and that what is noise in one situation can be signal in another.

In this spirit, Moscow conceptual artist and poet Dmitry Prigov organised a performance during the International Symposium on Electronic Art in Helsinki (1994) in which he used business traveller's software on one of Aleksander Pushkin's nineteenth century poems, translating it from Russian into Finnish, and then from Finnish into English. For Prigov, the final product was not a miserably misbegotten translation, twice removed from the source, but a new poem, its originality indebted – however ironically – to the operations of the lowest level of artificial intelligence.

Like Prigov's performance, Shulgin's own new media projects can be described as meta-art. In contrast to many of his Western colleagues who feel that they have to colonise and appropriate the web through a distinct category of 'artists' web projects,' Shulgin proceeds from the assumption that the web 'is an open space where the difference between "art" and "not art" has become blurred as never before in XXth century.' In this spirit he established the *WWWArt Medal* <www.easylife.com/award> to be awarded to 'web-pages that were created not as art works, but gave us definite "art" feeling.' Visitors check links to a variety of 'found' web pages (importantly, not a single one of them is an 'artists' web project'), which have been singled out for 'flashing', 'moderation' and 'vali-ant psychedelics', among other categories. Like Prigov's poem, another of Shulgin's sites, *Remedy for*

Information Disease <www.desk.nl/~you/remedy>, functions as a noise generator, implying that the cure for data overload is to shift from receiving to broadcasting.

Prigov and Shulgin exemplify how the conceptualism which has recently dominated the Moscow art scene offers a valuable strategy for approaching new media. Another strategy positions Russian new media within a larger historical tradition of 'screen culture'. For Russian thinkers, the meaning of the screen expands far beyond its function as a surface displaying an image originating from elsewhere: it is also a bridge across two spaces, one physical, one imaginary; a link between a human subject and an audio-visual stream; and a rectangular window which opens onto alternative (virtual) reality. So understood, the 'screen' is that which unites old and new media, still and moving image, analogue and digital culture.

The emphasis on the screen as a space that opens onto an alternative reality is echoed in much modern Russian art which remains firmly committed to the tradition of easel painting. In contrast to the West, where artists gave up on illusionistic pictorial space in favour of the notion of a painting as a self-sufficient material object, many Russian artists, both representational and abstract, continue to conceive of a painting ('kartina') as a parallel reality which begins at the picture frame and extends towards infinity. Thus, Eric Bulatov has described his paintings as windows onto another, spiritual universe, while Ilya Kabakov conceptualises his installations as a logical expansion of pictorial traditions into the third dimension – a materialisation of reality models previously presented by painting.[3]

Young Russian media artists are using the computer as an excuse to re-think basic categories and mechanisms of screen culture, such as frame, montage, and illusionistic space. Thus, rather than representing a radical break with the past, the computer screen becomes, for them, a rearticulation of the models which have defined screen consciousness for centuries. *My boyfriend came back from war!* is a web-based work by the young Muscovite Olga Lialina <www.heise.de/tp/sa/3040/fhome.htm>. Using the web browser's capability to create frames within frames, Lialina leads us through a series of pages which begin with an undivided screen and become progressively divided into more and more frames as we follow different links. Throughout, an image of a human couple and of a constantly blinking window remain on the left part of screen. These two images enter into new combinations with texts and images themselves engendered by the user's interaction with the site. In this way, Lialina creatively bridges principles of traditional parallel montage, as it existed in the cinema, and the evolving possibilities of interactive hypertext.

St. Petersburg-based Olga Tobreluts uses a computer to expand the possibilities of cinematic montage in a different way. In *Gore ot Uma* (1994), a video work based on a famous play written by an early nineteenth century writer, Aleksandr Griboedov, and directed by Olga Komarova, Tobreluts seamlessly composes images representing radically different realities on the windows and walls of various interior spaces. In one scene, two characters converse in front of a window which opens up onto a shock of soaring birds taken from Alfred Hitchcock's *The Birds* (USA 1963); in another, a delicate computer-rendered design fades in onto a wall behind a dancing couple. Because Tobreluts bends composited images to follow the same perspective as the rest of the shots, the two realities appear to inhabit the same physical space. The result is a different kind of montage for digital cinema.[4] Which is to say, if the 1920s avant-garde, and MTV in its wake, juxtaposed radically different realities within a single image, and if Hollywood digital artists use computer compositing to glue different images into a seamless illusionistic space (for instance, synthetic dinosaurs composited against filmed landscape in *Jurassic Park* [Steven Spielberg, USA 1993]) Tobreluts explores the creative space between these two extremes.

Lialina and Tobreluts' projects offer a vision of how Russian new media artists can negotiate between the extreme materialism of Western computer art practice and the historicism and conceptualism characteristic of their country's art. The question remains, however, will Russia be able to stop the march of Bill Gates' aesthetic imperialism, the way she previously froze out the armies of Napoleon

Notes

1 This text was originally published in *Art + Text* 58 (August – October 1997), pp. 40-43. I am very grateful to Peter Lunefeld and Susan Kandel for editing.

2 Rhizome Digest, <www.rhizome.com> (11 October 1996).

3 Eric Bulatov, conversation with the author, 1980; Ilya Kabakov, *On the 'Total' Installation* (Bonn: Cantz, 1995).

4 I explore digital compositing in relation to the history of cinema in more depth in 'To Lie and to Act: Potemkin's Villages, Cinema and Telepresence,' in *Mythos Information – Welcome to the Wired World*. Ars Electronica 95, eds Karl Gerbel and Peter Weibel, (Vienna and New York: Springer, 1995) pp. 343-353.

The East, the West and the Rest

Central and Eastern Europe between Techno-Orientalism and the New Electronic Frontier

Oliver Marchart

Abstract: The article seeks to explore Central Europe's role and location within the imaginary cartography of techno-colonialist discourses on electronic networks. Ideologists of the European Union and of 'Mitteleuropa' (not to mention Eastern Europe) did not yet fully succeed in establishing a genuinely European high-tech identity. 'Networked Europe', as a fantasmatic technological space, rather seems to be caught between what has been called Techno-Orientalism on the one hand and the American New Frontier myth on the other. The article tries to map out the European imaginary in its differential relation towards both the 'Oriental' and the American myth of electronic space.

Introduction In what one might call the prevailing techno-imaginary of the internet, Central and Eastern European countries seem to be caught between two competing hegemonic sign-systems: the overall Techno-imaginary is 'Eastern Asian' or 'Japanoid': SONY, Toyota, tamagotchi, Hongkongese or Singaporean high-tech skyscrapers, etc In addition, the specific imaginary of the *internet* relies on what one could call the Colonial Discourse of the Net in general and on American New World narratives in particular: Gore's Information Superhighway, Cyber-Hippies and the so called Californian Ideology[1], that is, Electronic Frontier Foundation, Wired, Mondo 2000, etc Every European representation of the internet, from the infamous 'Bangemann report' by the EU bureaucracy to a popular internet-journal like Germany's recently launched *konr@d*, has to come to grips with these already established dominant representational systems.

What role, then, is left to be played by the Central or Eastern European countries within the given imaginary cartography of the internet where the object of desire and conquest – the (electronic) frontier – is phantasmatically situated either in the Far East or in the Far West?

The matter is further complicated by the play of boundaries within Europe and the fact that Eastern Europe became an object of sub-imperialism or sub-colonisation, especially in economic terms, by secondary empires like the EU. Yet the EU's identity itself is not fixed at all. Although Central European countries have a good chance to enter the EU step by step after the turn of the century, the question remains

whether Islamic Turkey should or should not be considered part of the European club of Christians. In this sense, David Morley and Kevin Robins consider the fall of the Iron Curtain as the critical moment when the question came up 'as to where Europe ends (what is the status of *Mitteleuropa* or Eastern Europe?), and against what 'Other' (besides America) Europe and European culture are to be defined, if no longer against Communism.' They argue that, 'if America continues to supply one symbolic boundary, to the "West", there is also, implicit in much recent debate, a reworking of a rather ancient definition of Europe – as what used to be referred to as a "Christendom" – to which Islam, rather than Communism, is now seen to supply the "Eastern" boundary'.[2]

There *are* depictions of the internet as an Islamic zone or myth, most prominently by the would-be Islamist Hakim Bey, who described it as a pagan Temporary Autonomous Zone.[3] Concerning the popular narratives and the imaginary repository of high-tech, however, 'eastern' in most cases means 'oriental' and 'exotic' in the 'Japanoid' sense, rarely in the Islamic and Middle Eastern sense as it was studied by Said in his magisterial work *Orientalism*.[4] Hence, I will start this article with an account of Techno-Orientalism in general, that is, the prevailing exoticist and orientalising imaginary of technology in so called First World countries. In a second step, I will describe the specific American New World-narrative on which particularly the internet is modelled. Finally, I will try to locate Central and Eastern Europe within this phantasmatic geography of high-tech communication media. In doing so I will deploy as an analytic tool the specific branch of discourse and hegemony theory as it was developed by Ernesto Laclau and Chantal Mouffe,[5] thereby linking it to Kevin Robins and David Morley's highly influential concept of Techno-Orientalism.

The East and the Rest: Techno-Orientalism

One could argue that Techno-Orientalism is only part of a general oriental fashion, a new 'hip' *japonisme*. For example, one of the latest Jeans-commercials by *Levis* is explicitly placed within the imaginary of Hong Kong action movies; another one, astonishing as it may sound, is set against the picturesque background of North Korea's revolution (apparently, the hero and the heroine are the only North Koreans in possession of *Diesel*-clothing and, being a suppressed minority for that reason, try to commit suicide together). Commercials like these as well as related cases do not, of course, evoke images of high-tech in the strict sense. They rather belong to a broader, aesthetic or culturalist Orientalism which seeks to re-code Western consumer products into an oriental trend. Fashionable Orientalism ranges from Japanese designer clothing to Japanese cartoons or pop bands. The rise of Hong Kong directors like John Woo (*Broken Arrow*, USA 1996; *Face-Off*, USA 1997), actors like Jackie Chan (*Jackie Chan's First Strike*, Stanley Tong, USA 1996) and actresses like Michelle Yeoh (the new 'James Bond-girl') to international fame and Hollywood contracts can also be understood as part of this new cultural Orientalism.

Yet within this general Orientalism the specific articulation of Orient *with technology* is especially prominent. In the new techno-mythology, Morley and Robins claim, 'Japan has become synonymous with the technologies of the future – with screens, networks, cybernetics, robotics, artificial intelligence, simulation'.[6] One has to add, though, that this is not a one way street: If Japan – and we could add Hong Kong, Taiwan and Singapore – has become synonymous with technology, then, to a large extent, technology has become synonymous with the Orient on its part. In this process the internet, being a technological artefact, stands in a relation of substution to other technological artefacts of popular life. Thereby a kind of technological interdiscourse is created which mainly consists of 'oriental' consumer technologies and objects: From cars and camcorders to cultural phenomena like tamagotchi or karaoke. Newness with all its futural and futuristic predicates is not anymore necessarily linked to the imaginary of the West only, the American *New* Frontier, it has become orientalised to a certain extent. Morley and Robins put the same observation in deductive terms: 'If the future is technological, and if technology has become "Japanised" then the syllogism would suggest that the future is now Japanese too'.[7]

Most clearly, the fascination of techno-culture with the Orient can be observed in a recent music video entitled '*Ni Ten Ichi Ryu*' by the popular artist Photek – alias Rupert Parkes – from Hertfordshire.[8] The music style belongs to a common derivation of electronic music or techno called 'intelligent' drum-n-bass (sometimes also called 'jungle') which is characterised by the extensive use of breakbeats. Title and story of the video, on the other hand, refer to the Japanese samurai technique of using a long and a short sword simultaneously which was invented by a famous samurai after watching a drummer using two drum sticks. For Photek, by analogy, two drum breaks represent the movement and interaction between swordsmen and their swords. Hence, one of the champions of the most advanced branch of popular electronic music – drum-n-bass – draws his inspiration from traditional Japanese rituals, includes in his video the spirituality of candles, traditional ink writing, samurai rituals, and enriches his breakbeats with the sound of Japanese flutes.

For Koichi Iwabuchi, drawing on Morley and Robins, the most well-known image of Techno-Orientalism 'is a paradoxical combination of traditionalism – *samurai, geisha,* etc – and high-technology, which can be seen in Hollywood films such as *Bladerunner* or *Black Rain*.'[9] It is an image of 'paradoxical alienness' which suggests 'a western desire to enclose the otherness of Japan with "knowable" mysteries in order to control it'.[10] As Morley and Robins point out, there has been an increasing fear of reverse colonialisation of American capital, especially of the entertainment industry, by Japanese corporations like SONY. This leads – from the American viewpoint – to a 'reversal of the traditional

aestheticised image of Japan, its people are now increasingly seen as workaholics, as "economic animals".'[11] But since the old aestheticised image of Japan does not simply disappear, one should add, we witness a vacillation between the traditional aesthetic notion of Japan and the economico-technological one, rather than a complete reversal. A constitutive ambiguity is inserted into the image.

In a sense, one could suspect that the paradox is constituting the very core of the stereotype of the Japanese as it is produced by the Western gaze and has been traced back to Ruth Benedict's study *The Chrysanthemum and the Sword*[12] of 1946 which tries to capture the Japanese 'character' via a paradoxical enumeration of mutual contradictions: they are militaristic and yet aesthetic, they are insolent and yet polite, they are both loyal and treacherous, they are brave and yet timid, and so on. 'This paradoxical view of Japan', as Iwabuchi maintains, 'has dominated western discourse on "Japan" since then'.[13]

Obviously this paradoxical view is not restricted to our construction of Japan, rather, it has something to do with the colonial gaze as such, that is, the colonial discursive genre. It is perhaps for this complicated scopic economy, the 'dialectics of the gaze', that Techno-Orientalist discourse is as contradictory, paradoxical and ambiguous as any colonial discourse. For Toshiya Ueno, Techno-Orientalism works as a semi-transparent or two-way mirror. The image or stereotype of the Japanese, what he calls 'Japanoid', serves as interface between Japan and the West. From one angle, by looking through this mirror into the other side, as it were, Westerners orientalise and construct a representation of Japan, from the other angle they look at themselves, constructing their own identity *ex negativo*.

This dialectic between Japan and its Other constitutes *one* mirror structure – the colonial one – of Techno-Orientalism. The *second* mirror structure is about 'the encounter between the human and the machine, humanity and the net' – the technological one. Japan is understood as an 'automaton culture', a purely technological culture inhabited by emotionless robot-like Cyborgs. Ueno Toshiya refers to the case of the German pioneers of electronic music *Kraftwerk*, who reportedly modelled their machine-like stage performances on the gestures of Japanese businessmen. Surprisingly, he finds exactly the same combination of technology and Orient as we found in Photek's case – the only difference being that 'Orient' for Kraftwerk (in the 1970s) means robotics while for Photek it means tradition. Ueno Toshiya concludes: 'These two mirror images', the colonial and the technological, 'constitute the "Japanoid" as object of envy and hate'. Note that there is a fundamental ambivalence inscribed into this discursive product of Techno-Orientalism, the 'Japanoid' – to which we will return later.[14]

The West and the Rest: The new frontier

At least since *Mondo 2000* titled 'The Rush is On! colonising Cyberspace' in its Summer 1990 edition,[15] we know what Cyberspace is all about: a new colony, a virgin land ready to be discovered and explored by 'pioneers of cyberspace' (John Perry Barlow). The most prevalent concept within cyberspatial Colonial Discourse, hence, is the notion of frontier (just think of Electronic Frontier Foundation): an always escaping horizon, which, nevertheless has to be arrested and 'colonised'. However, the metaphor of the new frontier is not exclusively deployed in narratives of cyberspace but, of course, it stands in the tradition of one of the American founding myths. Frederick Jackson Turner in his canonical *The Frontier in American History* claimed as early as in the 1890s – *a propos* the Western frontier – that the 'American character' was based on the very extension of civilised space into new territories. We know how prominent this concept remains in regard to the specific American ideology. In extension – given the American hegemony over the internet – we know about the prominent role of this concept in our cyberspatial imaginary.[16]

Yet, Europe's 'projective identification' with America as the realm of future, progress and prosperity is double-edged and can easily turn into a 'projective *dis-identification*'[17] with America as a realm of hostility towards (European) culture. In the latter sense, America 'assumes a fantasy dimension as that which always threatens to "contaminate" or overwhelm European cultural integrity' as Morley and Robins put it.[18] Europe's phantasmatic relation to America, therefore, is intrinsically split. On the one hand, America serves as the brighter side of Europe, a realised utopia, on the other hand, there is always a danger lingering of 'McDonaldization' and so on. No wonder we can find the same structure in discourses about the internet (on the one hand a chance for democratisation, a new public sphere, etc; on the other hand, information-overload and child pornography).

It is my conviction, that this ambivalence resides in the very nature of the colonial narrative through which we construct newly discovered continents, no matter whether geographic continents or electronic continents. It is especially the role of the 'frontier' in these narratives which allows for the constant re-emptying of this space. A space that – once re-emptied – can serve as screen for our projections. In a sense, frontier plays the role of a hinge, a control button switching on and off processes of de- or re-territorialization. Sometimes it is colonised by fear, sometimes by hope. For Ziauddin Sardar, virtual colonisation is just the new version of European colonialism – as such, it follows the patterns of the 'old West': Cyberspace 'is a conscious reflection of the deepest desires, aspirations, experiential yearning and spiritual *Angst* of Western man'.[19] Thus, Cyberspace must be conceived as the 'Darker Side of the West'. Sardar's dark view of the West, for example, might be considered to be an example of projective *dis-identification*.

Let us confront Sardar's discourse of darkness with a slightly more subtle articulation of the electro-American new frontier. As the following example shows, in case of a positive 'projective identification' things are a bit more complicated since pictures (or constructions) of the United States have to be adapted to certain inner-European strategies. The West is not as homogeneous as Sardar presents it. In New World narratives, the West is not only divided into America and Europe – Europe itself is divided along many imaginary borders. Thus, when Europe turns towards its 'imagined West', to American narratives that is, we have to ask first: which Europe?

When *Wired* launched the first issue of its UK-edition one of the main questions obviously was: What to put on the frontcover? What is going to be our first title-story? The very first title-story, of course, defines not only the first issue but also the whole set of up-coming issues and, hence, the reader's 'affective tonality' towards the project and its future. Surprisingly, or perhaps not so surprisingly, the editors decided to put a man on the cover who has been dead for over 250 years: Thomas Paine.

Why Thomas Paine? The main header tells us: 'Thomas Paine – digital revolutionary'. And – in smaller letters – we can read what is one of his best-known quotes: 'We have it in our power to construct the world over again'.[20] Only that /world/, here, apparently refers to cyberspace. Why should *Wired UK* conjure a historical figure? The answer is very simple, because Thomas Paine was an Englishman and, moreover, he aligned himself with the American revolution (being somehow the first professional revolutionary, the first Che Guevara). This means that by reanimating Thomas Paine the editors enabled themselves to establish a link (a) between England and the United States (particularly the States of the *Californian Ideology*, expressed by *Wired US* and *Mondo 2000*), (b) to the overall techno-apocalyptic discourse crystallised in the notion of Revolution. By building a bridge across *historic* time they build one across geographic space.

The alignment with the *Californian Ideology* and its ideologems (hippie-lifestyle and free market-liberalism) can easily be observed throughout the whole issue, but the point is that *Wired UK* could not become a simple imitation of its US counterpart, it had to be distinctive even to raw *Californian Ideology* which is – for the UK market – simply indigestible without some English rearticulations. What we can see in the UK-editor's decision to put Thomas Paine on the cover, hence, is the brave attempt to articulate fish and chips with hamburgers.

However, this is not the end of the story: Thomas Paine, after participating in the American Revolution, crossed the Atlantic again and took part in the French Revolution. But, according to Jon Katz,[21] who

wrote the article on Paine, the Jacobins were not so happy about him as he came to defend the life of the king, and so they sentenced him to death (but luckily the revolution ended early and he became free). A true hero of cyberspace, according to *Wired UK*. At this point, another element enters the narrative construction: the enemy. It is not only that England and America are linked together, thereby opening up a new space, cyberspace – they can establish a more constant relation only if they turn against a third element. Another article on the French 'war' against American culture, against the English language in particular, deepens this operation. We can see Francois Mitterand with Mickey Mouse-ears and the subtitle tells us: bad news, Francois, Mickey is winning. Here it is the mean French centralist state that wants to interfere with the individual rights of self-expression (very much like the American state wants to interfere with supposedly free internet communication) and does so directly by censoring English/American vocabulary (for Wired-UK nothing less than an attack against Englishness as such).

To conclude, in this example for an English orientation towards and identification with the New (American) Frontier we can observe two inimical chains of equivalence built between the liberal/liberalist Anglo-American countries on the one side and statist, centralist France (metonymically standing for continental Europe) on the other:

UK/USA		France/EU-continent
communitarianism		etatism
market liberalism	*versus*	interventionist
popular culture		high culture
Paine-friendly		Paine-hostile
pluralistic		centralist

What this example shows is the way in which identities are articulated differentially, that is, antagonistically. The only problem is to give a precise meaning to these terms – difference and antagonism. In the structuralist paradigm it is usually assumed that meaning is produced within a system of differences, which is the theoretical starting point for Morley and Robins as well: We cannot just assume a positive, pre-given European identity to be discovered. Once we hold that difference is constitutive of identity, we have to follow Morley and Robins in their conclusion that European culture[22] is constituted 'precisely through its distinctions from and oppositions to American culture, Asian culture, Islamic culture, etc'[23] I agree with that, but some further considerations will show how the differential ensemble is vested with an essential ambivalence.

Just to assume the differential character of any system of meaning doesn't lead far enough – and here we follow the argument as it was developed by Ernesto Laclau: The possibility of a system of differences

depends on the possibility of its limits – and these limits cannot belong to the side of the system, since in that case the limit was just another difference and, hence, no limit. It is only as far as we perceive the outside of the system as a radical outside (and the limit therefore as an exclusionary limit) that we can speak of systematicity, meaning or identity at all. As a consequence the limits cannot be signified themselves, they can only '*show* themselves as the *interruption* or *breakdown* of the process of signification'.[24] The radicality of the radical outside (non-meaning) is not only the condition of possibility for the establishment of a structure (meaning) it is at the same time the condition of *im*possibility of the establishment of a structure as closed totality (full meaning). The effect of the exclusionary limit, in other words, 'is that it introduces an essential ambivalence within the system of differences constituted by those limits'.[25]

In their work *Hegemony and Socialist Strategy* Ernesto Laclau and Chantal Mouffe give the example of a colonised country where differences of dress, language or customs make evident the presence of the colonial power. When the situation turns into a state of anti-colonial struggle it becomes clear that a chain of equivalence is established between all these differences 'absorbing *all* the positive determinations of the colonizer in opposition to the colonized'.[26] All positivity is dissolved and 'the colonizer is discursively constructed as the anti-colonized. In other words, the identity has come to be purely negative'. The 'identical something' between all the differential elements within a chain of equivalence consists precisely in their antagonistic opposition to what they are not. But, once again, since 'what they are not' cannot be simply another difference it has to be a radical other which is constitutive for the establishment of the chain and at the same time prevents the latter from collapsing into mere identity: 'Hence the ambiguity penetrating every relation of equivalence: two terms, to be equivalent, must be different – otherwise, there would be a simple identity. On the other hand, the equivalence exists only through the act of subverting the differential character of those terms'.[27] Again, every identity is marked by a constitutive ambivalence.

It is important to note that we are confronted with a double movement: On the one hand a discourse constructed in a simplifying fashion around a binarism. This simplification *is not*, as Stuart Hall maintains, a result of the analyst's laziness, ignorance or reluctance to further differentiation but it is the work of the very colonial discourse[28]. On the other hand, it is because of the radicality of the exclusion that the discursive system becomes dislocated and ambivalent.

The Center and the Rest: *konr@d* and Naomi

While *Wired UK* had to take into consideration its trans-Atlantic origins, that is, the hegemonic *Californian Ideology* of the net, the continental and especially Central European situation, on the other

hand, apparently calls for a different solution. All plans to create a German edition of *Wired* ran aground and in 1997 a genuinely German product was launched: *konr@d.*[29] It is named after Konrad Zuse, who developed the first freely programmable Computer, the Z3, in 1941. By baptising their journal *konr@d* the editors clearly situate the latter in their indigenised German technological tradition. While *Wired UK* exhibits a clear orientation towards the American New Frontier version of Cyberspace, the first issue of *konr@d*, conversely, articulates a supposedly German view on the internet – expressed already by the Germanic title – with a general Techno-Orientalism or Techno-Exoticism. This Techno-Orientalism is to be found on the title-page again. But this time there is no 'revolutionary', 'liberatory' or 'creationist' (let's create the world over again) ideology to be found anymore – and so it was not Thomas Paine who was chosen to become the first cover-boy. Instead, we see Naomi Campbell, and the main header reads: 'Chats, Flirts, Erotic – when love goes online'.

What is astonishing about that cover is not the fact that a 'black supermodel' is made to represent the erotic ontology of cyberspace. The astonishing thing is that this 'black supermodel' is not 'black' at all. Her face seems to be painted with body colour – namely silver. But it is not until you get to page 49, where a whole series of these pictures start, that you find out, that it is the work of Seb Janiak, a 30 year old French fashion photographer, who reworked Naomi Campbell's computerised pictures in his 'Paintbox'. The 'silver' is not paint, it represents – especially due to its computerised production – technology, of course. The head on the cover becomes a Cyborg's head. However, it is not only a gendered Cyborg (a female allegory of Cyberspace, understood – according to the Colonial Discourse of the net – as a 'virgin land' to be conquered) it is also a radicalised Cyborg – it owns two layers of skin. The technological layer overrules, in a way, the 'biological' one, but at the same time Naomi Campbell's reputation for being a '*black* supermodel' stays operative: *Black Skin, Silver Mask.*

Again, we are confronted with a double mirror structure similar to the 'Japanoid' as described by Toshyia Ueno. Technology is humanised, gendered, eroticised and exoticised at the same time: First, the cover brings Konrad Zuse and Naomi Campbell together as an unlikely couple – a colonial couple: The German computer pioneer and the African – albeit native English – female Cyber-allegory. So, second, the (female) human meets technology; colonialist discourse meets techno-discourse: Naomi Campbell is racialised and digitalised at the same time. The colonisation, thus, is a colonisation of both exotic people *and* exotic technology.

In this process, it comes as no surprise that the stereotype is condensed in Campbell's skin: The prominent role skin plays in this techno-colonial

drama stems directly from its place in the fetishistic object-relation which for Homi Bhabha lies on the ground of the colonial stereotype. Following Bhabha, it is necessary to attribute a certain ambivalence to relations of power/knowledge in order to account for the seemingly contradictory function of the stereotype as phobia and fetish: the Orient is both the darker side of the West and the brighter side of the West. On this account we have to conceive the signifier of the New – the New Frontier or the New Continent vs. the 'Old World' – as an empty signifier[30] which can serve as a screen for contradictory demands precisely because it doesn't have a signified of its own: Bhabha refers to an – in his words – underdeveloped passage in Said's *Orientalism* where he says: 'The orient at large, therefore, vacillates between the West's contempt for what is familiar and its shivers of delight in – or fear of – novelty'.[31] One has to see clearly how the ambivalence of our emotional investment – delight or/and fear – stands in relation to the *novel* character of this space, a space apparently not yet defined or not yet colonised.

In addition, the stereotype functions *as* fetish only through a certain vacillation between different modes. To quote Bhabha again:

> Within discourse, the fetish represents the simultaneous play between metaphor as substitution (making absence and difference) and metonymy (which contiguously registers the perceived lack). The fetish or stereotype gives access to an 'identity' which is predicated as much on mastery and pleasure as it is on anxiety and defence, for it is a form of multiple and contradictory belief in its recognition of difference and disavowal of it. This conflict of pleasure / unpleasure, mastery / defence, knowledge / disavowal, absence / presence, has a fundamental significance for colonial discourse.[32]

We are reminded again of Ruth Benedict's *The Chrysanthemum and the Sword* and of Toshiya Ueno's theorisation of the Techno-Oriental 'Japanoid', which is constituted as object of both envy and hate by a double mirror image. The 'Japanoid' stereotype is as much an 'impossible object' as the 'black' in Bhabha's or Fanon's descriptions: While the black is 'mystical, primitive, simple-minded and yet the most worldly and accomplished liar',[33] the 'Japanoid' is traditional and spiritual ('Ni Ten Ichi Ryu') and yet technologically avant-garde and economically at the top. While the black is 'the embodiment of rampant sexuality and yet innocent as a child',[34] the 'Japanoid' – being a Nerd – turns the internet into a 'toilet wall' where alienated perverts are chatting about how to sodomise their baby daughters or how to mount a horse, thereby 'projecting their darker side on the hypertext world of cyberspace'[35] and yet he is native of the 'virgin land' of free and unrestricted two-way communication.[36]

If it is the sexual fetish of the skin which accounts for the sexualisation and racialisation of the Cyborg – and therefore of technology, then what is the geographical fetish that accounts for the colonisation of New Territory? Is it safe to assume – after all what has been said – that a similar role is played by the frontier as a kind of structural fetish within the New World narrative of encounter and conquest? Referring to the stories of Hernán Cortés and others Mary Fuller claims that 'the narratives that set out in search of a significant, motivating goal had a strong tendency to defer it, replacing arrival at the goal (and the consequent shift to another kind of activity) with a particularised account of the travel itself and what was seen and done'. Even narratives like those of Raleigh and Columbus, which where driven by an explicit goal, 'at best offered only dubious signs of proximity in place of arrival – at China, El Dorado, the town of the Amazons – phenomena that, interpreted, erroneously suggested it was just over the horizon, to be deferred to some later day.'[37] It makes no difference, since I'm not trying to make a psycho-analytic point here, whether we call this ambiguous object 'fetish' or not. Only the functional role it plays within these narratives is of importance. It functions as a contingent object which *necessarily* has to be arrested and fixed in some way and yet – at the same time – escapes any attempt to do so.[38]

The Center and the East: The Rest

Given the two main discursive registers discussed above – Techno-Orientalism and the New Frontier – which determine the limit within which technology is being imagined (the Far East and the Far West), is it legitimate to speak about a Central European identity in the case of electronic networking? In his article 'The West and the Rest: Discourse and Power', one of Stuart Hall's starting assumptions is that 'Eastern Europe doesn't (doesn't yet? never did?) belong properly to "the West"', and he refers to the historian John Roberts who has remarked that, 'Europeans have long been unsure about where Europe "ends" in the east. In the west and to the south, the sea provide a splendid marker ... but to the east the plains roll on and on and the horizon is awfully remote'.[39] What role is played by the notion of *Mitteleuropa* in this precarious dialectics of West and East?

In the 1980s, the idea of Central Europe (*Mitteleuropa*) was designed by conservative intellectuals, mostly from former countries of the Austro-Hungarian Empire, in order (a) to re-claim a position of centrality in respect to the European cultural heritage at large, and (b) by doing so, to re-vitalise the Habsburg-myth of a patchwork of nations with close cultural ties. The former Habsburg territories (Austria, Hungary, Bohemia, Slovenia, Triest, etc) and their respective 'ethnicities' are presented in an imaginary cartography of 'unity in diversity' characterised by mutual benevolence and tolerance. This image of a kind-hearted though senile emperor Franz-Joseph, who is presiding over a peaceful family of nations, of course, has nothing to do with historical

facts. In order to keep his family together, an unprecedented system of spies was developed. Habsburg's intra-European colonial ideology was characterised by ongoing annexations which were countered by many revolts against the Austrian occupants. Historical facts, though, did not keep ideologists of Central Europe from presenting the Austrian Empire as a role-model for the EU.[40]

Hence, it would not come as a great surprise if we discovered in this area a Techno-Europeanism in the disguise of the Austro-Hungarian Empire. In fact, in the mid-nineties the Austrian government established a 'National Host' which is expected to facilitate the electronic integration of Central Europe.[41] Main task of the Austrian National Host is to enhance the co-operation within Central and Eastern European countries by electronically 'linking' them to 'mainland' Europe. For that purpose the Austrian National Host is working within the CEI's (Central European Initiative) research initiative PACT (Programming Environments, Algorithms, Applications, Compilers, and Tools for Parallel Computation) in order to provide 'Central and Eastern European partners in the PACT project with access to modern high-speed computing equipment'.[42] As a member of and via the 'Central and Eastern European Networking association' (CEEnet) Austria's academic broadband network ACOnet, on its part, provides network links to most Central and Eastern European countries which happen to be, in most cases, former parts of the 'Central European' – though Austrian – Habsburg empire. A cartographic representation of ACOnet's connections to Eastern Europe[43] illustrates how these lines radiate from the imaginary center Vienna and the German speaking Habsburg core lands to their former intra-European Eastern colonies.

This geography of electronic networks is mainly due to Austria's success in convincing its Central European neighbours to use Vienna, rather than Berlin, as their gateway to the 'West', that is, to the 1 Mb/s EBONE from Vienna to Paris, yet it is not unrelated to a general policy in favour of the Central European 'idea' which traditionally is associated with the conservative Austrian Peoples' Party ÖVP and a diverse range of cultural initiatives.

Otto Habsburg, for instance, the last Emperor's son, representing the Bavarian Christian conservative party CSU in the European Parliament, was recently joined by his son Karl who entered the European Parliament as an elected candidate of Austrian's ÖVP. Although elected in democratic fashion and as a candidate of a democratic party, Karl Habsburg remains reluctant to denounce monarchism as a feasible regime for Austria. Both father and son are highly motivated proponents of the idea of *Mitteleuropa* – Otto as president of the International Paneuropa-Union, Karl as president of the Paneuropa movement Austria, whose major target is the furthering of a 'Europe united according to Christian-occidental ideas and values'.[44] The role of the

avant-garde of this process falls to Austria, according to Karl Habsburg, who claims that 'Austria has the unique chance to act as Central and Eastern Europe's avant-garde within the European Union. Thereby it could take up anew its ancient historical mission in the Danube region'.[45]

This example is meant to illustrate how technological matters are always articulated with political matters into what we might call the techno-political interdiscourse. Thus, what raises memories of historical geographies of power is not only the fact that the lines from Prague, Bratislava, Budapest, Zagreb and Ljubljana converge in the new building of Vienna University. It is also the fact that the new node of networked communication (the University) stands in astonishing topographic proximity to the historic node of Austro-Hungarian-power (the Austrian parliament) as both are situated close to each other on the historicist Viennese 'Ringstrasse', emperor Franz Joseph's urbanistic monument, as Herbert Hrachovec has pointed out.[46]

However, since it is beyond doubt that 'people are connected electronically rather than by geographical proximity',[47] the shadow of *vanitas* might lie on monarchistic attempts of that kind to re-articulate the European techno-imaginary. Even Herbert Hrachovec observes:

> Imagining a geographical connection, ie along the River Danube, is a nostalgic enterprise when electronic signals from Passau to Vienna – and hence to Budapest – travel via Paris. Networking routing defines a new matrix of 'neighbourhoods'. ... There are, indeed, direct cable connections between the two Central European cities and they carry the main load of the electronic traffic within a rather conventional topology that closely matches geographical circumstances. My claim is, nevertheless, that those prosaic cables have lost most of their importance within the discourse of 'neighbourhood'. Roads might still be said to facilitate exchange between countries bordering on each other. Electronic exchange does not care about the route it takes. Its main determinants are the routing programs, the capacities of the respective service providers and the shifts in supply and demand of information, advertisement and entertainment.[48]

And yet, such supposedly technical categories as bandwith, etc do not remain untouched by political decisions which are supported by ideological articulations on their part. The conclusion we have to draw from the above example is that we are witnessing a constant attempt to re-articulate 'electronic borders' with 'geopolitical' borders, and, in doing that, to arrest the borders of our imagination. By borders of imagination I understand the discursive limits of what can be thought

and said within a given hegemony. Therefore, the operation of hegemony consists not only in establishing a consensus and common sense among people but also in the attempt to arrest the flux of meaning (the receding Frontier) by making 'unthinkable' what lies beyond the limits of the hegemonic discourse.[49] It is precisely in this way that we have to understand Michel de Certeau's quasi-definition of 'the theoretical and practical problem of the frontier: to whom does it belong?'.[50] By owning the right to define the limits, you are empowered to determine who's part of your system and who is not. Today, it is mainly in *Mitteleuropa* where the eastern border of the EU is on the move – and is waiting to be defined.

And here, Eastern Europe's imaginary cartography is not the same as its geographic cartography. What does it mean for a city to lie in the East? Prague, for instance, was one of the peripheral centers within the Austro-Hungarian-empire with its double-headed hegemony of Vienna and Budapest. After World War II, Prague was lying behind the Iron Curtain, which coincided with Austria's 'Eastern' borders. Within the popular cartographic imaginary of Viennese travellers, thus, to go to Prague still bears connotations of going eastward – although Prague geographically lies to the north-west of Vienna. What Prague defined – and still defines to a certain extent – as a city of the East was not its actual geographic location but the images of Prague 'Westerners' like the Austrians had in their mind: grey buildings in not yet gentrified quarters, empty shops, coffee-houses with unbearable service, a lot of militia soldiers on the streets, and – in particular – the *absence* of high-tech. The East was defined by common characteristics of its 'life-world'.

Yet, what appeared to the West as empty shops, etc appeared as a paradise of consumption to visitors from the German Democratic Republic.[51] Slavoj Zizek gives a nice description of Eastern self-perception when he recounts everyone's desire to be part of the West, that is, to be west of the East:

> For the right-wing nationalists in Austria, there are these imaginary borders of the Karawanken, the mountain range along the border between Austria and Slovenia: Just beyond it begins the realm of the Slavic hordes. For the national Slovenians, this border is the Kolpa River, separating Slovenia from Croatia: We are central Europe, while the Croatians are already part of the Balkans ... For the Croatians, this all-important border is naturally the one between them and the Serbs, that is the one between western Catholic civilization and the Eastern Orthodox collective spirit which cannot fathom the values of western individualism. And finally, the Serbs believe they are the last line of defense for Christian Europe against the fundamentalist danger embodied by the Islamic Albanians and Bosnians.[52]

At every stage the operation goes as follows: Whoever is on the western side of the border belongs to civilisation, while what is beyond the border is merely chaos, threat, *barbari*. The ideology of *Mitteleuropa* can be read as an attempt to claim a place at the western side of the border by deconstructing the latter via a broad notion of culture, that is, 'cultural ties'. So, in the case of Austria, it is not surprising that Karl Habsburg warns his compatriots to keep up their pan-european spirit, otherwise 'the political development in Austria would turn the latter from being the avant-garde of *Mitteleuropa* to being the arrière-garde of the former Eastern bloc'.[53] There is always a danger of toppling over onto the eastern side of the European threshold.

In a strange way the eastern self-perception coincides to some extent with the western perception of the East during the Cold War period. For western eyes, Prague, as a city of the East, was interchangeable with any other eastern, that is, communist city. The best way to explain this is by referring once more to the logic of antagonism. What we said about the Orient holds for the 'eastern bloc' too – it was eastern only as far as it was not western. The East was a 'homogeneous, solid whole' only for the western gaze and – as Arns and Broeckmann remark – it was only when the Iron Curtain rose that it became clear that '[v]arious mentalities and various socialisms had been brought together under red flags'.[54] By the West, a chain of equivalence was established among all positive determinants of the East: They were all equivalent in the sense that they did not belong to the West.

On the other hand, precisely at the moment when the Iron Curtain rose, that is to say, in the very 'birth hour' of Eastern European democracies – in their 'democratic revolution' – a remarkable ambivalence was revealed: The communist East, formerly mere object of hate and distrust, now became an object of envy and fascination.

What was the reason for the fascination felt by western spectators when they were witnessing the 'revolutions of 1989' in Eastern Europe? Jeliza Sumic-Riha and Rado Riha argue that the Western spectators recognised the truth of these events 'to be a return to the origins of democratic experience, that is, to the extent to which these events were seen to constitute an answer – *one already realized* in the West – to the fundamental question of democracy. The West thus saw in the East the confirmation of its own truth. But it saw its own truth in a very specific way.'[55] The answer already realised in the West was democracy. But it was not simply the reinvention of democracy that fascinated the West: *It was the very fascination of the East* that fascinated the West. Or, to be more precise: The West was fascinated by the fascination Eastern European actors felt towards Western democracy – 'their naive belief in – Western democracy'.[56]

Today we must observe that the fascination has vanished again: After the emphatic moment of their founding the Eastern European countries seem to have lost every imaginative power and – caught in day-to-day democratic politics and *Realpolitik* – seem to be unable to cause any fascination or envy. However, inasmuch as their techno-imaginary is concerned, they are in a double position: On the one hand, they have the same problem as Central European member states of the EU have. A Central European identity of electronic networks does not exist since electronic networks are still defined by either Orientalist discourses of high-tech or by Americanist discourses of new Net-worlds. Although everybody is struggling to create a European high-tech identity, and although electronic networks are supposed to foster the politico-economic identity of Central Europe, we are not yet prepared to think of the European East as some kind of 'Techno-Slovakia' nor do we think of the former members of the Austro-Hungarian-Empire as the international avant-garde of new communication media – despite all these fancy initiatives like 'National Host', CEI, PACT, or CEEnet.

On the other hand, the position of Eastern European countries is still subordinated to the EU because of the high degree of investment and speculation by Western European countries. This might change in a few years as their integration proceeds but, for the time being, their position towards the EU resembles the position of some Eastern Asian countries towards Japan. Let us consult for the last time Koichi Iwabuchi. Being the only imperial power in the region, Japan's strategies are not only directed against the West: 'Japan's challenge against the western hegemony tended to lead less to the deconstruction of western hegemony than to changing the dichotomy of "the West" and the "the rest" into the trichotomy of "Japan", "the West" and "the rest" without changing the binary logic. "The rest" has changed from the "marked" inferior to the "unmarked" inferior'.[57] The role of the 'unmarked inferior' is played by Japan's neighbour states: sub-colonised by both the West and Japan. Don't we encounter here some similarities to the relation between the EU and it's neighbours? Perhaps it is worth considering the following hypothesis.

Maybe it is precisely their beginning integration – or should we say sub-colonisation? – into the EU, that causes the Eastern European countries to change from the 'marked' inferior – the object of fascination, envy or hate – to the 'unmarked' inferior. Why? Because a hegemonic construction of the 'unthinkable' has been successfully established: The 'unthinkable' of not being part of the European Union.

Notes

1 The term Californian Ideology was coined by Richard Barbrook and Andy Cameron, 'The Californian Ideology', <http://www.thing.desk.nl/~nettime/zkp/californ.txt> (26 February 1998).

2 David Morley and Kevin Robins, *Spaces of Identity. Global Media,*

Electronic Landscapes and Cultural Boundaries (London and New York: Routledge, 1995), p. 86.

3 See Hakim Bey, *T.A.Z. The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism* (New York: Autonomedia, 1991). For a discussion of the actual use of the internet by Middle Easterners, see Jon Anderson, 'Cybernauts of the Arab Diaspora: Electronic Mediation in Transnational Cultural Identities', paper given at the Couch-Stone Symposium 'Postmodern Culture, Global Capitalism and Democratic Action', April 1997, <http://www.bsos.umd.edu/CSS97/papers/anderson.html> (26 February 1998).

4 Edward Said, *Orientalism* (London: Routledge & Kegan Paul, 1978). It goes without saying that Said's major assumptions stay operative also for a study of Techno-Orientalism: the 'Orient', of course, is constructed by Western discourses of Orientalism. It is beyond the scope of this paper to engage in the enormously proliferate discussion on Said's work. Yet, I would like to remark that from the viewpoint of Laclauian hegemony theory (the one I sympathise with) we would even have to strengthen Said's Gramscianism in order to analyse the way in which the Western power-block uses Orientalism to foster its hegemony in the field of popular culture, to which high-tech discourse does belong.

5 Ernesto Laclau and Chantal Mouffe, *Hegemony & Socialist Strategy. Towards a Radical Democratic Politics* (London and New York: Verso, 1985).

6 Morley and Robins, p. 168.

7 Ibid, p. 168.

8 The respective record was released on Astraworks 1997.

9 Koichi Iwabuchi: 'Complicit exoticism: Japan and its other', in *Continuum. The Australian Journal of Media & Culture,* 8, no.2 (1994), <http://kali.murdoch.edu.au/~cntinuum/8.2/Iwabuchi.html> (26 February 1998).

10 Iwabuchi, 1994.

11 Morley and Robins, p. 154.

12 Ruth Benedict, *The Chrysanthemum and the Sword* (Boston: Houghton Miffkin, 1946).

13 Iwabuchi, 1994.

14 Ueno Toshiya Japanimation and Techno-Orientalism <http://www.t0.or.at/ueno/japan.htm> (5 May 1998)

15 For a critique of *Mondo 2000* and related ideologies see Vivian Sobchack: 'Democratic Franchise and the Electronic Frontier', in *Cyberfutures*, eds. Ziauddin Sardar and Jerome R. Ravetz (London: Pluto Press, 1996), pp. 77-89; as well as one of her earlier versions of this article: 'New Age Mutant Ninja Hackers: Reading Mondo 2000', in *The South Atlantic Quarterly*, no.4 (Fall 1992), pp. 569-584.

16 For a discussion of the colonial in general and American VR-myths in particular see Chris Chesher: 'Colonizing Virtual Reality. Construction of the Discourse of Virtual Reality, 1984-1992', in *Cultronix* 1, no.1, <http://english-www.hss.cmu.edu/cultronix/chesher> (26 February 1998).

17 J. Grotstein quoted in Morley and Robins, p. 80

18 Morley and Robins, p. 80.

19 Ziauddin Sardar, 'alt.civilization.faq: Cyberspace as the Darker Side of the West' in *Cyberfutures*, eds. Ziauddin Sardar and Jerome R. Ravetz (London: Pluto Press, 1996), pp. 14-41. For Sardar 'dark' means three things: (a) Militarisation: 'like the old West, it is a terrain where marshalls and lawmen roam freely bringing order and justice whenever and wherever they can' (p. 22); (b) Commercialisation: 'The monopolistic tendencies of those who control cyberspace reflect the ethos of the East India Companies ... We are thus set to move from the physical colonisation of the Other to virtual colonisation of everything by virtual capitalism' (p. 33); and (c) Sexploitation: 'colonisation would not be complete without the projection of Western man's repressed sexuality and spititual yearning on the "new continent"' (p. 33). When Sardar complains about the 'loss of humanity': 'The individual's self is reduced to discrete bits of binary code; our humanity is digested by cyberspace' (p. 28); then he connects the old story of an allegedly 'alienating' technology to a critique of Western colonialism: By simply reverting Orientalism into Occidentalism, though, the West is turned into a mere stereotype characterised by 'increasing spiritual poverty, utter meaninglessness and grinding misery and inhumanity of everyday lives' (p. 38). Sardar's discourse of alienation thereby ressembles what Toshiya Ueno has called the 'Japanoid'. Only that this time it is not the Japanese but the Westerners who are depicted as emotionless cyborgs.

20 *Wired – UK* 1, no.1 (1994).

21 It is important to note that Katz – the 'Jeremiah of Cyberspace' – is an *American* journalist. For a collection of his political views see his *Media Rants. Postpolitics in the Digital Nation* (San Francisco: HardWired, 1997).

22 It follows that there is no European culture as such: 'it is inappropriate to start by trying to define "European culture", for example, and then subsequently analising its relations to other cultural identities' (Morley and Robins, p. 45).

23 Morley and Robins, p. 45.

24 Ernesto Laclau, 'Why do Empty Signifiers Matter to Politics?' in *Emancipation(s)*, (London and New York: Verso, 1996), p. 37.

25 Laclau, p. 38.

26 Laclau and Mouffe, p. 128.

27 Ibid.

28 In his article 'The West and the Rest', Stuart Hall holds that we can use this simplification in order to make a point about discourse itself: 'For simplification is precisely what the discourse itself *does*. It represents what are in fact very differentiated (the different European cultures) as homogeneous (the West). And it asserts that these different cultures are united by one thing: the fact that *they are all different from the Rest*. Similarly, the Rest, though different among themselves, are represented as the same in the sense that *they are all different from the West*. In short, the discourse, as a "system of representation", *represents* the world as divided according to a simple dichotomy – the West/the Rest. That is what makes the discourse of "the West and the rest" so destructive – it draws crude and simplistic distinctions and constructs an over-simplified conception of

"difference".' Stuart Hall, 'The West and the Rest: Discourse and Power' in *Formations of Modernity*, eds. Stuart Hall and Bram Gieben (Buckingham: Open University Press, 1992). This does not mean, however, that we can do away with the founding paradox of every discursive system: the system's constitutive ambiguity is a *result* of the very dichotomisation of the system, whereby the former – even as being a 'result' – remains constitutive. For an elaborated discussion on the paradox of circular foundation, see Torben Bech Dyrberg, *The Circular Structure of Power. Politics, Identity, Community* (London and New York: Verso, 1997).

29 *konr@d*, no.1 (1997).

30 For a theory of the empty signifier see Ernesto Laclau: 'Why do Empty Signifiers Matter to Politics?'. For a discussion of the 'New' and avant-garde according to Laclau's concept of the empty signifier see Oliver Marchart: 'On the Final (Im-)Possibility of Resistance, Progress and Avant-Garde,' *Filozofski Vestnik/Acta Philosophica*, XVI, no. 2 (1995), pp. 159-172. For a discussion of the 'New' and Cyberspace as a new frontier see Oliver Marchart, 'Settlers, Indians, and the Cavalry, or: How to Subvert Electronic Identities' in *ZKProceedings 3*, eds. Geert Lovink and Pit Schultz (Budapest, 1996), pp. 43-48

31 Homi Bhabha, *The Location of Culture* (London and New York: Routledge, 1994), p. 73

32 Bhabha, pp. 74-75.

33 Bhabha, p. 82.

34 Ibid.

35 Sardar, p. 26.

36 This procedure is typical for colonial discourse: There is not only a dichotomisation between the West and the Rest, or, between the coloniser and the colonised, but the colonised is also split from *within*. As Stuart Hall puts it: 'The world is first divided, symbolically, into good-bad, us-them, attractive-disgusting, civilized-uncivilized, the West-the Rest. ... By this strategy, the Rest becomes defined as everything that the West is not – its mirror image. It is represented as absolutely, essentially, different, *other*: the Other. This Other is then itself split into two "camps": friendly-hostile, Arawak-Carib, innocent-depraved, noble-ignoble' (p. 308).

37 Mary Fuller and Henry Jenkins, 'Nintendo and New World Travel Writing: A Dialogue' in *Cybersociety. Computer-mediated communication and community*, ed. Steven G. Jones (Thousand Oaks, London and New Delhi: Sage, 1994), p. 63.

38 From the highly abstract viewpoint of Ernesto Laclau's theory of signification a signifying system fulfills the same function as the Lacanian object *petit a*, since the system 'is what is required for the differential identities to be constituted, but the only thing – exclusion [via the hegemonic construction of the systemic limits, O.M.] – which can constitute the system and thus make possible those identities is also what subverts them', (Ernesto Laclau, *Emancipation(s)*, p. 53). This would also explain how the screen of the – empty – New Continent is constructed as ideological fantasy. In the phantasmatic scene, the impossible system – in our case, the frontier – becomes the phantasmatic object which is supposed to fill the lack of the split subject.

39 Quoted in Hall, p.276.

40 If there is any contiguity between the Austro-Hungarian empire and the EU, than it is to be found exactly between the empire's spy-system and Europol's computer-system.
41 'The Austrian National Host', <http://bit.cosy.sbg.ac.at/acts/anh/> (26 February 1998).
42 See chapter 1.6.1 – 'Cooperation with Central and Eastern European Countries' of 'The Austrian National Host', <http://bit.cosy.sbg.ac.at/acts/anh/anh-doc6.html#otherprogs> (26 February 1998).
43 For the cartographic representation see 'Austrian Scientific Data Network' (gif-File): <http://bit.cosy.sbg.ac.at/acts/anh/anh-fig2.gif> (26 February 1998).
44 See the Paneuropa Union Website: <http://www.paneu.or.at/paneu/paneupe.htm> (24 February 1998).
45 See the Paneuropa Union Website: <http://www.paneu.or.at/paneu/paneuzi.htm> (24 February 1998).
46 Herbert Hrachovec, 'Ring und Netzwerk,' *Die Universität*, no.2 (1997), <http://www.univie.ac.at/Schroedinger/2_96/net34.htm> (26 February 1998).
47 Morley and Robins, p. 61.
48 Herbert Hrachovec, 'Austro-Hungarian Disconnections,' <http://hhobel.phl.univie.ac.at/~herbert/disconnections/disconnections.html> (26 February 1998).
49 Laclau calls this operation 'politics as the construction of the unthinkable'. For a collection of different accounts on this problem see Oliver Marchart, ed., *Das Undarstellbare der Politik. Zur Hegemonietheorie Ernesto Laclaus* (Wien: Turia+Kant, 1997).
50 Michel de Certeau, *The Practice of Everyday Life* (Berkeley and Los Angeles: University of California Press, 1988), p. 127.
51 It was not only the demonstrations on the streets of Leipzig which announced the so called peaceful revolution. The latter was also announced by inner-Eastern tourists from the GDR when they tried to reach the West via Prague. It was as much a revolution of tourists as it was a revolution of priests and writers.
52 Slavoj Zizek, 'The Malaise in Liberal Democracy' quoted in Inke Arns and Andreas Broeckmann, 'Small Media Normality for the East,' in *ZK Proceedings 4*, ed. by P. Schultz, D. McCarty, V. Cosic, G. Lovink (Ljubljana: Digital Media Lab 1997), p. 19. Also on-line at Rewired, Journal of a Strained Net, 9 <http://www.rewired.com/97/0609.html> (15 June 1997).
53 See the Paneuropa Union Website: <http://www.paneu.or.at/paneu/paneuzi.htm> (24 February 1998).
54 Inke Arns and Andreas Broeckmann, 'Small Media Normality for the East,' in *ZK Proceedings 4*, ed. by P. Schultz, D. McCarty, V. Cosic, G. Lovink (Ljubljana: Digital Media Lab 1997), p. 18. Also on-line at Rewired, Journal of a Strained Net, 9 <http://www.rewired.com/97/0609.html> (15 June 1997).
55 Rado Riha and Jeliza Sumic 'The Reinvention of Democracy in Eastern Europe,' *Angelaki*, 1, no. 3, p. 147.
56 Riha and Sumic, p. 147.
57 Iwabuchi 1994.

The Plague of Virtuality
Slavoj Zizek reads VR through the Lacanian interface

Oliver Marchant

Slavoj Zizek, *The Plague of Fantasies* (London and New York: Verso, 1997), 248pp. ISBN 1 85984 193 7

Since the publication of his first English book *The Sublime Object of Ideology* in 1989, Slavoj Zizek, the 'Giant of Ljubljana' (Voice Literary Supplement), has become notorious for his highly original interventions in philosophy, political and ideology theory, cinema theory, feminism (note his discussions with Judith Butler), and the analysis of many cultural phenomena – from pornography to the opera – including, of course, cyberspace, virtual reality and the internet. As Ernesto Laclau has remarked in his preface to the *The Sublime Object*, Zizek arranges his books in a way in which the reiteration of a given thesis does not merely repeat it but partially re-*constructs* it over and over again, from different angles – be it through Hitchcock, Robert Schumann, David Lynch or Hegel.

In his new book *The Plague of Fantasies* we can observe a similar 'combined and uneven development' of themes and topics. Here it is the psychoanalytic notion of *fantasy* which is re-constructed throughout the chapters: from the role it plays in ideology to its relation to enjoyment and fetishism. The book's turning point is a chapter on Cyberspace where Zizek claims that the *plague of fantasies* 'is brought to its extreme in today's audiovisual media'.

For him, Cyberspace must be read as a key symptom of our ideological condition which is characterised, for instance, by the neo-gnostic desire to leave one's body and to enter a purely spiritual domain. In some passages, therefore, his account is not without resemblances to historical variants of *Ideologiekritik* , for example when he silently draws on Althusser and calls Cyberspace's hidden evolutionism and biologism the 'spontaneous ideology of Cyberspace'. However, Zizek himself claims to follow the opposite path – while *Ideologiekritik* deduces abstract notions of religion or cyber-evolutionism etc., from their material roots in concrete 'social reality', he claims to take the opposite direction moving 'from pseudo-concrete imagery to abstract (digital, market...) processes which effectively structure our living experiences' (p1).

In Zizek's reverse symptomology of VR, the key notion is 'interface', interpreted by him as a phantasmatic screen. Zizek's theorisation of interface, though, is not compatible with either a pure modern or a pure postmodern account. A postmodern approach (identified by Zizek with Stone and Turkle) would focus on the arbitrary nature of the relation between our off-line self and our on-line selves, where things on the screen must be taken at their (inter)face value – there is nothing behind the mask; whereas a modern approach would focus on the universe (of wires and chips, perhaps) hidden *behind* a transparent screen. According to Zizek, both of these myths share the same error: although there is in fact no *reality* behind the screen of VR it would be wrong to assume – from a kind of caricatured postmodernist stance – that reality itself is only one more virtual reality. The point is, rather, that the screen presupposes 'a background of the scientific digital universe' (which is not to be conflated with the hardware): 'bytes – or, rather, the digital series – is the Real behind the screen' (p132). In a typical Lacanian move Zizek turns the problematic of an external *reality* into a question of *the Real* in its digitised form, i.e. mathematical calculation (witness Lacan's 'mathemes' as a way of touching at the Real through 'mathematisation').

This doesn't imply that Zizek does away with the whole notion of virtuality – quite on the contrary. He assumes a strict correlation between the symbolic order and a phantasmatic scene of the interface, that is, the virtual dimension: No symbolic order without virtuality, or to put it in Zizek's words: every access to the symbolic order '*has to be supported by an implicit phantasmatic hypertext*' (p143). In the case of cyberspace he goes so far as to claim that our fascination with the screen of the interface bears some resemblance to the fascination with the 'mysterious domain of phantasmic Otherness', as it is exhibited by colonial narratives like Conrad's *Heart of Darkness*,[1] Poe's 'The Narrative of Arthur Gordon Pym of Nantucket' or Rider Haggard's *She*[2]: 'as if the screen of the interface is today's version of the blank, of the unknown region in which we can locate our own Shangri-las of the kingdoms of *She*' (p160).

The key paradox of these stories has to be seen in the fact that in the non-colonised core of the New Continent, in the 'Heart of Darkness', in this phantasmatic beyond, we find again our own law, the law of the 'white man'; in the centre of otherness we discover the other side of the same, of ourselves: our own structure of domination. Or in case of 'Arthur Gordon Pym', what he finds on his way to the Antarctic Pole after passing through a village inhabited by completely black 'natives' (even their teeth are black) is 'a shrouded human figure, very far larger in its proportions than any dweller among men. And the hue of the skin of the figure was of the perfect whiteness of the snow'.[3] The structure of these tales, according to Zizek (who obviously applies here the

Lacanian communication formula), is that of the Moebius-strip: If you go on long enough what you'll find is not the complete other place – but your own one in its reversed – that is 'true' – form.
One might have many objections to a Zizekian reading of VR-technologies. Cultural Studies might denounce his style as overtly schematic, philosophers as populistic, and others might feel irritated by the torrent of rhetorical questions and dialectical reversals which are so typical for Zizekian rhetoric. At the end of the day, however, we should remind ourselves that Zizek's theoretical endeavour does not aim at a simple application of psychoanalysis to the cultural field since it is simply not his intention, to paraphrase an earlier dictum by himself, to ask what Lacan can teach us about VR but what VR can teach us about Lacan.

Notes

1 Joseph Conrad, Heart of Darkness (Boston: Bedford Books of St. Martin Press and Basingstoke, Macmillan, 1996).
2 H. Rider Haggard, *She* (Bloomington: Indiana University Press, 1991).
3 Edgar Allan Poe, *The Narrative of Arthur Gordon Pym of Nantucket, in Complete Tales and Poems* (New York: Dorset Press, 1989), p852.

Periphery vs Province

Igor Markovic

The need for new terms

The internet as a new medium for art, or even – as some writers express it – as a new form of art, inspires and encourages many different kinds of work which might be considered 'works of art'. However, despite the massive number of web pages being produced, internet relay chat activities, and some e-mail art projects, there are very few theoretical works which either aim to explain some of the phenomena of the new medium, or endeavour to link them to the already existing discipline of art history. Almost unique in this respect are the article 'Art in the Electronic Networks' by Andreas Broeckmann[1] and some of the work done by Critical Art Ensemble, especially in *The Electronic Disturbance*.[2] Given the dearth of theoretical work, I would like to introduce some new terms to deal with the description of internet content and web art, which are also applicable to contemporary multimedia art in general. Recently, there has been much discussion about electronic networks and post-socialist countries as essentially different from, for example, electronic networks in Western Europe, but I would argue that any such idea has nothing to do with reality. Although I will be using examples mainly from Croatia and some other 'post-' countries in this short essay, I would like to stress that these are not cited for being 'special' in any way, nor is the classic East-West divide of any importance whatsoever for my argument. In fact, when we talk about internet access and web art projects, it is possible to argue that Slovenia, for example, belongs to the highly developed West; while France, and to certain level even Germany, can be described as part of a 'soft East' both in terms of accessibility and the quality of web art projects. This is an important point because the terms I will be introducing traditionally have a geographic connotation, but in the world of cyberspace it is more appropriate, I would argue, to think about the 'centre' and the 'periphery' in topological rather than geographical terms.

Provincial art in the provincial milieu

The terms I would like to propose were first elaborated by the Croatian art historian Ljubo Karaman, who, in the 1950s and 1960s, published a number of works on medieval and Renaissance architecture in Croatia ('Pregled umjetnosti u Dalmaciji'[3] and 'O djelovanju domace sredine u umjetnosti hrvatskih krajeva'[4]). The terms are: peripheral, border-line and provincial arts. For Karaman provincial art was 'art of the countryside and small towns, which live and develop in the shadow

of the larger cultural centres'.[5] Thus, art emanating from the provinces is constantly exposed to the ideas, artists, and artworks of such centres and absorbs those influences, but is always realised within the constraints of its more modest economic and social situation. Indeed, it is precisely the economic and social situation of the countryside and small towns that determines many of the characteristics of provincial art. Since monumental scope and luxury materials are not usually within the range of limited provincial economic resources, it results in that art being marked by a degree of 'modesty', as it were.

If we apply this analysis to the world of the internet, the modest socio-economic conditions of the provinces find their equivalent in poor telephone connections, together with limited access, disk space, and bandwidth. Just as someone today may be forced to work with whatever limited network resources are available to them, artists in the provinces – as Karaman pointed out – have to use 'domestic material which is accessible, and such a combination gave to the artworks feeling of a closer connection with the region'.[6]

In considering the internet and web art projects, Karaman's formulation may be reworked somewhat: we can say that artists in the 'provinces', as it were, often use pre-existing material from another medium[7] – mostly from photography and video – and there are very few truly 'original' internet projects. Of course, in economically less developed parts of the world there are some genuine obstacles – such as lack of infrastructure in general – to the growth of multimedia and internet art projects. But if we view the digital sphere from the perspective of the topological meanings of centre and periphery, it is clear that artists in the 'provinces' are more willing to use digital technology as an advertising tool (for web sites can be visited several times of day from several countries) than to develop the medium-specific qualities of and opportunities offered by the internet. Although fascinating and innovative web projects, like Jodi,[8] Web Stalker[9] and others, exist and are just a click away, in the 'provinces' (topologically speaking) little consideration is given to such work. This usually results a low level of internet use among the artistic community, and multimedia art favours the use of video and playing with technologies rather than work to develop new art forms. The 'provincial milieu' often completely misinterprets and misapplies details and decorative motifs because of its innate taste for luxury decoration and collecting ornamental motifs. Rather than trying to develop cultural forms that are medium specific to the internet, the provincial milieu, use the internet as something which simply provides decorative features for other forms of cultural expression.

This is easily demonstrated by visiting any of the web sites dedicated to various music stars – irrespective of whether they are official or fan

sites. But another good example is Monitor,[10] an e-zine and magazine for the internet, shareware, and multimedia. They introduce a 'link of the week' and it is a great honour to be chosen. The site is an extremely good example of 'provincial art',[11] but its importance in Croatia is enormous. It consists of an uncritical mixture of different elements from (mainly) commercial web pages from all over the world: there are, for instance, banners and structures (i.e. hot spots, links etc) of home pages which are too unwieldy, and look like a revival of 'big-byte' home pages: rather like the CNN page from a couple of years ago. Overcrowded with links, Monitor is completely out of keeping with contemporary trends, and thus it can be considered a kind of relic. Although there are some pages with regular columns,[12] they show a lack of original ideas; and there is no consideration given to the overall image of the site – just the home page 'flourishes', and all other pages are left as text only in HTML.

Another good example of 'provincial art' is the use of the animated gifs 'under construction' – irrespective of who originally created them and to what extent they are re/built. And the interactive poetry project Interaktivalija by the young Slovenian Jaka Zeleznikar could also be classified in a similar way.[13] In a neo-dadaist style, visitors can choose from pre-given words and make their own poems, but the site offers nothing really innovative.

'Border-line art' can be defined as art which is located at the border of two essentially different cultural centres, and is hence subject to the influence of both. In such work, different influences intermingle and mix together to create something new and interesting. In such a milieu, we can find cultural artefacts, works of art, of a different character: a range of forms, shapes and other features from different sources can be found in a single work, as is the case with the Croatian Comic Web Station.[14] This web site has obviously been influenced by commercial sites with their hard, unchangeable structures and rules, but at the level of graphic design its inspiration is clearly the more 'alternative' fanzine comic scene (including some of the e-zines) rather than mainstream sources. This combination, together with its high technical quality, make the Croatian Comic Web Station a good example of border-line art.

Art from the periphery vs provincial art

In contrast to the provincial milieu and its art, which is strongly influenced by the ideas, artists and artworks of one dominant art centre, Karaman defined peripheral milieu as 'an area which, being a certain distance from the leading cultural centre, absorbs influences from different sides, but also processes and recombines those influences to develop an autonomous arts activity'. Peripheral art synthesises a wide range of art forms from different periods and places – motifs from different places, and also belonging to different styles. In peripheral art deeply inveterate details of a one origin survive, even when the area

comes under another influence or source of input. But the most interesting and significant aspect of peripheral art is the freedom of development – here 'great masters' simply do not exist.

In the wired world, art from the periphery should be very common, but is unfortunately very rare. Given the dramatic growth in information flow and the age we live in – 'the age of recombinant bodies, recombinant gender, recombinant texts, recombinant culture'[15] – one might conclude that the internet seems as if it were made for 'peripheral culture', as well as peripheral and marginal activities in other senses. Yet there are unfortunately very few web projects or sites which fit into this category. One of the few that does – and a good example of web content that can be regarded as peripheral culture – is the Croatian cultural magazine 'Arkzin',[16] which includes different styles, in an experimental manner with no obvious connection between them. It ranges from a Warholian-type work,[17] through classic and quieter pages, along the lines of commercials,[18] to fully original pages, with a touch of local colourit, originality and freshness that is very different to the surrounding web environment.[19] An even better example is perhaps the project *Absolute Sale* by the Novi Sad based group Apsolutno,[20] which continues the well-established tradition of exposing the ways in which the mass media interpret our reality. In brief, the project offers viewers the possibility to surf around the site (via exceptional replicas of a Windows environment) and buy the artworks of yet to be born Eastern European artists today. To achieve this they have simply used standard programs, developed in some of the software technology centres, and added content based on recent interest among curators and exhibition organisers in East European art. The project exposes the new-born interest of the Western art world for East European art as an 'unnatural interest' – a new form of neo-colonialism where artists from the East do what ever is necessary to sell their work to the West. The bitter flavour of their viewpoint – of artists in the claws of managers and curators – is something new in the area and it could be considered a perfect example of 'peripherial art'.

Conclusion All that has been discussed about the 'periphery' versus the 'province' could equally be applied to older historical periods, when the flow and exchange of information was rather limited, occasional and even incidental. Yet I would argue that with some refinements, these terms – 'periphery' and 'province' – are particularly appropriate and useful for an analysis of today's world of digital communication. The fact that we are still a long way off equality of access and connection speeds for the internet is not open to dispute, and consequently we cannot yet talk about the free flow of information. Although the situation has improved in recent years, our position vis-a-vis information flow is in fact not so dissimilar to that in previous periods of art history.

In accordance with recent theoretical works which argue that culture and art constitute the main sites of today's social struggles,[21] I believe that the proposed terms indicate a valuable field for future research. If we accept that a major tendency in the contemporary world is the transference of social tension and political struggle into the sphere of culture,[22] and if this is considered alongside the way in which the role of the intellectual has moved from the centre to the periphery, then addressing and developing the notion of the 'peripheral' versus the 'provincial' in relation to 'net art' could help improve our understanding of this area of cultural production.

Notes

1 Andreas Broeckmann, 'Art in the Electronic Networks', *ZKProceedings* 3.2.1., Ljubljana 1996 <http:/lois.kud-fp.si/~vuk/zkp321/art/25.htm> (21 April 1998).

2 Critical Art Ensemble, *The Electronic Disturbance* (New York: Autonomedia 1994). In particular, see chapters 4 ('The Recombinant Theater and the Performative Matrix') and 5 ('Utopian Plagiarism, Hypertextuality, and Electronic Cultural Production') also available at <http://mailer.fsu.edu/~sbarnes/ted/tedbook.html>. (21 April 1998) In other work by Critical Art Ensemble, a discussion of refreshing art history terms may be found – see, for instance, 'Utopian promises – Net realities', Address to Interface 3, <http://mailer.fsu.edu/~sbarnes> (21 April 1998).

3 Ljubo Karaman, *Stara umjetnost Dalmacije* [The Ancient Art of Dalmatia] (Zagreb: Mladost, 1958).

4 Ljubo Karaman, *O djelovanju domace sredine u umjetnosti hrvatskih krajeva* [About Domestic Influence in the Ancient Art of Croatia] (Zagreb: Institut za povijest umjetnosti, 1963).

5 Ibid, p. 6.

6 Ibid, p. 7.

7 As in the recent exhibition by Croatian artist Darko Fritz: *Internet porno* held in Zagreb, January 1998. Fritz's work consists of computer printouts of photographs taken off internet porn sites and digitally processed, and is very similar to the work of American artist Tom Perez <http://www.tseinc/~tomsar>(21 April 1998).

8 At <www.jodi.com> (21 April 1998).

9 At <www.backspace.org/iod> (21 April 1998).

10 At <http://www.monitor.hr/> (21 April 1998).

11 It is, of course, pertinent here to ask why this should be considered as art at all? As yet, the question of what constitutes so-called 'net art' has not yet been answered satisfactorily, and even the question of constitutes art in general remains open to debate. My high-school history teacher once told me , half seriously, that real art is supposedly something with no practical values. I would have to disagree with such exclusivity, and, particularly when talking about the internet, any content may be considered as a form of art. There is no doubt that the graphic design of any magazine or newspaper – be it *National Geographic, Emigre,* or *The New York Times* – has some artistic intentions; similarly, any creator of web page work can be

regarded as an artist – in so far as they are working to attract viewers and hold their attention long enough to read the content.

12 See, for instance, <http://www.monitor.hr/lora/lora008.htm> or <http://www.monitor.hr/marija/maria004.htm> (21 April 1998).

13 At <www.kiss.uni-lj.si/~k4ff0047/CRO/prvast.htm> (21 April 1998).

14 At <http://comics.cro.net/> (21 April 1998).

15 Critical Art Ensemble, *The Electronic Disturbance*, p. 84.

16 At <http://www.arkzin.com>. (21 April 1998)

17 See <http://www.arkzin.com/1-94/beuys.html> (21 April 1998).

18 See <http://www.arkzin.com/1-94/athey.html> (21 April 1998).

19 See <http://www.arkzin.com/bkar/index.html> (21 April 1998).

20 See <http://apsolutno.opennet.org> (21 April 1998).

21 For an excellent recent example, Mark Terkessidis, *Kulturkampf: Volk, Nation, der Westen und die Neue Rechte* (Köln: Kiepenheuer & Witsch, 1995).

22 And arguably even more so into the sphere of sport, but this is not relevant to the point being argued here.

Three Years of Internet-Art in Hungary

An Annotated List of Sites and Events

Miklós Peternák

Sailor: I can't follow the story
Agatha: It's your problem
(trust-n-dust diary by Olia Lialina[1])

During the last three years, several significant steps have been made in developing original net art projects in Hungary. One site was developed by the first media art faculty in Hungary, the Intermedia Department,[2] founded in 1990 at the Hungarian Academy of Fine Arts. Another arose out of the continuous interest of Hungarian artists in new media and new tools of expression, from photography to performance, from happenings to experimental film, from installations and environments to video and computer (see Anna Bàlint's review of the Artpool web site in this issue). For instance, as early as the 1920s Lászlools of expression, from photography to performance, from happen*The Dynamics of the Big City* (1922-24), and later in the mid-1970s the first computer animations were shot here on 35mm film.[3]

MetaForum

The first event where a Hungarian audience was given access to information about the new possibilities of the internet and multimedia as an art form, was the first MetaForum conference (1994),[4] organised by the Media Research Foundation,[5] and the Intermedia Department. Last year, a book[6] was published in Hungarian containing mainly lectures and texts by the authors who were present (including among others, Richard Barbrook, Manuel De Landa, Critical Art Ensemble, János Sugár, Pit Schultz, Lev Manovich, Eric Davis, Peter Lamborn Wilson, and an interview with Arthur Kroker by Geert Lovink). This is also available on-line in two locations,[7] and as part of the Hungarian Electronic Library.[8]

C3: Center for Culture and Communication

Exploration Network

In Hungary, the breakthrough for net art – and the internet in general – came in early 1996. In January an exhibition was organised by the Soros Center for Contemporary Arts at the Mûcsarnok (Kunsthalle) Budapest, where five free workstations were available for the public to 'surf' electronically and following this similar provision was made on several other occasions. One unusually successful show *The Butterfly Effect,*[9] gave birth to a new programme from the Hungarian Soros Foundation: C3: Center for Culture and Communication.[10] The first

website of C^3 entitled *Exploration Network* was made for the grand opening in June 1996. The introductory text declares that:

> the future-users are able to step into a latent gallery, where they can *act as an active,* collaborative participant in developing the real or the (virtual) image. Understanding the past tense as the traffic signs of the highway, the next moment can be the common responsibility of the viewer and the creator. Is it the pitfall of methodological chaos, or the new grammar of the new synthesis that symbolises the interface used for accessing global knowledge? [11]

European Media Artists in Residence Exchange

Since then, numerous Hungarian and international residency projects have taken place the products of which can be seen on the web, including for instance Masaki Fujihata, *Impressing Velocity in Real Time; Protected by etoy;*[12] *Artist in the Age of Information* by Alexei Shulgin and *The 6th International Vilém Flusser Symposium,* a part of the *Beyond Art* exhibition which was curated by Peter Weibel. Some of the projects were initiated by the authors/artists, such as the latest web artwork by Olia Lialina: *Agatha appears*[13] which is a unique and exciting piece. The presence of internationally known artists naturally inspires Hungarians, as do exchange programmes like EMARE (European Media Artists in Residence Exchange).[14] Two pieces shown in Budapest as a result of the programme are *Anonymous Drawing Room* by Beverly Hood and *Concise Creative Concordance 2.0* by Reinhold Adt.[15]

The Collection

The first Hungarian projects were developed in parallel with the international scene. For instance, Zoltán Szegedy-Maszák's *Cryptogram* is a communication-system which can turn encoded messages (for instance, e-mails) into virtual sculptures (actually VRML files). So the user can send messages in the form of virtual sculptures, which can be decoded back to their original form.[16] In the introduction, the author explains the system further:

> The idea of the *Cryptogram* is very simple: having a 3D virtual object built of triangular facets, we can link the points holding the faces to character codes. This way any text could be encrypted to a virtual object: each character of the text could be converted to one vertex-point of the sculpture, and the triangular faces could be built according to the order of the characters in the text. ...
> Communicating through 'Cryptograms' (with wrl files as text sculptures) has not only the advantage of encryption; it encrypts the fact of exchanging messages as well, since for unsuspecting outsiders the process seems to be the exchange of wrl worlds by vrml-fans; if one of them would look at the wrl

> files, they might seem to be some kind of 'artworks' for him. On the other hand, the initiated Cryptogram-fans could acquire the skill after some practice to understand the most common enrypted messages in form of 'sculptures' without decoding them.

These works are all related to a new C^3 project, *The Collection*, which is both a vision of the future and a 'museum' collection – like a contemporary *Wunderkammer* on the internet.

Internet.galaxis In 1996, the first *Internet.galaxis* a net-art show and exhibition for internet providers was initiated by the adam studio.[17] It was followed by two more *Internet.galaxis,* the third was held as recently as February 1998.[18] For this event, artists and students were asked to present their work within a commercial context, and contributions from the Intermedia Department, and the art workshop of the Scientific Institute of the Hungarian Academy of Sciences called *SZTAKI Mûhely* formed the core of the show.[19]

Nightwatch The workshop – where computer programmers provide assistance to artists – also helped produce the first Hungarian on-line art magazine, *Nightwatch*. While the magazine is published from Budapest its aim is global as its slogan indicates: 'Art-Net-magazine. *Changing still life.* Idea, image, news market. Nightwatch – *around a world*'.[20] In the project *Vanishing trace,* art historian Gábor Andrási explains the idea behind the enterprise:

> Day in day out, we see in the galleries exhibitions that leave no artwork behind – either because they are calculated to deteriorate, dissolve or diminish, or because the group of objects, the installation composed for the given space, is taken apart and is never put together again. Why – one may naturally ask? Why make an artwork that lives only for an hour or two? And in what form do they still survive?

A list of vanished works follows with an appeal: 'Review the whole list and vote for which one we have shown at its best.' The most recent issue, entitled *Experimental Document,* was co-produced by C^3 and contains original web artworks by Gábor Bakos, Gábor Gerhes, Endre Koronczi, János Sugár, Gyula Várnai and Imre Weber, as well as *Beta Tours* by Balázs Beöthy and *Travel document* by Ágnes Eperjesi.[21]

Other C^3 projects Besides art galleries and art institutions, C^3 has also created a web-based free electronic mail system in Hungarian for Hungarian speakers[22] and provides dial-up service and webspace NGOs and minorities.[23] For example, the homepage of the Hungarian Roma community is found at a

C^3 site: <http://www.romapage.c3.hu/engindex.htm>. Though it is not an 'art project' in an academic sense, there are artists whose interest in sociological issues has continued to develop in postmodern 1980s, despite the lack of interest in the pages of well-printed and skillfully-designed art magazines and the lack of gallery space. A separate project initiated by Dominic Hislop and Miklrest in sociological issues has continued to develop in postmodern 1980s, despite the lack of interest in the pages

> *Photographs taken by Budapest's homeless*
> *Inside-out* is a photographic project which began in Hungary's capital city, Budapest, in July 1997. Since then, some 30 people from a variety of homeless situations have been given simple single-use colour cameras and asked to record their view of whatever they feel to be important or interesting in their everyday experience. Each image is accompanied by some text taken from the transcript of a recorded interview with the photographer. As well as drawing attention to the issue of homelessness in Budapest, it is intended that this project can empower the homeless with the responsibility for their own representation, and produce images which challenge common preconceived notions of the homeless as a homogeneous or stereotypical group. (For more information e-mail: <homeless@c3.hu>)[24]

The Institute of Contemporary Art-Dunaújváros

Finally, to conclude this overview of recent developments one initiative outside the capital deserves mention. A year ago a new project began in an industrial town 80 km from Budapest created by young professionals with the local government. The Institute of Contemporary Art-Dunaújváros is a museum and a meeting place, an extraordinary venue built in the fashion of the so-called *socialist-realism* style of architecture. The project aims

> to build up and maintain an intense/vivid and challenging cooperation with artists and theoreticians [and] coordinate and document analytical research on contemporary art, as well as to maintain and develop the Institute's collections and to initiate new projects that might generate new works of art.[25]

Notes

1 See <http://www.c3.hu/collection/agatha> (22 April 1998).
2 Intermedia Department <http://www.intermedia.c3.hu/> (22 April 1998).
3 Lászledia Department*The Dynamics of the Big City* was later printed in his book *Painting, Photography, Film* published by the Bauhaus.
4 Metaforum <http://szocio.tgi.bme.hu/metaforum/index.html>. There have been two subsequent conferences in 1995 and 1996 under the titles No Borders (MetaForum II) and Under Construction (MetaForum III).
5 Media Research Foundation <http://www.mrf.hu/ (22 April 1998).
6 Ágnes Ivacs and János Sugár eds. *Bulds Ivacs and János Sugár eds.* (Budapest: Media Research Alapítvány, 1997).

7 <http://www.mrf.hu/bulldozer/index.html > (22 April 1998).

8 Hungarian Electronic Library <http://www.mek.iif.hu/MEK/> (22 April 1998).

9 The Butterfly Effect <http://www.c3.hu/butterfly/index.html> (22 April 1998).

10 C3 <http://www.c3.hu> (22 April 1998).

11 Exploration Network <http://www.c3.hu/c3/explo/exp_next.html> (22 April 1998).

12 Impressing Velocity in Real Time <http://www.c3.hu/~masaki/> (22 April 1998).; Protected by etoy, by the etoy group is at <http://protection.etoy.c3.hu/> (22 April 1998).

13 Olia Lialina, Agatha appears <http://www.c3.hu/collection/agatha/> (22 April 1998).

14 The aim of the EMARE programme, which was initiated by Werkleitz Gesellschaft, is to establish a European media art network in which not only the individual artist is promoted, but also the general cooperation of the respective European Organisations.

15 The internet-based installation by Beverly Hood and Reinhold Adt, two artists-in-residence at C3 via EMARE were presented in the C3 gallery. See <http://www.c3.hu/emare.htm> (22 April 1998).

16 Zoltán Szegedy-Maszák's *Cryptogram* <http://www.c3.hu/cryptogram/, see also http://vrml.c3.hu/> (22 April 1998).

17 Internet.galaxis <http://www.inf.bme.hu/internet.galaxis/ig97/index-e.html> (22 April 1998).; Adam studio <http://www.adam.hu/.> (22 April 1998).

18 The most recent *Internet.galaxis* web site is <http://www.adam.hu/internet.galaxis/> (February 1998).

19 See <http://www.c3.hu/~nyorsi/> and <http://www.intermedia.c3.hu/Students/Vecsey_J/> (22 April 1998).

20 Nightwatch <http://www.sztaki.hu/providers/nightwatch/index.eng.html> (22 April 1998). e-mail: <nightwatch@sztaki.hu>.

21 See <http://www.sztaki.hu/providers/nightwatch/kiserleti/> (22 April 1998).

22 See <http://freemail.c3.hu/fm/login> (28 April 1998).

23 Applications for awards are made to C3. See <http://www.c3.hu/ngo-e1.html>, <http://www.c3.hu/~bartok32/#English> (22 April 1998).

24 See <http://www.c3.hu/collection/homeless/Angol1.htm> (22 April 1998).

25 The Institute of Contemporary Art-Dunaújváros <http://www.ica-d.hu/> (22 April 1998).

Pioneering Spirit and Technology

The Future of the Information Highway in Africa

Stephen Quinn

New Media 2000 conference, New Media Lab, Rhodes University, South Africa, 10 September 1997

The official opening of the New Media 2000 conference provided a case study in miniature of a major issue for South Africa and the rest of the continent. South Africa's minister of post and telecommunications, Jay Naidoo, gave the opening address via an ISDN link from Geneva in Switzerland. It was an impressive exhibition of communications technology. Telecommunications was the 'information backbone of the African renaissance', Naidoo said, and it would 'lay the foundation for Africa's leapfrog into the twenty-first century'. But he also acknowledged that many black students in his country had 'never heard of the internet and had never operated a computer' and there were 'no magical solutions'.

Naidoo spoke for half-an-hour before taking questions, his image emblazoned on a 40-foot square screen. He referred to the 'monumental challenge' in bridging the gap between the information rich and poor in his country. This gap was a recurring theme throughout the conference. 'We have to remind ourselves of the lack of infrastructure [in Africa],' Naidoo said. He was referring to the fact that about 4 billion people worldwide do not have a personal telephone. The 700 million people in sub-Saharan Africa have access to only 12 million phones, that is one phone to 58 people. And for those on the waiting list worldwide the average time to connection is one and a half years.

South Africa mirrors this gap. It has fewer than two phones per 100 households in the townships and rural areas. Only one in 100 people currently has access to the internet. The New Media Lab at Rhodes University in Grahamstown, South Africa, organised the conference. Lab director Roland Stanbridge said that the conference – designed to introduce new media to the African continent – was relevant and appropriate. 'Even if a majority of people in Africa do not have access to the internet, it can be used by those few who have access to it for the benefit of communities,' he said. One aim of the conference was to co-ordinate some of the internet initiatives on the continent and make

Africans aware of the possibilities of new media technologies via contact with delegates from other parts of the world.

The conference structure reflected these aims. The first half of day one outlined the situation in Africa. Stanford Mukasa, chairman of the Department of Journalism at the Indiana University of Pennsylvania, USA, spoke about 'redefining African journalism in the age of the information superhighway'. As Africa moved into the twenty-first century, he said, it carried 'an ever present burden' of under-developed social infrastructures and 'undemocratic governance'. Journalists had to be more pro-active and dynamic in championing basic human rights. To do that they needed to be better trained. His paper identified priorities for African journalism in the next century, and proposed strategies for training journalists to be internet literate.

Anriette Esterhuysen, the driving force behind SANGONet (the Southern African NGO network) focused on the role that service providers and information technology training institutions could play in supporting media development in Africa. Sipo Kapumba, a journalist with the Zambia Independent Media Association (ZIMA), talked about MISAnet, the on-line arm of the Media Institute of Southern Africa (MISA). It had allowed Zambian independent newspapers to exchange news and improve their foreign news coverage, while at the same time allowing Zambian news to be covered in the rest of southern Africa.

The second half introduced four case studies of how South African companies were making money from the internet and the new media. Kevin Davie, editor and publisher of Woza (www.woza.com.za), outlined how his publication had been making money from its second month since launching in October 1996. 'We are a new publishing paradigm,' he said. 'We are purely web-based. There's no paper.' Neil Jacobsohn, deputy chief operating officer of Times Media Ltd (one of the two major English-language media groups in South Africa), described how TML's flagship, *Business Day*, had metamorphosed into a new media product. Content from the daily is also used for hourly radio news updates, an on-line news service, web sites and an evening television programme.

Day two introduced experts in internet journalism from the USA (two), the Netherlands, Australia, Sweden, Fiji, Ireland, England and Germany, as well as delegates from South African think tanks. They discussed ways that African journalists could benefit from the internet. Nora Paul, new media guru from the Poynter Institute of Media Studies, USA, talked about how American newspapers used the internet for reporting and research. Fredrik Laurin, an investigative reporter with Swedish TV, described how he used spreadsheets and databases to expose corrupt judges.

The first half of the third and last day developed the subject of computer-assisted reporting (CAR). Speakers used examples from Sweden and the Netherlands to show delegates how CAR could evolve in Africa. This prompted considerable debate on the legal and ethical issues, and again brought up the recurring motif of the gap: was it possible to use computers and the internet for reporting in a country without an established infrastructure? One questioner, who knew her history of Africa, likened the 'new evangelists' to the missionaries who had arrived several generations earlier. 'The big difference is they were carrying Bibles tucked under their arms, while you are carrying notebook computers.' It was relatively easy to distinguish a speaker from a delegate; the former had laptop or notebook computers tucked under their arms. Another delegate reminded the audience of minister Naidoo's opening statement that sub-Saharan Africa has fewer telephone lines than the city of Tokyo.

The number of delegates who attended the second half of the last day – to discuss the future in Africa – dropped to about a quarter of the 140 who started on day one. This was a combination of commitments elsewhere and the inevitable fatigue that comes from listening to more than 40 papers and panel discussions inside a tight deadline and a stuffy hall. Rhodes University's department of journalism and media studies had also hosted three other conferences and an editorial management workshop in the two weeks prior to the New Media 2000 event. The consequences of excess socialising was another factor. The South African hospitality was at times almost overwhelming.

Stanbridge said that the programme had been designed to encourage networking among media practitioners, students and trainers in southern Africa. Elina Sana, from the Nordic journalism centre, said she attended the conference intending to recruit internet trainers. Her organisation, based in Maputo in Mozambique and sponsored by Nordic countries, provides media training for journalists from southern Africa with at least three years media experience. 'So far, the internet in Africa is for the privileged,' she said. But she believes that the situation will improve because the net 'bridges gaps' provided people have a computer and a modem.

Parts of Africa are poised, ready to leap into the next century, aided by a pioneering spirit and technology. The conference showed plenty of evidence of the former and outlined the potential problems with the latter. Both will provide ample opportunity for future research.