3011: Geographies of Cyberspace
28th November 2003

Course Assessment

The course is assessed through examination (50%) and coursework (50%). There are two pieces of coursework, (1) 'Digital City Audit', a group project (25%) and (2) 'Cyberspace and Everyday Life', an individual project.

The deadline for submission of the coursework (projects 1 and 2) is **Tuesday 13th January 2004**. Submission in the geography reading room by 12 noon.

Cyberspace and Everyday Life project

(i) Aims:
This is an individual project involving the mapping and analysis of your everyday interactions with cyberspace (computers, software and networks). As has been outlined in earlier lectures and readings in this course, increasing amounts of daily activities, transactions and personal interactions are made possible by cyberspatial technologies. The goal of this project is to consider how is cyberspace changing your life, in terms of what you do and in particular your sense of spatiality? Is it enabling completely new patterns or simply supplementing your existing activities and interactions across space.

Many objects you use, and take for granted, are being made 'smart' with embedded software and network connections. Crucially, the myriad of transactions via cyberspace also leave behind electronic trails that identify who you are, what you were doing, when you were doing it and, often, where you were. It has been argued these electronic trails form an evermore comprehensive 'data shadow' that maps out your identity across time and space. The 'data shadow' enables many routine transactions to happen smoothly (e.g. withdrawing money from an ATM) but it also has the potential for disabling effects. A key goal of this project is to begin to understand the shape of your 'data shadow' in cyberspace and think about its implications.

You will undertake a time-space survey of all the types of cyberspace technologies you use, creating a detailed inventory of the purposes of the technologies, and consider the influences these computer-mediated interactions have on everyday spatiality and your spatial behaviour, as well as thinking about the power relationships involved and the degree to which aspects of your personal life maybe being 'exposed' to companies and institutions that you might not want revealed.

(ii) Methodology:
You will gather your own data by keeping a detailed time diary for a 4 days period, in which you record all cyberspatial interactions and transactions, logging the (1) type of interactions (technology and purpose), the (2) time and duration and (3) location. I suggest you record these data using an excel spreadsheet, where each row represents a fix time interval (e.g. 15 minute). You can print hardcopy pages of the diary to take

with you to fill in when you have spare moments throughout the day. You can draw up a simple coding scheme to make logging data easier (e.g. a1 = phone granny, a2= phone sister, etc). Also, remember to keep all receipts, ATM slips, etc as useful records of electronic transactions that will help populate your time diary. You might also be able to automatically log the number of emails and text message sent/received, depending on the system you use.

To begin you should spend some time thinking about your daily activities and the degree to which they are mediated by computers and software, and then draw up a list of possible interactions that are part of routine daily life. Likely examples could be as follows. Communications: using a PC (for work, recreation), general Internet access (college, home, other), sending / reading email, using a phone (mobile, landline). Financial transactions: using ATMs, using payment cards, online banking, payment by direct debits. Using 'smart' appliances (e.g. dvd player or digital tv, digital cameras, etc), swipe cards (e.g. store loyalty cards, library card) and electronic keycode doors. Note, this is not a definitive list and you will likely not do all these and you will likely have additional examples that you want to log.

Decide on the 4 day period for the time diary. I would suggest you do this during term time, as you will likely have more diversity of interactions, but you can do it over the vacation if that is easier. Try to record as much detail as possible to provide a rich dataset for analysis and discussion.

(iii) Report:
You will provide a written report of your findings on your everyday use of cyberspace. The report should be a maximum of 2,000 words and include references where needed and appropriate illustrations (maps, charts, tables, etc). The report must be submitted on **Tuesday 13th January 2004**. (Note, for privacy reasons, you do not need to include the full time diary in your report.)

The discussion in the report should cover the following (1) factual description of the types of cyberspatial interactions and outline the shape of your 'data shadow', (2) analysis of the spatial and temporal patterns of usage (3) and interpretation and discussion, particularly in regard to the changing sense of spatiality.

Here are a few suggestions on the type of questions you might want to cover in your report.

- Try to classify the activities and interactions into a broad typology. Work out the frequency and duration of technologies used (e.g. how many phone calls made/received, approximate duration). You could plot some summary graphs of this.

- In terms of the use of technologies for communication (phone, email, etc) you could try to analyse the types of people contacted and the distances from you (local, national, global), perhaps via graphs or sketch maps. Consider the degree to which your use of these technologies is leading to greater time-space compression or distanciation in your everyday life.

- Analyse the sequencing of technologies throughout the day. How does the use of a particular technology relate to other activities and to the spaces you are in? Are some technologies a predecessor to certain other activities (e.g. withdraw money from ATM before going shopping). Do some interactions happen in a particular order or regular patterns, how are the technologies you use enacted into longer 'chains' of activities?

- What ways does cyberspace change your behaviour and how you organise routine activities, structure your social networks, etc? Does cyberspace change your sense of place, feeling of distance and notions of accessibility, does it change where you go and how you travel? Are they leading to new types of activities and new structures of activities space or simply supplementing/augmenting existing ones?

- Are certain cyberspatial activities fixed in certain space, while others are more mobile across space? Are they changing the nature of conventional geographical 'containers', e.g. blurring the lines between home and work, public space – private space.

- Is the use of technologies undertaken as a shared task or alone? Is the use of technology obligatory or discretionary?

- Discuss what your level of dependence on cyberspace is? Think about the degree to which you could live without these routine cyberspace infrastructures (e.g. only using cash and having no cards; giving up your mobile phone). How much would you be inconvenienced? Do certain cyberspatial technologies make you feel safer and more secure.

- Think about the types of data that is being logged in your 'data shadow'. List the number and organisations and institutions that will hold a part of your data shadow (e.g. UCL, the bank, the pub chain, retailer, underground, ISP, etc), try to classify them and comment upon what you think they might do with the data. Can you draw up a typology of data, perhaps ranked along a scale from anonymous to very private? What type of locational data is being logged and how far does this create a profile of your movements through the urban environment?

- You might also want to comment on the time diary methodology and any limitations you see in recording and analysing your 'data shadow'. What further data could be gathered and analysed to provide a richer, perhaps more qualitative understanding of your everyday use of technology.

(iv) Further readings:

The following papers by geographers have considered the role of ICTs in the context of everyday life:

Adams, P. (1999) Bringing Globalization Home: A Homeworker in the Information Age. *Urban Geography*, 20:356-376.

Adams, P.C., (2000) Application of a CAD-based Accessibility Model. In Janelle, D.G. and Hodge, D.C. (eds.), *Information, Place, and Cyberspace: Issues in Accessibility*. Berlin: Springer-Verlag, pp. 217-240.

Goss, J. (1995) 'We know who you are and we know where you live': The instrumental rationality of geodemographics systems. *Economic Geography*, 71**(**2): 171-198.

Kwan, Mei-Po. (2002) Time, Information Technologies and the Geographies of Everyday Life. *Urban Geography*, 23(5):471-482. (http://geog-www.sbs.ohio-state.edu/faculty/mkwan/Paper/Kwan_UG2002.pdf)

Valentine, G. and Holloway, S.L. (2002) Cyberkids? Exploring Children's Identities and Social Networks in On-line and Off-line Worlds. *Annals of the Association of American Geographers*, 92(2):302–319.

More general references on the nature and implications of the 'data shadow':

'Your day – Emma Brockes is being watched round the clock', handout from the surveillance lecture (a one page photocopy from the *Guardian*).

Clarke, R. (1994) The digital persona and its application to data surveillance. *The Information Society*, 10(2). http://www.anu.edu.au/people/Roger.Clarke/DV/DigPersona.html

Lyon, D. (2002) Everyday surveillance: Personal data and social classifications. *Information, Communication & Society* 5:242–257.

MyLifeBits project, http://research.microsoft.com/barc/mediapresence/MyLifeBits.aspx

Gemmell, J, Bell G, Lueder, R, Drucker, S and Wong, C, 2002, "MyLifeBits: Fulfilling the memex vision" *ACM Multimedia'02* Juan Les Pins, France, 1-6th December.

The use of time diaries to study Internet use, see chapters in :

Wellman, B. and Haythornthwaite, C. (2002), *The Internet in Everyday Life*. Blackwell Publishing, Oxford.