

GSC2417/3417
VIRTUAL CULTURES:
SEX, POLITICS AND WAR IN
CYBERSPACE

SUBJECT GUIDE

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School of Humanities, Communications, and
Social Sciences

School of Political and Social Inquiry
FACULTY OF ARTS



Prepared by:

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SUBJECT INFORMATION

Please read this Subject Guide carefully. Refer to it as questions arise during the semester. It contains information about learning objectives, assessment policies, assignment topics, due dates, and so on. It also includes the semester program of lectures/topics, readings and topic questions which you will need to consult weekly.

1. Prerequisites

To be enrolled in this Subject you must have successfully completed both of the following subjects: GSC1402/COM1010 Media Studies and GSC1901/COM1010 Introduction to Communication Studies. If you believe you have completed similar subjects elsewhere, you may be permitted to enrol, but you must first get the permission of your subject adviser.

2. Staff

2.1 Contact Information

Fill in the name of your lecturer/tutor here, at your first lecture/tutorial.

Tutor: _____
Room: _____ Phone: _____
Email: _____
Consultation times: _____

2.1 Subject Adviser

The Subject Adviser for Berwick students is Ned Rossiter. You can contact Ned on matters pertaining to special consideration and other complications at the following address:

Email: Ned.Rossiter@arts.monash.edu.au

Rm. 228

Phone: +61 3 9904 2023

Fax: +61 3 9904 7037

Note: any requests for assignment extensions should be made through your tutor, and not the Subject Adviser.

3. Subject introduction and objectives

3.1 Introduction

This subject aims to provide a comprehensive analysis of the factors (economic, social, political, cultural) which influence the use and construction of virtual spaces on the internet. As such, it provides an important theoretical context through which students of communications can further develop their own interests.

This subject builds upon the concerns developed in GSC2411 Media, Culture, Power (though the course is designed so that GSC2411 is not a prerequisite), such as the management of populations and the formation of socio-political constituencies in mediated terrains. The relationship between online communities, their tropes of expression, and the material conditions that shape virtual cultures and informational societies are explored.

This subject adopts no specific theoretical position. However, its critical concerns are underpinned by materialist notions of communications and culture. That is, this subject foregrounds the ways in which virtual cultures and new information and communications technologies (ICTs) are embedded in socio-political settings whose regimes of practice, institutional realities and imaginary formations condition the internet in distinct and uneven ways.

In taking a materialist approach to the study of net cultures, this subject seeks to explore the possibilities for cultural invention in an age of structural transformation. These possibilities have become increasingly important to students of new media, and this subject aims to provide students with the means to more effectively engage with online cultures from theoretical and practical standpoints.

3.2 Objectives

At the completion of this subject students will be able to satisfactorily demonstrate:

1. an understanding of contemporary issues and elements of the “information society”;
2. an understanding of internet cultures, contexts, and emerging paradigms within new media theory;
3. the acquisition of information technology skills – in particular, a knowledge of and participation in listserv discussion procedures, a capacity to research internet sites and information relevant to research topics;
4. critical reflection upon the construction and use of those skills, thus producing the kind of multiple literacies needed to effectively engage within contemporary workplace environments;

Objective for third level

Distinction between 2nd and 3rd levels:

5. Third Year level will require students to demonstrate a greater breadth of reading and a more extended understanding of the theoretical issues covered in the subject.

3.3 Methods of teaching and relationship to objectives

This subject consists of two key modules. In the first module, seminars will be conducted on campus for the first four weeks, introducing students to key critical debates within different paradigms of net culture (Objectives 1, and 2). Topics covered include internet history and practices, speculative theory, net politics and tactical media, and new media empirics (Objective 2). The second module consists of online tutorials and research in weeks 5, 7 and 9. Here students will identify an online phenomenon (Objective 3) and then submit weekly reports to a web page designed especially for this subject. The reports will at once demonstrate online skills and critical reflection (Objectives 3 and 4). The online component will function as a space for dialogue and archiving student research (Objective 4). Upon completion of both modules, students will be expected to reflect critically on their research in terms of material covered in modules 1 and 2 (Objectives 1 to 4).

3.4 Methods of assessment and relationship to objectives

1 seminar paper: 1500 words (30%); participation in an online community: documentation of 2 x 100 words plus 1 x 300 word research proposal (20%); 1 research essay: 2500 words (50%). Assessment at Third Year level will require students to demonstrate a greater breadth of reading and a more extended understanding of the theoretical issues covered in the subject.

Relationship to objectives:

The seminar paper will consist of an essay that demonstrates an understanding of one of the critical paradigms introduced in class and related theoretical literature (Objectives 1 and 2). Online participation will be conducted externally and reflected upon in class; assessment will be based on student participation and submission of reports (Objectives 2 and 3). Teaching, learning and assessment will culminate in the research and submission of a major assignment that demonstrates an understanding of distinct theoretical paradigms and cybercultural practices and reflects critically upon the limits and possibilities of online research and participation (Objectives 1-4).

4. Study materials

4.1 Prescribed text

Hugh Brown, Geert Lovink, Helen Merrick, Ned Rossiter, David Teh, Michele Willson (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001).

This excellent reader provides a wide ranging survey of current research being undertaken in Australia. It is divided into sections on theory, politics, policy, new media arts, and online education. It provides the structural framework for this subject.

You can purchase this text from your subject adviser. It costs \$30 (GST inclusive).

4.2 Online materials

There is no hard copy reader for this subject. All set readings are available from online sites and archives from listserves. These readings can be accessed from the subject web site: the url of the site will be given to you in week 1. Write the address down here: _____

It is essential that you access the readings and we strongly recommend that you print them off, and mark them up. You will find it extremely difficult to pass this subject if you do not keep up with all weekly readings.

Copies of further readings listed in each Topic will be available on electronic reserve or closed reserve.

The diversity of critical approaches addressed in this Subject in addition to the vast array of cultural and economic practices associated with the internet guides the choice of articles which have been included as online readings. Given the range of approaches introduced here, and the particular perspective established on these approaches, the emphasis is on reading key or exemplary texts from the different approaches.

4.3 Recommended texts

You should also consider buying one or all of the following recommended texts, or refer to them in the Library. Copies will be kept on closed reserve. They are an excellent source for further research.

Bosma, Josephine et al. (eds). *README!: ASCII Culture and the Revenge of Knowledge* (Brooklyn: Autonomedia, 1999). [Trawl the nettime archive for contributions from many of the authors in this book: <http://www.nettime.org>]

Lash, Scott. *Critique of Information* (London: Sage, 2002).

May, Christopher. *The Information Society: A Sceptical View* (Cambridge: Polity, 2002).

Miller, Daniel and Slater, Don. *The Internet: An Ethnographic Approach* (Oxford and New York: Berg, 2000).

4.4 Readings

Students should aim to read weekly materials before tutorials/seminars (that is, read Week Two readings for Week Two's seminar). This subject works through the conjunction of, and connections made between, lectures as well as readings and seminar work, and not through any one element.

When you are reading, don't expect to understand everything at once. Work to identify what **major** points are being made by the author(s) to help you in this.

One thing: **DO NOT FREAK OUT OVER THE NUMBER OF READINGS!** We've listed more than you'll get around to reading, no doubt. Pick the ones that seem relevant to your interests, and have a quick look at the others. Most of the readings are short. However, **the readings from the fibreculture book are essential reading.**

Look up unfamiliar words in dictionaries, and keep a list – or, a glossary – for future reference. If they are more specialised terms, ask in seminars, ask peers online, or direct questions to your tutor. If you encounter difficulty with a reading, mark particular points or paragraphs to remind yourself to ask questions in seminars.

In many cases, the lectures will orient and elucidate the week's readings. It's also important to know that the subject is cumulative: i.e. don't expect it to be a subject where you're dealing only with what you already know. Over the semester your familiarity with basic assumptions and approaches will develop, and you may find it useful to note connections between later and earlier readings, or to re-read earlier readings.

4.5 Further readings

A list of further readings which you may wish to consult is provided at the end of this Guide. Many of these are on Library Reserve and available as books, through the library databases, or as electronic pdf files.

5. Class contact

This subject is delivered in a fairly distinctive way, combining on campus and online modes of teaching and student focused research. From weeks 1-4 lectures and tutorials will be conducted on campus. Then, from week 5 through to 9 every other week will be on campus, alternating with online tutorials, discussion, and research. Week 10 will be the final lecture/tutorial format. Weeks 11-13 will not have any formal lectures. Instead, we will be meeting for 2 hours in a seminar format. Here, your final research projects will be presented to the class, and subject to critique and feedback prior to final submission.

NOTE: you must be prepared to allocate 2hr seminar blocks to your timetable from weeks 11-13. Be sure to accommodate this at the start of the semester.

Lectures will introduce and discuss the materials covered each week [see **'Internal classes - Topic/Lecture' in Section 11 below**]. The lectures will do the work of placing all the materials in a larger framework, and draw on specific case studies to illustrate key conceptual points.

Tutorials: These will be used to develop points from lectures, to discuss and contextualise each week's reading, and to discuss media examples in relation to the various approaches and questions they raise. You are expected to attend all tutorials and participate in class discussions and activities.

Online tutorials/discussion: In weeks 5, 7 and 9 there will be no formal meeting on campus. These weeks are designed for you to become familiar with online list discussion and peer review of your research progress. More details about this are outlined in Section 7 on Assessment. Use this time to consult on campus or online with your tutor and peers about your major research project.

Topic questions: These are provided for each week's tutorial to indicate the areas of work that will be covered. You should use these in conjunction with the weekly readings and lectures to review points that have arisen in these. Use them also to identify areas that you need to have further clarified or developed, or that you wish to discuss, to think about how you might contribute to the seminar, and to work towards your assignments.

6. Semester program

Week & Topic No.	Beginning Monday	Topic/Lecture	Due Dates
Part 1			
1	22 July	Introduction: Net History & Practices	
2	29 July	Speculative Media Theory	
3	5 August	Net Politics and Tactical Media	
4	12 August	New Media Empirics	
5	19 August	no lecture/online tutorials & research	1 st online entry due
6	26 August	Processual Aesthetics	<i>Assignment 1 due 30 Aug</i>
Part 2			
7	2 Sept	no lecture/online tutorials & research	2 nd online entry due
8	9 Sept	The Virtual University?	
9	23 Sept	no lecture/online tutorials & research	Proposal due - online
10	30 Sept	Summary lecture and tutorials	
	30 Sept	VACATION WEEK	
11	7 Oct	Research presentations (2hrs)	
12	14 Oct	Research presentations (2hrs)	
13	21 Oct	Research presentations & evaluations (2hrs)	
			<i>Assignment 2 due 1 Nov</i>

7. Assessment

7.1 Introduction

There are three key pieces of assessment that need to be undertaken in this subject. All students are required to submit two essays and a third item of assessment, which consists of three pieces of online work (details below). **It is not possible to pass the subject unless all components of assessment are attempted.**

This does *not* mean you must pass all five tasks in order to pass overall. It means instead that you must at least submit both essays, and complete the three online tasks, before your final grade can be allocated. **You must pass at least 2 of the 3 assessments in order to pass this subject.**

Both essay tasks are designed to assess students' achievement of the more general objective number one. Beyond this, the first essay is designed specifically to assess students' achievement of objectives two and four. The major research essay is designed to assess students' achievement of objectives one through to four.

The online assessment is designed to assess students' achievement of objectives two and three (see Section 3.2 above).

7.2 Values/Due Dates

Task	Words	Value	Due Date
Essay 1	1500words	30%	30 th August
Online research & responses	500words <ul style="list-style-type: none"> • 1 x 100 • 1 x 100 • 1 x 300 	20%	Before beginning of weeks 6, 8 & 10 (i.e. submit any time during week 5, 7 & 9)
Essay 2	2500 words	50%	1 st November

7.3 Essay topics

Note: Please read and take into account Written Assessment Criteria (see Section 7.4 below) when preparing your assignments. Make sure you use non-sexist and non-racist language in all assignments.

Essay 1 (30% of total semester mark)

Select one of the topics from weeks 1-4 (i.e. net history, speculative media theory, net politics and tactical media, or new media empirics) and write an essay.

You may decide to use one of the weekly topic questions as the basis for your essay. Or you may decide to combine a number of questions. Use your initiative, and follow your interests.

1500 words

Online research and participation (20% of total semester mark)

In weeks 5, 7 and 9 you will be tabling your research findings on the mailing list set up for this subject. Each week you will have a specific task. Details are as follows:

Week 5 (1 x 100 words)

Post a 100 word commentary on a subject of your choice on the discussion list. Your posting should consist of a critically informed description of any internet mailing list you may have joined, a web site you may have encountered, a news service you may have subscribed to (detailing current developments in the “new economy”, for example), a policy document on ICTs, online gaming sites ... the list is pretty much endless.

Week 7 (1x 100 words)

Following the week 6 topic on Processual Aesthetics, problematise either your own posting from week 5, or one your peers, by posing a set of critical questions with regard to virtual communities/cultures or informational economies/societies. That is, ask a question about the ways in which particular objects of study and cultural practices are embedded in and conditioned by socio-political settings (i.e. institutional regimes and discursive frameworks).

Instead of assuming that online culture and communication is a universal experience or shared phenomenon, consider the kinds of material constraints (physical, technological, regulatory, cultural – gender, age, class, ethnicity) that constitute the multiple terrains of the internet.

Week 9 (1 x 300 words)

With the previous list postings in mind, post a short proposal of your major research project. Outline what you will study, the sort of critical interests/paradigms in which your study is situated, and pose a critical question that your project will address.

Note: your contribution to and participation in the online mailing list for this subject is not limited to the above assessment requirements. You should see this mailing list as resource that can be used any time throughout the semester.

[continued from previous page] We strongly encourage you to make postings in addition to the tasks outlined above. Consider this space as your online community that can offer valuable feedback along with postings about useful sites, news items, commentaries and so forth. Rather than just cut and paste information and send it to the list, we recommend that you introduce findings on the net with a commentary.

Note also: this mailing list is unmoderated. This said, postings that are sexist, racist or overly offensive will not be tolerated. “Spam” or “flaming” is also unacceptable. While every mailing list has its own peculiarities, just as with any institution, there is an expectation of respectful exchange. These guides to “netiquette” do not prevent you from being provocative!

FINALLY: you must print out the 3 pieces of assessment detailed above and submit them to your tutor by the due dates. If you do not have a print out submitted by the due date, you will incur penalties for late submission.

Essay 2 (50% of total semester mark)

Based on the 300 word proposal submitted online, develop your study of net culture and/or informational societies into an essay. Your essay also needs to include a literature review. Your essay must reflect critically upon the limits and possibilities of online research and participation.

You should discuss at least one online media case study in detail, and it must be a current (2002) case study. Please attach any online media examples to your essay (e.g. sites you analyse, web pages of mailing lists, etc).

Ensure that your essay is appropriately referenced. (Harvard or MLA in-text and bibliography. Do **NOT** use footnotes to reference.)

Note: Prior to submitting the final version of your major research essay you will be expected to present your research in progress in one of the 2 hour seminars that run from weeks 11-13. It is mandatory that you present your project prior to submission. See this time as valuable feedback on your work. Further discussion of projects can continue on the mailing list, where you might like to post a draft of your paper for comment by peers.

2500 words

7.4 Written assessment criteria

Assessment of written work will take into account the following:

- relevance to the set topic
- an understanding of the general perspectives of the subject
- evidence of familiarity with the texts discussed
- logical planning and sequence of argument
- clarity of expression
- apt use of quotation

- proper acknowledgment and documentation of materials drawn on in the preparation of the assignment, use of a bibliographic convention
- coherence of overall presentation.

7.5 Assignment presentation

Written work should be typed, and should be double spaced with wide margins on all sides, of at least 1.5”, or 4.0cm.

Feedback on your work will help you improve your knowledge of the concepts and arguments used in the subject, as well as your skills in writing and referencing. Academic staff undertake to provide you with appropriate comments on your reports and essays, but this requires consideration on your part. Double spacing and adequate margins will help markers read your work quickly, and place helpful comments in the margins.

Your assignments should include the following components:

1. a cover sheet, showing the due date, your name and student number, the title of the assignment, and the number of words written;
2. the numbered pages of your assignment;
3. a list of references.

7.6 Where to get additional help

The Language and Learning Services unit (LLS) at Berwick assists students to improve the quality of their academic English and their approaches to study.

What does LLS offer?

Courses and Workshops are offered at different times in the academic year. Topics include strategies for study, report writing, essay writing, understanding lectures, speaking in tutorials and oral presentations. Classes linked to particular subjects are also offered. A number of programs are designed specifically for students whose first language is not English. Class times are available on the LLS website or on the LLS noticeboard outside Room 104.

Individual sessions are available for students who would like to work intensively on an aspect of their English expression or their approaches to study. *Appointments should be made at least one week in advance.*

Drop-in sessions are held during semester. An appointment is not required for these sessions. They are designed to provide brief answers to assignment related problems. Information on session times is available on the LLS noticeboard.

Resources for students are available. LLS at Berwick has a **Student Resource Collection** especially selected for Berwick students. You are welcome to visit and browse through our collection. There are many books, audio and video tapes that may help you develop your tertiary academic skills. LLS also has an **On-line Student Resource Centre** which contains on-line student tutorials and resources that can be accessed from home. <http://www.monash.edu.au/online.html>

For further assistance in developing your study skills and improving your English expression contact:

Giselle Kett

Room 104

Berwick Campus

Phone: 9904 7113

Email: giselle.kett@celts.monash.edu.au

Available on Tuesdays and Wednesdays during semester 2, 2002

Other campuses: Caulfield: 9903 2507

Clayton: 9905 9181

8. Attendance and participation

Oral communication contribution

Tutorial attendance and participation is compulsory for all students. Students who miss more than three tutorials without explanation will automatically lose 10 marks from their final grade (**i.e you do not get marks for attendance and participation, BUT you can lose marks!**).

Make sure you let your tutor know reasons for any non-attendance. Attendance and participation is mandatory.

Assessment of oral contribution in seminars will take into account the following:

- (a) *regular* contributions to seminar discussion;
- (b) *evidence of reading* in seminar contributions;
- (c) *appropriateness* of questions and comments to seminar work – contributions do not have to be “correct”, but we do expect all students to attempt to discuss connections between lecture, seminar and reading materials.

9. School of Political and Social Inquiry (PSI) assessment policy

The following summary of PSI assessment policies are based on relevant decisions made by the School. Make sure you read them thoroughly. If you wish to consult a full copy of the School’s Assessment Policy, you can do so at the School Office.

9.1 Attempting all items of assessment

In order to pass this subject you *must attempt* all items of assessment, but *you do not have to pass all listed items*. However, *you must pass at least 2 out of 3 pieces of assessment*. If you do not submit any individual item, you will normally be given a Fail grade (N) at the end of the semester. Your

lecturer/tutor may invite you to resubmit a failed assignment at the end of the semester.

9.2 General assessment criteria

Marks will be allocated to each assignment, using the grading system outlined in Section 9.5 below, before being returned to you. Those marks will then be added together at the end of the Semester in determining your final grade.

In assessing written work markers will ask themselves the following questions:

- has the student understood and responded to the topic/question?
- has the student read and understood essential readings?
- has the student constructed a logical argument?
- are key terms and concepts used accurately?
- does the student write clearly?
- is the paper presented in the required format?
- has the student researched beyond the essential readings, where necessary?
- has the student observed correct referencing practice?

It is the responsibility of all students to ensure their work is submitted to arrive at the University by the due date stated in the Unit Guide/Handbook, or if an extension has been granted on the agreed date. *Marks for lateness will be deducted.*

9.3 Submission of assignments

You should always keep a copy of your work, in case of lost assignments or disputes over grading. Essays do, regrettably, sometimes go missing. Make sure you keep a backup file on disc, *and* a paper copy.

The due date for assignments is clearly specified in Section 7 above. You may incur penalties (see Section 9.6) if your work is submitted late or if work has been plagiarised (see Section 9.12 & 9.13).

In cases where there is no record of receipt students will usually be asked to submit a copy of the original assignment. This is extremely difficult if you have not kept a copy and have destroyed your rough notes or computer files.

9.4 Requesting assignment extensions

To request an extension you must apply to the relevant Subject Adviser *prior to the assignment due date*. The date to which the assignment has been extended then becomes the new due date.

Contact individual tutors in order to obtain an extension. Extensions are not normally granted on the basis of work commitments, holidays or poor organisation. Illness or personal trauma may be grounds for an extension. If you are given an extension ensure that your tutor signs and dates the appropriate section of the Arts Faculty cover sheet and attach it to your essay in order not to receive late penalties.

You must apply for an extension *in writing*. You will receive a copy of the extension slip, to attach to your essay. Off campus students should attach a note

to their assignment, explaining the details of the extension. The Subject Adviser will keep a list of extensions, and check them as they arrive.

If you request a lengthy extension, a copy of the details may be placed on your student record, held in Student Administration.

Special Consideration

Students can apply for 'special consideration' if they feel that over the course of the semester their study has been affected by events beyond their control. Special consideration can be awarded on the basis of illness, personal bereavement, personal or financial difficulties, and must be documented with a medical certificate. Work commitments will not be considered.

An application form is available from Julie Marriott, Faculty of Arts Administration Officer, Berwick. The full detail of current policies is available through the Monash University website.

There is no obligation on the student to divulge potentially distressing details of difficulties to tutors, but it is essential that students inform tutors of their inability to submit an assessment task by the due date.

9.5 Grading of assignments

Assignments will be graded using the following categories:

HD	High Distinction	80-100%
D	Distinction	70-79%
C	Credit	60-69%
P	Pass	50-59%
N	Fail	0-49%

9.6 Penalties for late submission

Penalties are levied on late assignments in order to ensure prompt turnaround on marking loads. Sometimes student papers may be sent out to contract markers, with tight working deadlines. The following penalties will be incurred, where assignments are lodged after the due date:

1. Essays submitted up to **two business days** late will receive a 5% penalty.
2. Essays submitted between **three and five business days** late will receive a 10% penalty.
3. Essays submitted between **six and ten business days** late will be marked on a pass or fail basis only with no comments. The maximum mark available will be 50% on such pieces.
4. Essays submitted **more than ten business days** past the due submission date will not be accepted and the student will be given a 0% mark for the essay.

Note: These regulations do not include documented special consideration cases.

9.7 Double marking

Where a marker has given either a Fail (N) or High Distinction (HD) grade for an assignment, the paper will be double marked before a final grade is allocated.

9.8 Resubmission of failed assignments

If you receive a fail grade for the Essay (i.e. less than 50%), and if your essay was submitted on or before the due date, you may be offered the chance of editing and resubmitting your essay at the end of semester. **This does not apply to any other assignment.** An offer to resubmit will be clearly indicated on the marking sheet attached to your essay, and you will be given a due date by which you must return the essay for final marking.

Note that the maximum grade you can achieve in this case will be a Pass.

9.9 Clarification of disputed assignment grades

If you feel that your paper has received a mark that is unjustified, you may request a remark. In this case, the following procedures will apply:

- Speak directly to your Subject Adviser about your concerns, and try to have them resolved – you may not be aware of all relevant assessment criteria.
- If you then wish to have your paper remarked you must provide the Subject Adviser with the original paper, plus a clean copy of your work for a second assessment, and a written statement outlining why you feel the grade is unjustified in relation to the relevant assessment criteria.
- The new mark will be the final mark, even if it is lower than the original.
- If you are still not satisfied, you may appeal *in writing* to Dr. Jenny Hocking, Head of the National Centre for Australian Studies, again providing a clean copy of the assignment.

9.10 Confirmation of final grades

At the end of each semester a meeting of the School's Board of Examiners will confirm all final grades, except for withheld (WH) grades, which are used when a final mark/grade has not been determined.

9.11 Appeals against final grades

If you wish to appeal against your final grade you must refer to the relevant sections of the Monash University Academic regulations and the Faculty of Arts Handbook. The following notes outline the procedures applied in the School of Political and Social Inquiry, and should be read in conjunction with the above publications:

1. The student should discuss the grade with the Subject Adviser.
2. After discussions with the Subject Adviser involved, an appeal may be lodged in writing with the Head of the relevant Section, who must consider the case and advise the student of the outcome in writing within

14 days of receiving the written appeal. The student must also be advised of the further steps of the appeal.

3. The final decision of School may only be appealed through Faculty structures – normally the Faculty Grievance Committee and, ultimately, the Dean of the Faculty of Arts.

9.12 Plagiarism statement

The submission of essays, assignments and homework is an essential part of the learning process and a vital way by which we can assess your understanding of a subject. The submitted work must therefore be *your own work*. This does not mean that you may not make use of the work of others. However, when you quote or paraphrase material from other sources, *you must acknowledge your sources in full*. You may seek the help of your tutor in preparing the piece of work and might enlist the help of fellow students in sorting out your ideas but *the final product must be written by you in your own words*.

Plagiarism occurs when students fail to acknowledge that ideas have been borrowed. Specifically, it occurs when:

- (a) phrases and passages are used verbatim without quotation marks and without a reference to the author;
- (b) an author's work is paraphrased and presented without a reference;
- (c) other students' work is copied;
- (d) items of assessment are written in conjunction with other students (without prior permission of the relevant staff member);
- (e) a piece of work has already been submitted for assessment in another course.

Plagiarism is an attempt to obtain undeserved academic advantage. Students suspected of plagiarism will be required to explain the circumstances of their plagiarism to the Subject Adviser/s. At this meeting both the student and the staff member are entitled to be accompanied by a support person. On the basis of this meeting if the Subject adviser believes plagiarism has occurred, he or she shall disallow the work submitted by not giving it a grade, or may refer the matter to the dean of the Arts Faculty who will refer it to a committee of enquiry. In cases of deliberate plagiarism, the Subject Adviser will notify the Head of Section and the Head of School. Cases of deliberate plagiarism must be reported to the Dean in accordance with Faculty Policy. Serious or repeated cases may be reported to the University discipline committee.

University policy on plagiarism and other forms of cheating are outlined in Part II of Statute 4.1 of the Statutes of the University (*Monash University Calendar 1990*, Vol. II, pp. 5/24-50). If you are at all uncertain about what is required consult your tutor.

The following hints will help you avoid plagiarism:

- Take accurate notes. Distinguish in your notes between your own ideas and the ideas of other writers.
- In your notes, as well as essays, place quotation marks around *all* material that is copied out directly and note the source.
- Reference any idea that is not yours even if it is paraphrased or summarised and does not appear in quotation marks.
- Even when receiving advice from fellow students, formulate the final product by yourself.

9.13 Penalties for plagiarism

Subject Advisers are responsible for taking appropriate action on cases of plagiarism. If plagiarism occurs during a student's first semester of study but is deemed unintentional, it is recommended that a written warning be issued reiterating the definition of plagiarism, its unacceptability, and making reference to Statute 4.1 outlining the procedures and penalties that can apply in cases of plagiarism. This letter should also provide information on where a student can get assistance with referencing if necessary. A copy of this letter should be placed on the student's file.

The above procedure may also apply in subsequent semesters when it is deemed that plagiarism was not intentional.

It should be noted that a warning letter is not considered formally as a first instance of plagiarism, but may be used as a guide for staff in determining whether subsequent instances of plagiarism are intentional or unintentional.

If plagiarism is suspected to be intentional and occurs during the student's first semester of study or at any stage following his/her first semester of study, the Subject Adviser must follow the procedures outlined under Statute 4.1. A meeting should be arranged between the Subject Adviser and the Student to discuss the suspected plagiarism. On the basis of this meeting, the Subject Adviser shall:

- (a) disallow the work submitted by not giving it a grade and report this action in writing to the Dean of Arts Faculty (and the Head of School for information only)

OR

- (b) refer the matter to the Dean of the Arts Faculty, who shall refer the matter to a committee of enquiry.

Where the work has been disallowed under (a) above, the student may request the Dean of the Arts Faculty to refer the matter to a committee of enquiry. If the committee of enquiry finds that the student has no case to answer, the Subject Adviser will be instructed to assess the piece of work concerned.

If the committee of enquiry finds that plagiarism has occurred, a penalty may be applied or the matter may be referred to the University Discipline Committee.

10. Lodgement of assignments

Students should submit assignments with the appropriate cover sheet at the designated location. Ask your subject adviser or tutor if you are uncertain about where the essay box is located.

NB: The deadline for submitting assignments is 5.00 pm on the due date for submission.

11. Weekly readings, topic overviews and questions

11.1 Introduction: Net History & Practices (Week 1)

Overview

This topic describes some of the essential themes and concepts you will encounter throughout this subject. The rapid development and multiple uses and construction of the net which currently exist often mask the fact that (a) the internet has a very specific history located within recognisable material frameworks and (b) there remain competing and multiple constructions of net culture at the level of both discursive and material forms which will shape its future development.

Topic one presents a brief history of the internet, not merely for its own sake, but rather to pose questions such as: what were the material conditions of possibility for online communications? What cultural desires/anxieties are reflected in, and help shape, the cultural constructions of the internet? We will briefly explore the ways the net can be discussed through reference to various themes such as politics, economics, identity, art and so on. A key point to register is that online communication is not an entirely new or profound shift from past social and cultural frameworks – rather, it extends some aspects of those frameworks, while marginalising and displacing others.

Learning objectives

By the end of this topic you should:

- be aware of the history of the internet and digital technologies;
- be able to make parallels between the development of the net and other communications industries – such as the cinema, TV, radio and print;
- begin to recognise competing discourses and cultural constructions of new media terrains;
- begin to think about the relationship between the net and other spaces, such as politics, economics, art, etc.

Readings

1. Editors, 'Listing Media in Transition', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), iv-vii.
2. Chesher, Chris. 'What is New Media Research?', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 227-232.

3. Chesher, Chris, 'Why the Digital Computer is Dead', *CTheory* a106 (2002). Available from http://www.ctheory.net/text_file.asp?pick=334
4. Castells, Manuel. 'Lessons from the History of the Internet', in *The Internet Galaxy: Reflections on the Internet, Business and Society* (Oxford: Oxford University Press, 2001), 9-35.

Further reading

5. Silverstone, Roger. 'What's New About New Media?', *New Media & Society* 1.1 (1999), 10-82. [themed section with various contributions] Available through library databases: <http://library.monash.edu.au>
6. Ceruzzi, Paul. *A History of Modern Computing* (Cambridge, Mass.: MIT Press, 1998).
7. Bardin, Thierry. *Bootstrapping: Douglas Engelbart, Coevolution, and the Origins of Personal Computing* (Stanford, Cal.: Stanford University Press, 2000).
8. Sterling, Bruce. 'Short History of the Internet', *The Magazine of Fantasy and Science Fiction* (February, 1993), <http://www.forthnet.gr/forthnet/isoc/short.history.of.internet>

Sites

Archive of websites, <http://www.archive.org/index.html>

EncyclopediaBritannica,

<http://search.eb.com/eb/article?eu=1460&tocid=218352&query=internet>

Hobbes' Internet Timeline, <http://www.zakon.org/robert/internet/timeline/>

Questions to consider

1. How are new media technologies different from other media and communications technologies?
2. What material conditions led to the desire for virtual identities and online existence?
3. How has the constitution and cultural construction of the internet changed in the last decade?

Online task

- Take one of the readings for this week and identify different discourses concerning the net. Given that discourses function to describe and delimit what can be said and done, consider the following: what do these discourses presume, what processes, histories, and subjects do they privilege? What/whom do they marginalise?

11.2 Speculative Media Theory (Week 2)

Overview: techno-utopians, dystopians and the challenge of speculative media theory

The digitalisation of cultural and economic flows that attends the internet intensify a process of communication that began in the mid to late nineteenth century with the advent of telegraphy, with telephony following close on its heels. At the close of the nineteenth century, colonial empires consolidated their territorial and imaginary rule via the electrification of space. And with the electrification of communication, there has been a radical shift in the organisation of the social, cultural, economic and political dimensions of life.

This is a process whereby the ‘space of place’ shifts to the ‘space of flows’ (Castells, 1996). Flows of communication that were once restricted by the contingencies of place, become in the emergent network society electronically decoupled, or disembedded, or deterritorialised from places. Yet most importantly, they are always necessarily re-embedded or reterritorialised, more often than not in socio-political and institutional settings. These transformations impact upon the ways in which society defines itself, with communities being reconfigured beyond or alongside the traditional geographic limitations of place and the modern space of the nation-state.

This shift has also been noted by Castells and many others as one in which manufacturing economies characteristic of the industrial age subside to informational economies that characterise network societies. This paradigm shift is made possible by a combination of economic, social, political and technological forces. It’s important to remember that this transformation, as with any societal transformation, is dependent on the intertwining effects of all of these forces, and cannot be reduced to any single agent.

That is, the world of the electronic network does not reside exclusively in some kind of virtual space; it is also part of a thoroughly material and sociotechnical system. It can’t exist without support services in the form of food catering, urban infrastructure, technical staff, creative personnel, in fact all of the social infrastructure that we associate with the contemporary city in advanced economies. Political economist and urban theorist Saskia Sassen writes about this in her excellent book *The Global City* (1991).

As Castells writes in his recent book *The Internet Galaxy: Reflections on the Internet, Business and Society*, ‘In the last quarter of the twentieth century, three independent processes came together, ushering in a new social structure predominantly based on networks’:

... the needs of the economy for management flexibility and the globalization of global capital, production and trade; the demands of society in which the values of individual freedom and open communication became paramount; and the extraordinary advances in computing and telecommunications made possible by the micro-electronics revolution. (Castells, 2001: 2)

The combined effects of these processes has led some critics to see the internet in utopian terms whereby potential access to and engagement with an

informational public sphere is taken as a universal condition since the internet eclipses the broadcast model of communications media, which functions through a single point or producer transmitting messages to many; instead, the internet enables interactive communication of many-to-many at a global scale. Communication occurs from one-to-one and one-to-many, as seen for instance with email, listserves, Internet Relay Chats (IRCs), and USENET news groups. It's these sort of multiple possibilities of communication that distinguish the internet from the older broadcast technologies.

Furthermore, the digitalisation of information means that immaterial informational products remain undiminished at the level of properties irrespective of the frequency with which they are reproduced and distributed. (Intellectual property regimes function to ensure that a regime of scarcity is imposed upon digitalised information. In so doing, an exchange value is able to be placed on what is otherwise digital code.) This is in marked contrast to the age of analogue technologies of mechanical reproduction whereby a limited number of copies could be made before degradation sets in. Think of what happens when you make a reprint of a photograph or duplicate of a magnetic audio or video tape: with each copy, the quality of the recording gets worse. Whereas when information is digitally encoded as zeros and ones, the quality of the copy remains identical to that of the original. This has led to the often repeated mantra that "information wants to be free", since its reproduction has no limit, at least in technical terms.

Techno-utopians

The techno-utopians or techno-libertarians see this technical feature of the internet as the penultimate embodiment of democracy at work.

The utopian discourse of techno-libertarians is frequently referred to as the "Californian ideology", which in turn is a reference to residual hippy culture that characterised those who worked in computer programming at the University of California, Berkeley where much work was done developing the internet from its origins in the 1960s within the military-industrial complex as ARPANET. Remember also that this was a time of new social movements such as feminism and environmentalism; protests against the US involvement in the Vietnam war were also going on. One of the most prominent spokespeople of hacker culture is John Perry Barlow, former lyricist of the Grateful Dead rock band. There's a reminder of the importance of history there.

It's useful to contextualise the techno-libertarian position in such a way because we can see why the libertarians maintain their distrust of government, and support the freedom of expression of the individual. That the internet is a horizontal, non-hierarchical and decentralised system of communication adds further weight to the libertarian position. And as it happens, such a position articulates fairly neatly with principles of neoliberalism, which favour the deregulation of industries and privatisation of public institutions, all the while valorising the so-called sovereignty of the consumer.

Techno-dystopians

In contrast to the techno-libertarian view of the internet, we find a decidedly more dystopian position which, unsurprisingly, sees the internet in more gloomy, pessimistic terms. At the extreme end, the dystopian view blames the internet as responsible for further alienating and abstracting people from society, for undermining the values and authority of tradition, and for fragmenting what are assumed to be otherwise coherent, tension-free communities.

In this respect, the dystopian position also adopts a technological determinist view of communication, yet it's pretty much directly opposed to the liberatory discourses of techno-utopians.

At a more sophisticated level, the dystopian view sees the advent of the net as symptomatic of larger, global forces which have undermined the authority of the nation-state and reconstituted citizens as consumers and functionaries within informational economies. The internet is seen as encroaching upon the civil liberties and privacy of citizens, encasing us further within the sinister web of control society through techniques of surveillance.

Manuel Castells captures the dominant position of both techno-libertarians and dystopian proponents of virtual communities when he writes that 'exclusion from these networks is one of the most damaging forms of exclusion in our economy and our culture' (2001: 3). This exclusion is often referred to in terms of the "digital divide", or information rich and information poor. Castells transcends these distinctions, and presents us with a call to arms: 'Neither utopia or dystopia, the internet is the expression of ourselves – through a specific code of communication, which we must understand if we want to change our reality' (2001: 6).

Speculative Media Theory

Speculative media theory can be considered a third alternative to techno-utopian and dystopian views of the net. Speculative theory is interested in the possibilities of net practice at all sorts of levels: theory, hactivism, policy formation, open source programming and distribution, design, netart, community formation, etc. Indeed, a speculative media theory of and for the net might be so ambitious as to try and accommodate all these diverse and more often than not incommensurable projects. And why not? Let's leave the reduction of what can be said and done to the boundary police. The borders of the net undergo constant reformation, and even amidst the current intense commercialisation of the net, there are still open spaces that enable radical projects. As Geert Lovink notes in Reading 4, 'If you have the impulse to do something you have to stop deconstructing yourself. Just do it, as the Nike slogan states. Hit and run. See how authorities and their sign systems respond. Trial and error'.

Now, there might seem to be a residue of techno-utopianism, or what is often referred to as the "Californian ideology", in this statement by Lovink. And that's ok. More to the point, Lovink is suggesting that we work within hegemonic orders (how can we ever think we are outside them anyway?), and

manipulate them for they're worth. Speculative media theory is sensitive to the historical formation of net discourses and practices, and it doesn't shy from recuperating or appropriating the positive dimensions of that which has preceded it. Speculative media theory steals conceptual and technological tools, and puts them to work.

If there's a shared concern across the dispersed, often unconnected projects of speculative media theory, then it is based upon a notion of a digital commons. As Lovink states:

I have always been willing to take the risk of promoting digital ideas, knowing that, at the end of the day, they would be perverted, not just to third parties, but also by classic infightings within the alternative ghettos. Increasingly, the media-cultural complex needs new ideas, just to feed itself ... In the case of demand for public access to information and communication networks it is a broad and diverse media culture which counts, in the end ... If the gift economy gets corrupted, move on. If everyone has Internet and the revolution still hasn't arrived, too bad. Change stage. The idea of a Digital Commons is still there, despite IBM and HP buying themselves into the open source movement. <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0110/msg00044.html>

As Lovink suggests, speculative theory has a sense of an enemy: it is finely tuned to the ways in which the net is being closed down in its current phase of commercialisation, which sees Intellectual Property Regimes (IPRs), coupled with techniques of control such as authentication passwords, "cookies", and server protocols, as manifestations of corporate power that seeks to restrict both access to the net through a user-pays system and the mobility of information.

Speculative media theory is unrelenting in its critique of forces which seek to restrict access to the net. Speculative media theory is attentive to the material dimensions of the net: both the technical infrastructure which shapes communicative forms, and the socio-political settings or institutions within which both technologies and users are embedded. Finally, speculative media theory is experimental. It seeks to reinvent what can be said and done, and it takes no hostages for security – only makes use of them for the purpose of remaking civil societies.

Learning objectives

By the end of this topic you should:

- understand and be aware of the limits of utopian and dystopian constructions of new media terrains;
- be able to envisage the possibilities of speculative media theory as an alternative means of coming to terms with new media.

Readings

1. Wark, McKenzie, 'Abstraction', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 3-7.
2. Munster, Anna. 'Net Affects: Responding to Shock on Internet Time', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 9-17.
3. Lovink, Geert, 'Closed Networks in an Open Society (plus interview)', posting to nettime mailing list, 01/07/00. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0007/msg00003.html>
4. Snafu and Subjesus, 'An Interview with Geert Lovink', posting to nettime mailing list 5/10/01. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0110/msg00044.html>

Further Reading

5. Virilio, Paul. 'Speed and Information: Cyberspace Alarm!', *CTheory* a030 (1995). Available from: http://www.ctheory.net/text_file.asp?pick=72
6. Lovink, Geert. 'Essay on Speculative Media Theory (1996)', in *Dark Fiber: Tracking Critical Internet Culture* (Cambridge, MA: MIT Press, 2002), 22-29.

Sites

Electronic Frontiers Australia, <http://www.efa.org.au/>

Indymedia, <http://www.indymedia.org>

Nettime, <http://www.nettime.org>

Openflows, <http://openflows.org>

Questions to consider

1. To what extent can the utopian/dystopian constructions of online communications and communities be discounted?
2. What are some of the political motivations behind speculative theory?
3. Is speculative media theory too idealistic? What possible methodologies might be suggested as alternatives?

Online tasks

- Join a chatgroup or a mailing list. Keep a record of your encounters for several days. Describe how you participate in online communities, and whether it differs from other spaces.

11.3 Net Politics and Tactical Media (Week 3)

Overview: politics, democracy, public sphere, civil society, open source movements

The relationship between the internet and politics is an extraordinarily complex one, which this subject can only begin to address. This topic aims to give you an insight into the types of politics which can unfold within and alongside the spaces of the internet. The political forms or actions can take place on a number of different levels. On one level there is the relationship of the internet to more traditional political issues such as democracy. Questions such as whether the internet is itself democratic, or whether the internet enables a more direct and more effective form of interchange which enhances currently existing forms of democracy constantly arise. Whether the internet is able to contribute towards a more global civil society, or whether such a society is even desirable, will be considered here. Perhaps the notion of multiple, contesting, uneven civil *societies* is more apt here.

On another level, the capacity of the internet to rapidly transmit vast quantities of information reconstitutes the nature of traditional political struggles. Whether it be the generation of more widespread and mobile political formations through the dissemination of information and the garnering of support from a distance (as in the case of the Zapatistas or aspects of the anti-globalisation movement), or the more subversive process of “hacking” the sites of political opponents or institutions, the internet has redefined the nature of contemporary political action.

Techno-libertarians are often participants in “open source” movements, particularly those hackers involved in software development, which depends on the collective intelligence of and labour upon a source distributed through computer networks in order to refine and improve upon the source code of a particular software program (see Stalder; Fibreculture; Nettime; Open Flows). One key and surprising aspect often overlooked in techno-libertarian tracts on open source distribution concerns the way in which the cultural technology of the net – its capacity to distribute and share information within a gift economy – is assumed to correspond to universal access and the maintenance of a democratic civil society.

That is, the problematic of cultural capital and the necessary institutional supports that endow actors with the requisite cultural knowledge and skills to access information is rarely, if ever, taken into consideration. As nice as it might sound, not all culture should be open. Nor is it. In times of crisis, some culture needs to be protected. And culture is not open, irrespective of open source principles, precisely because individuals and communities hold varying and often inalienable degrees of cultural capital.

It is also important to consider what kinds of subjects are generated through abstract encounters in virtual spaces. What relation do these encounters have to more traditional notions of identity, whether it be race, class or gender? To what extent does the capacity to transcend one’s more concrete physical and social limitations empower the individual at the expense of the social?

Learning objectives

- be able to understand the multifaceted ways political questions can be thought of in relation to the internet;
- understand the potential of the internet to enable/limit democracy and/or civil society;
- consider the capacity of the internet for political action such as hacking or political organisation;
- gain an understanding of the debates concerning what types of political subjects and relationships are enabled through the internet;
- consider the relationship of virtual spaces to global, civic and private spaces.

Readings

1. Rossiter, Ned. 'Networks, Postnationalism and Agonistic Democracy', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 47-57.
2. Redden, Guy. 'Grassroots and Digital Branches in the Age of Transversal Politics', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 61-68.
3. Broeckman, Andreas. 'David Garcia and Geert Lovink: the GHI of Tactical Media [interview]', posting to nettime mailing list, 15/08/01. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0108/msg00060.html>
4. Stalder, Felix and Hirsch, Jesse. 'Open Source Intelligence', *First Monday* 7.6 (2002). Available from: http://firstmonday.org/issues/issue7_6/stalder/index.html
5. Armitage, John. 'Resisting the Neoliberal Discourse of Technology: The Politics of Cyberculture in the Age of the Virtual Class', *CTheory* a068 (1999). Available from: <http://www.ctheory.com/article/a068.html>
6. Sassen, Saskia. 'A New Geography of Power?', 1999. Available from: <http://www.contrast.org/borders/camp/index99.html>

Further reading

7. Hyde, Gene. 'Independent Media Centers: Cyber-Subversion and the Alternative Press', *First Monday* 7.4 (2002). Available from: http://www.firstmonday.org/issues/issue7_4/hyde/
8. Cooper, Simon, 'Plenitude and Alienation: The Subject of Virtual Reality', in David Holmes (ed.), *Virtual Politics: Identity and Community in Cyberspace* (London: Sage, 1997), 93-106.
9. Fusco, Coco. 'The Unbearable Weightiness of Beings: Art in Mexico after NAFTA', posting to nettime mailing list [title: 'The US-Mexico Border'], 02/09/01. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0109/msg00014.html>

10. Feenberg, Andrew. 'Escaping the Iron Cage, or, Subversive Rationalization and Democratic Theory', in R. Schomberg (ed.), *Democratising Technology: Ethics, Risk, and Public Debate* (Tilburg: International Centre for Human and Public Affairs, 1998). Available from: <http://www-rohan.sdsu.edu/faculty/feenberg/schom1.htm>

Sites

Indymedia, <http://www.indymedia.org>

Online Opinion, <http://www.onlineopinion.com.au/>

No Border, <http://noborder.org/>

Catalyst (community activist technology), <http://cat.org.au>

Martin Shaw, <http://www.martinshaw.org/>

Electronic Disturbance Theatre – Electronic Civil Disobedience,
<http://www.thing.net/~rdom/ecd/ecd.html>

Questions to consider

1. How should we understand virtual spaces in relation to other spaces?
2. What are the uses/limits of the internet in terms of politics? Consider how social movements have made use of the internet and email as a technique for organising political activities.
3. Has the internet caused us to rethink the nature of politics itself?

Online task

- Briefly research a case where the internet has been used to organise/promote a particular group or social movement. Discuss in relation to the readings. Alternatively, find an example of “hacking” and discuss. Was the hacking effective? What were the consequences?

11.4 New Media Empirics (Week 4)

Overview

Over the past few years, one is increasingly able to detect the emergence of empirical approaches to the study of new media as the current dominant paradigm. An empirics of new media describes the various forms, objects, experiences and artworks that constitute new media. The empirical desire to fix all that is virtual into concrete is coextensive with a certain weariness, boredom or distrust of the excesses of “postmodern theory” that came to characterise much work going on in media and cultural studies and contemporary art during the 80s and 90s. Work carried out in sociology, international relations, and architecture has also taken this empirical turn.

These fields all share a desire to ground their objects of study, to retrieve them from the ravages of “speculative theory”, and in so doing, perhaps begin a process of reconstructing disciplinary identities. Arguably, all of this coincides with the perceived displacement of national and local communities wrought by communications media such as satellite TV, the Internet, and the mobile phone. Very real displacement across social scales accompanies the structural transformations of national and regional economies in a post-Soviet era in which populations have become increasingly mobile at transnational levels as professional or unskilled labour, as refugees, or as tourists.

It is the task of empirical studies to describe and analyse these various transformations, yet to delimit such work to the scholastic mode of production is to overlook the ways in which such research corroborates the interests of capital which, in the corporatisation of universities, finds the current empirical paradigm as the new frontier of rationalisation. Researchers, or information workers, in many instances are providing data analysis that has commercial applications in ascertaining consumer habits and, in the case of new media studies, there is the attempt to foreclose the myriad ways in which users engage with media forms and content. It’s all quite desperate. And it’s all related to a quest to capture markets.

The key problem of an empirics of new media aesthetics resides in its failure, in a number of instances, to understand that the aesthetics of artworks, software applications and technologies are conditioned by social relations as well as the theoretical paradigms through which analysis proceeds. Technology, as understood by Raymond Williams, is found in the processual dimension of articulation, where the media is but one contingent element that undergoes transformation upon every re-articulation.

This presents a challenge to the empirical turn in net studies, which seeks in vain to pin down a terrain that is made historically redundant prior to birth. Empirical approaches to the net, if nothing else, need to work in a reflexive mode that is constantly aware of the conditions attached to funded research, to critique them, to describe the institutional cultures that shape the emergent third paradigm of net studies, and to see the seemingly secure ground of any empirical moment as something which is always interpenetrating with something else.

This topic seeks to introduce empirical research on the internet, and follow this up with a critique of the empirical mode by considering the institutional desires and regimes of practice that condition the types and methods of research undertaken on new ICTs at the current conjuncture within informational societies.

Learning objectives

- to understand what we mean by empirical research;
- be able to be to discuss the uses and dilemmas posed by empirical research;
- to begin developing a critique of empirical research.

Readings

1. Flew, Terry. 'The "New Empirics" in Internet Studies and Comparative Internet Policy', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 105-113.
2. DiMaggio, Paul; Hargittai, Eszter; Neuman, W. Russell; Robinson, John P. 'Social Implications of the Internet', *Annual Review of Sociology* 27 (2001): 307-36. Available from: <http://soc.annualreviews.org/cgi/content/full/27/1/307>
3. Stallabrass, Julian. 'Digital Commons', *New Left Review* 15 (May-June, 2002): 141-146. Available from: <http://www.newleftreview.net/NLR24907.shtml>
4. Slater, Don and Tacchi, Jo. 'Modernity Under Construction: Comparative Ethnographies of Internet', The 2nd Social Study of IT workshop at the LSE, ICT and Globalization, 22-23 April, 2002. Available from: <http://is.lse.ac.uk/events/ssit2/slater.pdf>
5. Sassen, Saskia. 'Digitization: Its Variability as a Variable in the Reshaping of Cross-Border Relations', The 2nd Social Study of IT workshop at the LSE, ICT and Globalization, 22-23 April, 2002. Available from: <http://is.lse.ac.uk/events/ssit2/sassen.pdf>

Further readings

6. Janke, Terri. *Our Culture, Our Future: Report on Australian Indigenous Cultural and Intellectual Property Rights* (Surry Hills: Michael Frankel and Co., 1998). Also available at: <http://icjp.lawnet.com.au/frontpage.html>
7. Schram, Sanford F. and Daniels, R. Scott. "'Poor" Statistical Accounting: Welfare Policy Research in Cyberspace and Public Sphere', *Theory & Event* 2.2 (1998). Available from http://muse.jhu.edu/journals/theory_and_event/v002/2.2schram.html

Sites

Communications Law Centre, <http://www.comslaw.org.au/>

CyberAtlas: Internet Statistics, <http://cyberatlas.internet.com/>

Uniform Domain-Name Dispute Resolution Policy (UDRP) of the Internet Corporation for Assigned Names and Numbers (ICANN), <http://www.udrpinfo.com/>

Questions to consider

1. What might be the contexts and discourses which motivate the desire to understand the internet empirically?
2. What are the benefits of empirical research?
3. What are the limits of empirical research?
4. Compare the debate over new media empirics to other debates that have previously occurred in relation to media forms and technologies (such as TV or radio).

Online task

- Find a site that is devoted to empirical studies of internet cultures. What sort of information is tabled?; what disclosure, if any, of research funding/sponsors is made?; what sort of critical framework, if any, is deployed?; what kind of institutional interests might be shaping the research? Then find a commercial site that engages in market research. What differences can you find between the two sites?

11.5 Online research and tutorials: new media empirics (Week 5)

Overview: online activism, intellectual property regimes, open source movements

There is the popular perception that with the advent of new information and communication technologies (ICTs), the tyranny of space completely melts into air. Welcome to the age borderless economies, “friction-free capitalism”, the erosion of national boundaries and interchangeable global cultures. Well, that’s what Bill Gates, hegemonic nation-states and transnational corporations would have us believe. And as we saw earlier, the techno-utopians don’t hesitate to add their enthusiastic pitch into the ring.

However, amidst all this is a regime of governance that has developed with particular intensity over the last five to ten years as information and communication flows are secured to protect the commercial interests of companies, organisations and individuals. With regulatory regimes of the internet such as intellectual property law, we are seeing a re-spatialisation of society and the re-scaling of nation-states, rather than the disappearance of space. Issues of cultural capital and access further challenge claims that the net is a border free zone.

With developments in intellectual property law and techniques that invade the privacy of users, we are witnessing new regimes and legislation that functions to regulate access to information; we’ve seen a decline of the public commons, and the increasing rise of “gated communities” regulated by technical standards, but also issues of cultural values. These developments take place in a political discourse of deregulation and institutional cultures that have undergone privatisation.

In the past, society and its economic relations were primarily organised around the ownership of material property. Such a mode of property ownership is of course still prevalent and the most common, though it no longer commands the same exchange value as a commodity object that it once did. The reason for this has to do with economies of scale and the costs of production and labour.

Within informational or networked societies, property takes on a more immaterial form as knowledge, ideas, or information. Within informational societies and economies we see a raft of cultural forms that have been pushed into digital code for archival, production, commercial exchange and socially distributive purposes. Anthropological films, contemporary and traditional artworks, music, videos, and published materials would fit into this category.

The phrase “intellectual property regimes” (or IPRs) refers to the techniques for governing the ownership and control of property within informational societies.

Intellectual property law focuses primarily on copyright and patent law (see May, 2002: 162-63). Copyrights are about literary or artistic intellectual property such as:

- literary works (fiction and non-fiction)

- musical works (of all sorts)
- artistic works (including advertising and amateur drawings)
- maps; technical drawings; photography
- audio-visual works (cinema, video, multi-media)
- audio recordings

Copyright protects the *expression* of an idea. That is, it protects the *form* of expression as music, literature, a film, and so forth. Put another way, copyright is about expression in words, symbols, music, pictures, three-dimensional forms, or a combination of all of these.

Patent law refers to industrial intellectual property, and is about the protection of an idea that has industrial application. Note the difference from copyright law. Patent law registers an idea of an inventor as knowledge with a state or international patent office. In this regard, patent law is about an institutionalised agreement between the inventor and the state. To register a patent, an idea must be:

- new
- non obvious
- useful, or applicable in industry

Once something is legally coded as property, it means that access to that property by definition becomes restricted. Intellectual property regimes in informational societies have seen much of what once belonged to the public commons shift into the realm of private property. As more and more ideas become published in electronic form, then this means knowledge takes the form of a commodity object. (We'll be addressing this issue further when we consider the topic on the virtual university).

Thus, intellectual property regimes function to ensure that a regime of scarcity is imposed upon digitalised information. In so doing, an exchange value is able to be placed on what is otherwise digital code. That is, information becomes a commodity. In this way, intellectual property regimes can be seen as a technique or architecture for arresting the mobility of information (see Lessig, 1999; and <http://cyberlaw.stanford.edu/lessig/>).

As Edward Herman and Robert McChesney (1997: 51) note in their book *The Global Media*, 'Along with pharmaceuticals, media and computer software are the primary topics for global intellectual property rights negotiations'. This provides us with a fairly strong indication that information economies constitute the dominant mode of economic exchange in technologically advanced societies.

The World Trade Organization (WTO) is a key player within intellectual property regimes. The WTO's Agreement on Trade-Related Aspects of

Intellectual Property Rights (TRIPS) in 1995 sought to protect the commercial interests of Western pharmaceutical and media companies from countries, most notably China and African states, engaged in software piracy and abuse of copyright and patent law.

The TRIPS agreement sets out minimum standards for how member states engage with copyright, patents (including plant variety protection), trademarks, geographical indications, industrial designs, and undisclosed information such as trade secrets. Critics of the TRIPS agreement have pointed out ‘that transnational corporations own approximately 90% of technology and product patents in the world, and up to 80% of technology and product patents in developing countries’. So, in these sort of figures we can see why a political economy of the media might concern itself with the ownership and control of property as it figures within new communications media.

At best, intellectual property rights, when balanced between economic interests and public access, enable people – particularly Indigenous peoples and people in developing countries – the potential to secure their cultural and intellectual resources within network or informational societies. However, all too often, we see intellectual property regimes eroding what previously existed as information and knowledge that could be accessed because it belonged as part of the public commons.

Current developments in encryption methods by corporations embed code with default boundaries, further ensuring the territorialisation and regionalisation of intellectual property with copy-protection code of CDs, DVDs and software, for example, that registers infringements to property ownership as it occurs within the space of that nation. Hence offences can, in theory, be tracked and then prosecuted under national law as it corresponds to minimum standards of protection set out in the TRIPS agreement. Examples such as these evidence the ways in which the sovereignty of the nation-state is undergoing reconfiguration within an informational plane of abstraction.

The undermining of privacy is another key issue here. As Christopher May writes in his excellent new book *The Information Society: A Sceptical View*, ‘Our ability to remain anonymous, to retain our privacy, is being eroded by the information society’ (2002: 107). The way in which this is achieved is through databases which keep records of our commercial transactions and patterns or habits of consumption. Cookies, authentication passwords, and software designs are some of the key techniques by which the privacy of users is invaded.

Intellectual Property Rights are thus one of the key sites of sociopolitical tension within network societies and informational economies. Much empirical work needs to be done that maps out the various actors involved in and/or affected by the outcomes of IPRs.

Learning objectives

- understand basic notions of intellectual property, public access and the right to privacy, and how these notions are reconstituted within the virtual realm;
- understand the key supranational and national institutions involved in the governance and administration of IPRs;
- understand how IPRs, in their commercialisation of digital information and culture, function to reinforce what has been referred to as the “digital divide”.

Readings

1. Wark, McKenzie. ‘Hactivism’, in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 99-102.
2. Pickerill, Jenny. ‘Strengthening Cohesion, Networking Cells: Environmental Activists On-line’, in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 69-78.
3. Rossiter, Ned. ‘Intellectual Property Regimes and the Possibility of Indigenous Sovereignty within Informational Economies’, in Charles Ess and Fay Sudweeks (eds), *Cultural Attitudes Towards Technology and Communication*, Proceedings of the Third International Conference, The Net(s) of Power: Language, Culture and Technology, University of Montréal, Quebec, Canada, 12-15 July (Murdoch: Murdoch University, 2002), 339-353.
4. Adar, Eytan and Huberman, Bernardo A. ‘Free Riding on Gnutella’, *First Monday* 5.10 (2000). Available from: http://www.firstmonday.org/issues/issue5_10/adar/
5. Poster, Mark. ‘Citizens, Digital Media and Globalization’, *Mots Pluriels* 18 (August, 2001). Available from: <http://www.arts.uws.edu.au/MotsPluriels/MP1801mp.html>

Further readings

6. Rossiter, Ned. ‘Modalities of Indigenous Sovereignty, Transformations of the Nation-State, and Intellectual Property Regimes’, *Borderlands Journal* 1.1 (forthcoming 2002). Available from: <http://poweroflove.com.au/borderlands/>
7. Laidler, Terry. ‘A Balance of Rights’, in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 137-142.
8. Frank, Thomas. *One Market Under God: Extreme Capitalism, Market Populism, and the End of Economic Democracy* (New York: Anchor Books, 2000).

9. Correa, Carlos M. *Intellectual Property Rights, the WTO and Developing Countries: The Trips Agreement and Policy Options* (London and Malaysia: Zed Books/Third World Network, 2000).
10. Meikle, Graham. *Future Active: Media Activism and the Internet* (Sydney: Pluto Press, 2002).

Sites

Australian Digital Alliance – Intellectual Property,
<http://www.digital.org.au/issue/ipwfeb02.htm>

Center for the Public Domain, <http://www.centerforthepublicdomain.org/ip.htm>

Intellectual Property Resources,
http://www.sims.berkeley.edu/resources/infoecon/Intellectual_Property.html

Open Flows, <http://www.openflows.org>

WTO, ‘Intellectual property: protection and enforcement’,
http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm6_e.htm

WTO, Overview: the TRIPS Agreement,
http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm

Questions to consider

1. How do “open source” movements challenge the interests of global capital?
2. In what ways do intellectual property regimes restrict access to digital information and new communications media?
3. Why is there so much at stake in how intellectual property rights are determined in relation to the internet?
4. What does it mean to say that developments in areas such as IP law lead to the “respatialisation of society”?

Online task

- submit 1 x 100 word posting to mailing list (see assessment details)

11.6 Processual Aesthetics (week 6)

Overview

In *The Language of New Media* (2001), media theorist and artist Lev Manovich undertakes a media archaeology of post-media or software theory. He focuses on a very particular idea about what constitutes the materiality of new media, and hence aesthetics. In excavating a history of the present for new media, Manovich's work is important in that it maps out recent design applications, animation practices, and compositing techniques, for example, that operate in discrete or historically continuous modes. However, Manovich's approach is one that assumes form as a given yet forgets the socio-political arrangements that media forms are necessarily embedded in, and which imbue any visual (not to mention sonic) taxonomy or typology with a code: i.e. a language whose precondition is the possibility for meaning to be produced.

'Process as such', writes philosopher of science Michel Serres, 'remains to be conceived ...'. The aesthetic dimension of new media resides in the processes – the ways of doing, the recombination of relations, the figural dismantling of action – that constitute the abstraction of the social. Herein lies the unconscious code of new media empirics. The media sublime unravels the security presupposed by the political economy of empirical research on new media.

The aesthetic that constitutes a code is only possible through a process of articulation with modes of practice, of interpenetrative moments, of duration. The code is a language whose precondition is the possibility for meaning to be produced. The political dimension of aesthetics is manifest in the power relations that attend such processes, and in order to undertake an analysis of such assemblages, attention would need to be paid, as Manovich intimates, to the institutional settings of new media and their uses, be they in the office, at home, or in networked gaming arcades, for example, and the conditions of cultural production.

This topic aims to consider modes of perception and sensation, or aesthetics. Moreover, a processual aesthetics of new media goes beyond what is simply seen or represented on the screen. It seeks to identify how online practices are always conditioned by and articulated with seemingly invisible forces, institutional desires and regimes of practice. Furthermore, a processual aesthetics recognises the material, embodied dimensions of net cultures.

Learning objectives

- gain a basic understanding of processual aesthetics and its relation to the discourses concerning new media;
- consider how modes of perception and sensation constitute material practices, even to the extent of influencing policy outcomes;

- consider how processual aesthetics challenges the sovereignty of empirical research on new media.

Readings

1. Palmer, Daniel. 'The Art of Real Time', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 215-223.
2. Manovich, Lev. 'The Labor of Perception' (1994-96). Available from: <http://www.manovich.net/text/labor.html>
3. Rossiter, Ned. 'Processual Aesthetics and the Media Sublime: the Violent Sensation of New Media Empirics', Crossroads in Cultural Studies Conference, Tampere, Finland, 29 June - 2 July, 2002.
4. Munster, Anna. 'Digitality: Approximate Aesthetics', *CTheory* a093 (2001). Available from: http://www.ctheory.net/text_file.asp?pick=290

Further reading

5. Ednie-Brown, Pia. 'Diagramming Innovation-Scapes', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 197-203.
6. Manovich, Lev. *The Language of New Media* (Cambridge, Mass.: MIT Press, 2001).

Sites

Lev Manovich, <http://www.manovich.net/>

SERIOUS PLAY, SIMULATIONS, VISUALIZATION AND MODELLING,

UBIQUITOUS COMPUTING,
<http://cms.mit.edu/games/education/research.html>

Questions to consider

1. What is processual aesthetics and how does it relate to other ways of understanding aesthetics?
2. How does an emphasis on *process* (as distinct, for example, from representation or textual analysis) allow for a critique of more empirical ways of thinking about the virtual?
3. What is the relationship between processual aesthetics and the wider socio-political formations that we currently inhabit?

Online task

- find an online gaming site, or better still, go into the city or wherever and visit a networked gaming arcade. Write a description of the institutional practices that define your chosen location and pose a critical question. Post your work online.

11.7 Online research and tutorials: processual aesthetics (Week 7)

Overview

With the invention of the telegraph came the genre, form or style of telegraphic writing, of news wires. Think of Ernest Hemingway, with his telegraphic, machine-gun writing style. A mode of writing within and through media of communication. With the internet, we have seen hypertext, listserves, net.art, and so forth. With the mobile phone, short-text messaging. These could all be talked about in terms of media aesthetics. However, we think it is more interesting for an aesthetics of new media to consider the ways in which social and cultural formations not immediately attributable to the media they are contemporary with might also be included in the pantheon of media aesthetics. Such articulations might constitute the unconscious of media aesthetics: social and cultural forms that are not determined by media technologies, but are potentialities that coincide with or are parallel to contemporaneous communications media. The articulation of various elements that constitute a network can be thought of in terms of duration (a mode of temporality that is antithetical to instrumental time), which might also be termed the processual aesthetics of new media. So, a processual aesthetics of new media is related to and constituted within the time and space of the media event (see Wark, 1994; Munster, 2001).

A theory of processual aesthetics can be related back to cybernetics and systems theory and early models of communication developed by mathematician and electrical engineer Claude Shannon in the 1940s (<http://www.cultsock.ndirect.co.uk/MUHome/cshtml/introductory/sw.html>). This model is often referred to as the transmission model, or sender-message-receiver model. It is a process model of communication, and for the most part it rightly deserves its place within introduction to communications courses since it enables a historical trajectory of communications to be established (see Mattelart and Mattelart, 1998). However, it holds considerable problems because it advances a linear model of communication flows, from sender to receiver. And this of course just isn't the way communication proceeds – there's always a bunch of noise out there that is going to interfere with the message, both in material and immaterial ways, and in terms of audiences simply doing different things with messages and technologies than the inventors or producers might have intended.

The point to take from this process model, however, is that it later developed to acknowledge factors of noise or entropy (disorder and deterioration), once in the hands of computer scientists and anthropologists such as Norbert Weiner and Gregory Bateson (<http://www.martinleith.com/glossary/cybernetics.html>). As such, it shifted from a closed system to an open system of communication. In so doing, it becomes possible to acknowledge the ways in which networks of communication flows operate in autopoietic ways whereby media ecologies develop as self-generating, distributed informational systems (see Guattari, 1995; Massumi, 1992).

A processual aesthetics of media culture enables things not usually associated with each other to be brought together into a system of relations. A processual

media theory is constituted within and across spatio-temporal networks of relations, of which the communications medium is but one part, or actor. Aesthetic production is defined by transformative iterations, rather than supposedly discrete objects in commodity form. Processual aesthetics is related to the notion of the sublime, which is 'witness to indeterminacy' (Rodowick, 2001: 20). Processual aesthetics of new media occupy what philosophers of science Ilya Prigogine and Isabelle Stengers (1985) call a 'dissipative structure' of nonlinear, random relationships (see also Massumi, 1992; Stengers, 2000).

Learning objectives

- to gain a more thorough understanding of processual aesthetics and be able to make connections between aesthetic processes, social formations, ICTs and their economic/material underpinnings;
- to be able to apply the processual model to individual research projects.

Readings

1. McQuire, Scott. 'When is Art IT?', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 205-213.
2. Shapiro, Alan. 'Society of the Instance', posting to nettime mailing list, 13/06/01. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0106/msg00043.html>
3. Schleiner, Anne-Marie. 'Open Source Art Experiments in Erotica', posting to nettime mailing list, 26/11/00. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0011/msg00224.html>
4. Poster, Mark. 'The Aesthetics of Distracting Media', *Culture Machine* (2002). Available from: <http://culturemachine.tees.ac.uk/Articles/poster.htm>
5. Mattelart, Armand and Michèle Mattelart. 'Information Theory', in *Theories of Communication: A Short Introduction* (London: Sage, 1998), 43-55.
6. Kittler, Friedrich. 'The History of Communication Media', *CTheory* gal14 (1996). Available from: http://www.ctheory.net/text_file.asp?pick=45

Further reading

7. Stalder, Felix. 'From Figure/Ground to Actor-Networks: McLuhan and Latour' (1998). Available from: http://felix.openflows.org/html/mcluhan_latour.html
8. Schirmacher, Wolfgang. 'Media Aesthetics in Europe', posting to nettime mailing list, 05/01/00. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0001/msg00016.html>

Sites

The House of Aboriginality, <http://www.mq.edu.au/hoa/>

Adrian Miles, <http://hypertext.rmit.edu.au/vog/vlog/>

Anna Munster, <http://wundernet.cofa.unsw.edu.au/>

Norie Neumark, <http://www.out-of-sync.com>

Melinda Rackham, <http://www.subtle.net>

Questions to consider

1. What political/aesthetic/economic possibilities are enabled by a processual model?
2. What tensions exist between new media processes and older forms of regulation?

Online tasks

- submit 1 x 100 word posting to mailing list (see assessment details)

11.8 The Virtual University? (Week 8)

Overview

While “knowledge” is regarded as *the* twenty-first century commodity and the saviour of economies, nations, and communities alike, universities, once considered the prime institutional sites of knowledge, are in a state of crisis. The increased production and circulation of knowledge via media and information technologies, as well as the creation of knowledge from alternative sources such as commercial R & D centres or private think-tanks, has meant that the taken-for-granted assumptions concerning the role of the university are increasingly being called into question. Virtual education is seen as a means for both the university to increase its economic power, and thus enable its survival, and allow greater access to education. On the other hand critics of virtual education argue that taking the virtual path undermines the cultural role of the university and restricts, rather than enables the education process. This topic introduces you to these competing claims.

Learning objectives

- identify the different competing understandings of both the university and the virtual university;
- identify the social investments which lie behind the desire to virtualise education.

Readings

1. Merrick, Helen and Willson, Michele. ‘All Wired Up: Reflections on Teaching and Learning Online’, in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 243-252.
2. Dreyfus, Herbert L. ‘How Far is Distance Learning from Education?’, in *On the Internet* (London: Routledge, 2001), 27-49.
3. Lovink, Geert. ‘The Network Society and its Reality Romantics: Review of Herbert L. Dreyfus – *On the Internet*’, posting to nettime mailing list, 23/04/02. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-1-0204/msg00197.html>
4. Noble, David. F. ‘Digital Diploma Mills: The Automation of Higher Education’, *First Monday* 3.1 (1998). Available from: http://www.firstmonday.org/issues/issue3_1/noble/

Further reading

5. Cooper, Simon. ‘Post Intellectuality?: Universities and the Knowledge Industry’, in Simon Cooper, John Hinkson and Geoff Sharp (eds), *Scholars and Entrepreneurs: The University in Crisis* (Fitzroy: Arena Publications, 2002), 207-232.

Sites

Association for the Public University, <http://www.publicuni.org/>

Online Higher Education Notebook, <http://www.uis.edu/~schroede/sources.htm>

Questions to consider

1. In what ways does the virtual university differ from more traditional universities? Is the virtual merely an extension, or a thorough reconstitution of tertiary education?
2. What investments (social, economic, political) lie behind the desire to virtualise education?
3. How does the debate over virtual education intersect with theories and conceptions of the knowledge society?

Online task

- find an online education site. Identify its aims and intentions, and its sponsors (if any). Also make note of any special software design features. Offer a critique of the site at the level of useability.

11.9 Online research and tutorials: the virtual university (Week 9)

Overview

This topic extends the discussion on virtual education and more specifically examines the kinds of power relations that are produced within the virtual domain. In particular, we look at the kinds of knowledge produced within virtual pedagogical environments – what can be articulated, and what is marginalised as students and teachers engage with each other in this new formation?

We also examine the assumptions that underpin much of the discourse surrounding virtual education: how conceptions such as freedom, choice, empowerment and democracy – many of the perceived benefits of virtual education – presume a classical notion of the subject which in fact is radically restructured within online forms.

To this end, we propose the notion or approach of “software theory”. Such a mode of analysis shifts emphasis from the medium of communication to the design of communication. That is, we look at the ways in which software packages – like WebCT – shape discursive practices or uses of the internet (see Reading 8.1 by Merrick and Willson). Software theory invariably entails institutional critique, since it is institutions that are incorporating various software packages in order to deliver their knowledge commodities in online form. The motivation for this shift is often economic: deliver teaching packages at supposedly lower costs than traditional face-to-face models of teaching and learning. It is only recently that universities and corporations alike are realising the considerable costs that come with the shift to virtuality – both human, in the form of social capital, and economic, in the form of costs associated with maintaining online environments and providing the necessary technical infrastructure and support staff.

In order to critique the ubiquitous uptake of WebCT and similar online teaching and learning software packages across universities, it will be necessary to consider the political economy of software production, distribution and consumption within universities: who is making the push to use these packages?; what disciplines are the key advocates of standardising knowledge via software?; what industry relations do such actors hold?; what software alternatives are there for online learning?

Learning Objectives

- understand the competing frameworks, as well as the wider contexts (globalisation, neo-liberalism) which underpin the desire for virtual universities;
- consider the competing interests that attend the push for online learning within universities.

Readings

1. Graham, Phil. 'The Knowledge Economy as Alienation: Outlines of a Digital Dark Age', in H. Brown et al (eds), *Politics of a Digital Present: An Inventory of Australian Net Culture, Criticism and Theory* (Melbourne: Fibreculture Publications, 2001), 143-147.
2. Robe, Christopher. 'Techno-Mania: The Advent of the Virtual Classroom-University-Student-Professor-Education', 2002. Available from: <http://www.lehigh.edu/~crr2/crr2-techno.html>
3. Feenberg, Andrew. 'The Factory or the City: Which Model for Online Education?', in *Critical Theory of Technology*, 2nd ed. (Oxford: Oxford University Press, 2001). Available from: <http://commons.somewhere.com/rre/2002/RRE.Critical.Theory.of.T.html>

Further reading

4. Holmes, Brian. 'The Flexible Personality: For a New Cultural Critique', posting to nettime mailing list, 05/01/02. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0201/msg00012.html>

AND:

<http://amsterdam.nettime.org/Lists-Archives/nettime-l-0201/msg00013.html>

5. Feenberg, Andrew. 'Wither Educational Technology?', *Peer Review* 1.4 (1999). Available from: <http://www-rohan.sdsu.edu/faculty/feenberg/peer4.html>

Sites

Microsoft Research University Programs,
<http://www.research.microsoft.com/programs/default.asp>

Open Source Education, <http://www.osef.org/>

Questions to consider

1. What kinds of pedagogical relationships are enabled through virtual learning environments?
2. To what extent do economic and political imperatives drive the desire for virtualisation?
3. What kinds of subjects/speaking positions are constructed within these online learning domains?
4. What are the limits and possibilities for online learning and research associated with software such as WebCT?

Online task

- submit 1 x 300 word research proposal (see assessment details)

11.10 Summary lecture (Week 10)

Overview: cyberwar, data-surveillance and dotcom delirium

This topic returns to the notion of the “cyber-imaginary” (the phantasmic construction of the internet and its possibilities) and explores the material effects of such constructions in the socio-economic realm. We examine some of the more concrete effects that are enabled through specific interventions in virtual environments.

Learning objectives

- examine the relation between economic and political constructions of virtual domains and their material effects;
- explore the feedback loop that occurs when these constructions themselves restructure more traditional spheres of politics and economics;
- consider the inter-relationships between the hype attending the new economy, online lifestyles and the ongoing fallouts across finance, aviation, insurance, telecommunications and media industry sectors since the NASDAQ crash of the dotcom bubble in March-April, 2000;
- examine the ways in which online and offline social spaces are increasingly subject to micro-technologies of surveillance.

Readings

1. Kellner, Douglas. ‘The Politics of Postmodern War in the Age of Bush II’, http://www.gseis.ucla.edu/faculty/kellner/papers/POMOwar.htm#_edn1
2. Lovink, Geert. ‘Interview with Murdoch Analyst Neil Chenoweth’, posting to fibreculture mailing list, 14/05/02. Available from: <http://lists.myspinach.org/archives/fibreculture/2002-May/001535.html>
3. Lovink, Geert. ‘Market Populism after 911: Interview with Thomas Frank’, posting to nettime mailing list, 21/05/02. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0205/msg00140.html>
4. Lovink, Geert. ‘Finance and Economics after the Dotcom Crash: Interview with Doug Henwood’, posting to nettime mailing list, 20/12/01. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0112/msg00100.html>
5. Stalder, Felix. ‘The Excess of Control’, *Telepolis*, 8 January 2001, <http://www.heise.de/tp/english/inhalt/buch/11504/1.html>
6. Arns, Inke and Broeckmann, Andreas. ‘The Rise and Decline of the Syndicate: the End of an Imagined Community’, posting to nettime mailing list, 13/11/01. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0111/msg00077.html>

7. Barrett, Michael and Scott, Susan. 'Electronic Trading and the Transformation of Futures Stock Exchanges in Global Work Times', The 2nd Social Study of IT workshop at the LSE, ICT and Globalization, 22-23 April, 2002. Available from: http://is.lse.ac.uk/events/ssit2/Barrett_Scott.pdf

Further Reading

8. Borsook, Paulina. *Cyberselfish: A Critical Romp through the Terribly Libertarian World of High-Tech* (New York: Public Affairs Books, 2000). See also, <http://www.cyberselfish.com>
9. Lovink, Geert. 'Cyberselfishness Explained: Interview with Paulina Borsook', posting to nettime mailing list, 28/03/02. Available from: <http://amsterdam.nettime.org/Lists-Archives/nettime-l-0203/msg00154.html>

Sites

New York Surveillance Camera Players, <http://www.notbored.org/the-scp.html>

The Surveillance Project, <http://qsilver.queensu.ca/sociology/Surveillance>

The 2000-02 Nasdaq Bear Market vs. 1929 Crash, <http://www.lowrisk.com/nasdaq-1929.htm>

CITY STATE: flow/capture/control/rupture, <http://citystate.cat.org.au/>

Questions to consider

1. What is the link between libertarian and neo-liberal constructions of the internet?
2. What conditions led to the dot.com phenomenon?
3. What is meant by "cyberwar"? Are we to take it seriously?
4. To what extent can virtual environments be used for specific political purposes? Will the virtual world become more economically radical but more politically conservative? Can these terms even be used accurately anymore?

11.11 Research Presentations (Weeks 11-13)

There are no set readings, objectives, questions or online tasks for these weeks. This doesn't prevent you from continuing your research – indeed, you'll need to be doing that!

These weeks are designated for in-class presentations of your research projects. Make good use of the feedback you receive (and contribute) and the time remaining.

12. Further Readings and Online Resources

The following readings will be available either on Library shelves or closed reserve. You may find such further readings useful in preparing for assignments.

Readings - books

Adilkno. *Cracking the Movement* (New York: Autonomedia, 1994).

Adilkno. *Media Archive* (New York: Autonomedia, 1998).

Bardin, Thierry. *Bootstrapping: Douglas Engelbart, Coevolution, and the Origins of Personal Computing* (Stanford, Cal.: Stanford University Press, 2000).

Bijker, Wiebe E; Hughes, Thomas P.; Pinch, Trevor. *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology* (Cambridge, Mass.: MIT Press, 1987).

Bijker, Wiebe E and Law, John (eds). *Shaping Technology/Building Society: Studies in Sociotechnical Change* (Cambridge, Mass.: MIT Press, 1992).

Bolter, Jay David and Richard Grusin. *Remediation: Understanding New Media* (Cambridge, Mass.: MIT Press, 1999).

Borsook, Paulina. *Cyberselfish: A Critical Romp through the Terribly Libertarian World of High-Tech* (New York: Public Affairs, 2000). See also, <http://www.cyberselfish.com>

Castells, Manuel. *The Informational City: Information Technology, Economic Restructuring, and the Urban-Regional Process* (Oxford: Basil Blackwell, 1989).

Castells, Manuel. *The Rise of the Network Society*, Vol. 1, The Information Age: Economy, Society and Culture (Cambridge, Mass: Blackwell, 1996).

Castells, Manuel. *End of Millennium*, Vol. III, The Information Age: Economy, Society and Culture (Oxford: Blackwell, 1998).

Castells, Manuel. *The Internet Galaxy: Reflections on the Internet, Business and Society* (Oxford: Oxford University Press, 2001).

Cavallaro, Dani. *Cyberpunk and Cyberculture* (London: Althone, 1999).

Critical Art Ensemble. *The Electronic Disturbance* (New York: Autonomedia, 1994).

Critical Art Ensemble. *Flesh Machine: Cyborgs, Designer Babies and New Eugenic Consciousness* (New York: Autonomedia, 1998).

Dery, Mark. *Escape Velocity: Cyberculture at the End of the Century* (London: Hodder and Stoughton, 1996).

Featherstone, Mike and Burrows, Roger (eds), *Cyberspace/cyberbodies/cyberpunk: Cultures of Technological Embodiment* (London : Sage, 1995).

Feenberg, Andrew. *Questioning Technology* (London and New York: Routledge, 1999).

Frank, Thomas. *One Market Under God: Extreme Capitalism, Market Populism, and the End of Economic Democracy* (New York: Anchor Books, 2000).

Gerritzen, Mieke and Lovink, Geert. *Mobile Minded: Reader, 5th International Browserday* (Berlin: NL. Design, 2002).

Gray, Chris Hables (ed.). *The Cyborg Handbook* (London and New York: Routledge, 1995).

Gray, Chris Hables. *Cyborg Citizen: Politics in the Posthuman Age* (New York and London: Routledge, 2001).

Guattari, Félix. *Chaosmosis: An Ethico-Aesthetic Paradigm*, trans. Paul Bains and Julian Pefanis (Sydney: Power Publications, 1995 [1992]).

Guattari, Félix. *Chaosology*, Sylvère Lotringer (ed.), (New York: Semiotext[e], 1995).

Haraway, Donna J. *Modest_Witness@Second_Millennium,FemaleMan©_Meets_OncoMouse™: Feminism and Technoscience* (New York: Routledge, 1997).

Hardt, Michael and Negri, Antonio. *Empire* (Cambridge, Mass.: Harvard University Press, 2000) .Also available at: <http://www.hup.harvard.edu/pdf/HAREMI.pdf>

Henwood, Doug. *Wall Street: How It Works and for Whom* (New York: Verso, 1997).

Herman, Edward S. and McChesney, Robert W. *The Global Media: The New Visionaries of Corporate Capitalism* (London and Washington: Cassell, 1997).

Himanen, Pekka. *The Hacker Ethic and the Spirit of the Information Age*, prologue by Linus Torvalds, epilogue by Manuel Castells (London: Vintage, 2001).

Holmes, David (ed.). *Virtual Politics: Identity and Community in Cyberspace* (London : Sage Publications, 1997).

Innis, Harold. *The Bias of Communication* (Toronto: University of Toronto Press, 1951).

- Jones, Steven G. (ed.). *Virtual Culture: Identity and Communication in Cybersociety* (London: Sage, 1997).
- Jordan, Tim. *Cyberpower: The Culture and Politics of Cyberspace and the Internet* (Routledge, 1999).
- Kern, Stephen. *The Culture of Time and Space 1880-1918* (Cambridge, Massachusetts: Harvard University Press, 1983).
- Lash, Scott and Urry, John. *Economies of Signs and Space* (London: Sage, 1994).
- Latour, Bruno. *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, Massachusetts: Harvard University Press, 1993).
- Law, John and Hassard, John (eds). *Actor Network Theory and After* (London: Blackwell, 1999).
- Lessig, Lawrence. *Code and Other Laws of Cyberspace* (New York: Basic Books, 1999).
- Lessig, Lawrence. *The Future of Ideas: The Fate of the Commons in a Connected World* (New York: Random House, 2001).
- Lévy, Pierre. *Becoming Virtual: Reality in the Digital Age*, trans. Robert Bononno (New York and London: Plenum Trade, 1998).
- Lévy, Pierre. *Cyberculture*, trans. Robert Bononno (Minneapolis: University of Minnesota Press, 2001).
- Lovink, Geert. *Dark Fiber: Tracking Critical Internet Culture* (Cambridge, MA: MIT Press, 2002).
- Lucy, Niall. *Beyond Semiotics: Text, Culture and Technology* (London: Continuum, 2001).
- Lunenfeld, Peter. (ed.) *The Digital Dialectic: New Essays on New Media* (Cambridge, MA: MIT Press, 1999).
- Lyotard, Jean-François. *The Postmodern Condition: A Report on Knowledge*, trans. Geoff Bennington and Brian Massumi (Minneapolis: University of Minnesota Press, 1984).
- McLuhan, Marshall. *Understanding Media: The Extensions of Man* (London: Abacus, 1973).
- McQuire, Scott. *Crossing the Digital Threshold* (Brisbane: Australian Key Centre for Cultural and Media Policy, 1997).
- Manovich, Lev. *The Language of New Media* (Cambridge, Mass.: MIT Press, 2001).

Massumi, Brian. *A User's Guide to Capitalism and Schizophrenia: Deviations from Deleuze and Guattari* (Cambridge, Mass: MIT Press, 1992).

Mattelart, Armand. *Mapping World Communication: War, Progress, Culture*, trans. Susan Emanuel and James A. Cohen (Minneapolis: University of Minnesota Press, 1994).

Mattelart, Armand and Michèle Mattelart. *Theories of Communication: A Short Introduction* (London: Sage, 1998).

Mattelart, Armand. *Networking the World, 1794-2000*, trans. Liz Carey-Libbrecht and James A. Cohen (Minneapolis: University of Minnesota Press, 2000).

Meikle, Graham. *Future Active: Media Activism and the Internet* (Sydney: Pluto Press, 2002).

Miller, Daniel and Slater, Don. *The Internet: An Ethnographic Approach* (London: Routledge, 2000).

Mitchell, William J. *City of Bits: Space, Place and the Infobahn* (Cambridge, Mass.: MIT Press, 1995).

Moody, Glyn. *Rebel Code: Linux and the Open Source Revolution* (London: Penguin, 2001).

Morse, Margaret. *Virtualities: Television, Media Art, and Cyberculture* (Bloomington: Indiana University Press, 1998).

Poster, Mark. *The Second Media Age* (Oxford: Polity Press, 1995).

Poster, Mark. *What's the Matter with the Internet?* (Minneapolis: University of Minnesota Press, 2001).

Prigogine, Ilya and Stengers, Isabelle. *Order Out of Chaos: Man's New Dialogue with Nature* (London: Flamingo, 1985).

Raymond, Eric S. *The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary* (Sebastopol, CA.: O'Reilly, 1999).

Robbins, Kevin and Webster, Frank. *Times of the Technoculture: From the Information of Society to the Virtual Life* (London and New York: Routledge, 1999).

Rodowick, D. N. *Reading the Figural, or, Philosophy after the New Media* (Durham and London: Duke University Press, 2001).

Ronell, Avital. *The Telephone Book: Technology, Schizophrenia, Electric Speech* (Lincoln and London: University of Nebraska Press, 1989).

Sassen, Saskia. *The Global City: New York, London, Tokyo* (Princeton, New Jersey: Princeton University Press, 1991).

Serres, Michel and Latour, Bruno. *Conversations on Science, Culture and Time*, trans. Roxanne Lapidus (Ann Arbor: University of Michigan Press, 1995).

Shields, Rob (ed.). *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies* (London: Sage, 1996).

Spufford, Francis and Uglow, Jenny (eds). *Cultural Babbage: Technology, Time and Invention* (London: Faber and Faber, 1996).

Stengers, Isabelle. *Power and Invention: Situating Science*, trans. Paul Bains (Minneapolis: University of Minnesota Press, 1997).

Stengers, Isabelle. *The Invention of Modern Science*, trans. Daniel W. Smith (Minneapolis: University of Minnesota Press, 2000).

Taylor, Mark C. *Imagologies: Media Philosophy* (London and New York: Routledge, 1994).

Tofts, Darren and McKeich, Murray. *Memory Trade: A Prehistory of Cyberculture* (North Ryde, NSW: 21C/Interface, 1998).

Virilio, Paul. *The Art of the Motor*, trans. Julie Rose (Minneapolis: University of Minnesota Press, 1995).

Wark, McKenzie. *Virtual Geography: Living With Global Media Events* (Indianapolis: Indiana University Press, 1994).

Wertheim, Margaret. *The Pearly Gates of Cyberspace: A History of Space from Dante to the Internet* (Sydney: Doubleday, 1999).

Wise, J. Macgregor. *Exploring Technology and Social Space* (Thousand Oaks, CA: Sage, 1997).

Wiseman, John. *Global Nation? Australia and the Politics of Globalisation* (Cambridge: Cambridge University Press, 1998).

Whitehead, Alfred North. *Science and the Modern World* (New York: The Free Press, 1967; 1925).

Online Journals

Arena Journal and Magazine, <http://www.arena.org.au/>

borderlands, <http://poweroflove.com.au/borderlands/>

ctheory, <http://www.ctheory.net>

Culture Machine, <http://culturemachine.tees.ac.uk/>

E-journal, <http://www.wickedness.net/overview.htm>

fine Art forum, <http://www.fineartforum.org/>

First Monday, <http://www.firstmonday.org/>

Journal of Computer Mediated Communication, <http://www.ascusc.org/jcmc/>

Left Business Observer, <http://www.leftbusinessobserver.com/>

Linux Journal, <http://www.linuxjournal.com>

M/C Online, <http://www.media-culture.org.au/>

Mediamatic, <http://www.mediamatic.nl/>

Mots Pluriels, <http://www.arts.uwa.edu.au/MotsPluriels/>

The Nation, <http://www.thenation.com/>

RealTime, <http://www.realtimearts.net/>

Sociological Research Online, <http://www.socresonline.org.uk/>

Tekhnema: Journal of Philosophy and Technology, <http://tekhnema.free.fr/>

Theory & Event, <http://muse.jhu.edu/journals/tae/>

Sites

An Atlas of Cyberspace, <http://www.cybergeography.org/atlas/atlas.html>

Archive of websites, <http://www.archive.org/index.html>

ATSIC, <http://www.atsic.gov.au/>

Australian Broadcasting Authority, <http://www.aba.gov.au/>

Australian Digital Alliance – Intellectual Property,
<http://www.digital.org.au/issue/ipwfeb02.htm>

Australian Key Centre for Cultural and Media Policy,
<http://www.gu.edu.au/centre/cmp/>

Bytes for All, <http://www.bytesforall.org/>

Canadian Internet Law Resource Page, <http://aix1.uottawa.ca/~geist/cilrp1.html>

Center for the Public Domain, <http://www.centerforthepublicdomain.org/ip.htm>

CITY STATE: flow/capture/control/rupture, <http://citystate.cat.org.au/>

Communications Law Centre, <http://www.comslaw.org.au/>

- Crash Media Industries, <http://crash.mi.cz/>
- Critical Art Ensemble, <http://www.critical-art.net>
- CyberAtlas: Internet Statistics, <http://cyberatlas.internet.com/>
- Cybercultures, <http://www.centenary.edu/~balexand/cyberculture/main.html>
- Cyber Semiotic Institute, <http://www.chass.utoronto.ca/epc/srb/cyber/cyber.html>
- Cyberspace Policy Institute, <http://www.cpi.seas.gwu.edu/>
- Democracy is Online, <http://www.e-democracy.org/do/article.html>
- Department of Communications (Australia), <http://www.dcita.gov.au/>
- Department of Information Systems, London School of Economics (LSE), <http://is.lse.ac.uk/news/default.htm>
- E-Democracy Resources, http://www.bf.rmit.edu.au/kgeiselhart/e-democracy_resources_.htm
- Expanding the Public Sphere through Computer-Mediated Communication: Political Discussion about Abortion in a Usenet Newsgroup <http://www.sunyit.edu/~steve/abstract.html>
- fibreculture, <http://www.fibreculture.org>
- Foucault and Internet Discourse, <http://www.ascusc.org/jcmc/vol1/issue2/aycock.html>
- Game Culture, <http://www.game-culture.com/>
- Globalization, <http://www.polity.co.uk/global/default.htm>
- Global Site Library, http://www.theglobalsite.ac.uk/global-library/all_authors.cfm
- Government Policy and the Information Superhighway, <http://www.nla.gov.au/lis/govnii.html>
- Hobbes' Internet Timeline, <http://www.zakon.org/robert/internet/timeline/>
- The House of Aboriginality, <http://www.mq.edu.au/hoa/>
- House of Laudanum: sound:net:art, <http://www.laudanum.net/>
- Intellectual Property Resources, http://www.sims.berkeley.edu/resources/infoecon/Intellectual_Property.html
- Internet and the Public Sphere, <http://www.weltanschauung.com/>

Labor 21, <http://www.labor21.org/>

Medeia, <http://www.medeia.com/>

Media Theory Site, <http://www.theory.org.uk/>

<nettime>, <http://www.nettime.org/>

New Media Studies, <http://www.newmediastudies.com/>

Online Opinion, <http://www.onlineopinion.com.au/>

Open Flows, <http://www.openflows.org>

Open Democracy, <http://www.opendemocracy.net/>

Postmodern Civic Culture, <http://www.civsoc.com/>

Productivity Commission Report, 2000,
<http://www.pc.gov.au/inquiry/broadcst/finalreport/index.html>

Resource Center for Cyberculture Studies, <http://otal.umd.edu/~rccs/>

Social Centre Autonomous Network (SCAN), <http://scan.cat.org.au>

A Supervised Public May Lose Skills Requisite to Discourse,
<http://soclink.csudh.edu/wisc/dearhabermas/adminsoc.htm>

United Kingdom Citizen Online Democracy, <http://www.democracy.org.uk>

University of Iowa, Communications/Digital Media,
<http://www.uiowa.edu/~commstud/resources/digitalmedia/index.html>

World Information – News, <http://world-information.org/wio/news>

Zooknic Internet Geography Project, <http://www.zooknic.com/>

Personal web pages

Phil Agre's Red Rock Eater home page:
<http://dlis.gseis.ucla.edu/people/pagre/rre.html>

Paulina Borsook, <http://www.transaction.net/people/paulina/>

Andrew Feenberg, <http://www-rohan.sdsu.edu/faculty/feenberg/>

Phil Graham, <http://www.philgraham.net/>

Chris Hables Grey, <http://www.Routledge-ny.com/CyborgCitizen>

Lisa Gye, <http://www.swin.edu.au/sbs/media/staff/gye/gye.htm>

Vivien Johnson, http://www.anu.edu.au/culture/people/vivien_johnson.htm

Douglas Kellner, <http://www.gseis.ucla.edu/faculty/kellner/>

Naomi Kline and *No Logo*, <http://NoLogo.org/>

John Law (for Actor-Network-Theory),
<http://www.comp.lancs.ac.uk/sociology/jlaw.html>

Lawrence Lessig, <http://cyberlaw.stanford.edu/lessig/>

Geert Lovink (1998-present), <http://laudanum.net/geert/>

Lev Manovich, <http://www.manovich.net/>

Adrian Miles, <http://hypertext.rmit.edu.au/vog/vlog/>

Anna Munster, <http://wundernet.cofa.unsw.edu.au/>

Norie Neumark, <http://www.out-of-sync.com>

Melinda Rackham, <http://www.subtle.net>

Martin Shaw, <http://www.martinshaw.org/>

Felix Stalder, <http://felix.openflows.org/html/left.html>

McKenzie Wark, *A Hacker Manifesto*,
http://www.feelergauge.net/projects/hackermanifesto/version_2.0/

Tom Worthington, <http://www.tomw.net.au/index.html>