ITP Graduate Seminar Class

Widespread Content: On Mapping

NYU Fall semester, 2007
Student course guide/syllabus, v 1.2 at 4 September

Instructor: Rachel Abrams
Room: 442 Conference room
Weekly: Tuesdays 12.30-3pm

Rachel Abrams,
Interactive Telecommunications Program,
New York University Fall 2007
About this class

From Nathan Shedroff's Unified Theory of Design
What is this class about?

This class is a seminar class, introducing you to key themes and topics in mapping.

It is not a production class, nor a pure theory class, but a hybrid, where you will learn, through dialogue, reading, and from expert guests about ideas and research that inform your other ITP work.
What is this class about?

It’s about gathering, framing, analyzing, interpreting, representing and delivering information, usually visually, in media appropriate to the content, to tell a story to an audience.

It’s about the transformation and possible permutations of maps and mapping as information is increasingly stored, displayed and distributed over the digital network.
What can you expect to gain by the end of the semester?

Broadly, you will encounter, experience and practise:

- The what, when, who, how, why of maps;
- What mapping is as an activity and a discrete discipline;
- A historical perspective;
- New currents, emerging themes and trends;
Dennis Cosgrove says,

“The most challenging mappings today are found in the creative and imaginative work of artists, architects and designers, neither seeking absolute empirical warranty for their maps nor claiming for them any metaphysical revelation.”

In Else/where
So what generally applicable experience will this give you as an ITP graduate student?

- Gain knowledge of gathering, interpreting and representing complex analogue and digital content;
- Practice setting intention, framing, extracting and representing relationships within a dataset
- Apply these mapping techniques to your own creative process
- Understand maps as answers to questions + mapping as an organizing framework for working with all kinds of networked or ‘widespread’ content.
What this class is not

This is not a prescriptive, stand-at-the-whiteboard class. It is not a passive, one-way teaching experience where the instructor tells you what to know!

Rather, it is a participatory seminar, as enriched and lively as the experience, insights, expertise, commitment and interests we all contribute.
What this class is not

Nor is this a production class, though it will provide a complementary perspective to everything else you are doing hands-on, whether you are a first or second year student.
The structure of the semester

This 14 week semester is divided into thirds, covering the following themes:

A What are maps for?
B What are maps made of?
C What’s next in mapping?

This way, we’ll cover key topics addressing the why, what and what next of mapping.

There’ll be reference resources, occasional fieldwork, guests and assignments and two weeks of presentation at the end of the semester.
The structure of the semester

DIAGRAM hand out
Week-by-week syllabus
Part I:
What are maps and mapping for?
Week 1: Sept 4
Introducing mapping at ITP
Week 1: Sept 4

In class:
- Class introductions
- Overview of full syllabus
  Expectations
- Select topics for presentation

View+Discuss:
Eames’ Information Machine film
(1958)
Search Google video for “Information
Machine, Eames”
Week 1: Sept 4

Key questions for now into next week
• What is a map and what is mapping?
• Are maps ‘just’ tools for thinking, and if so, what about?
• What difference does the digital network make?

Resources
Janet Abrams/Peter Hall, Else/Where: Intro: Where/abouts (pp12-17) (pdf)
Week 2: Sept 11
Storytelling, shared experience, services
Week 2: Sept 11

In class:
  Discuss Else/Where reading
  Introduce core texts

View and discuss
  • How do maps reveal agendas + tell stories?
  • Who uses maps? Who makes them? Historical view
  • What are the questions that maps are answers to?

Resources (Storytelling):
Edward Tufte:
Visual Explanations (p27-37)
Snow’s cholera maps;
The Visual Display of Quantitative Information
(p40-41, 176-77)
Minard map of Napoleon’s retreat
Discuss to introduce next week
What’s the relationship between mapping and designing?
Is one just a means to the other?

When in working with new technologies to innovate are mapping tools most useful?

Mapping for service design:
Content+medium+mode/device+story

Resources (shared experience, services)

**Don Norman**, The Design of Everyday Things, ch3 Knowledge in the Head and In the World (pdf)

**Durrell Bishop** “Things Should Be Themselves”, pp541-48, in Moggridge, Designing Interactions (scan+pdf)

Mapping at large:
Attend an event as part of Psy.Geo.Conflux 2007 (13-16 Sept)
Week 3: Sept 18
Framing: Agendas and intentions
Week 3: Sept 18

In class
Review personal paragraphs and favorite map Q&As

Review PsyGeoConflux + Don Norman/Durrell Bishop

JYA guest (TBC)

View and discuss
The evolution of the London Underground Map:
Harry Beck’s original (TFL)

The Guardian music map
http://image.guardian.co.uk/sysfiles/Guardian/documents/2006/02/02/underground5.pdf
And Simon Patterson’s Great Bear,
http://www.artland.co.uk/Patterson_Great_Bear85.jpg
and
Paper poster of 1930s map
Vignelli’s Subway
Key questions for now into next week
What does mapping tell us about taxonomy and typology, about codifying information?

What elements of representation are available to map-makers?

Resources
James Corner “The Agency of Mapping” in Dennis Cosgrove, Mappings
http://www.art.uiuc.edu/projects/mobilemapping/corner.PDF
Watch out for oddly sequenced pages
Week 4: Sept 25
Organized Bits and Myths: Taxonomies and Topography
Week 4: Sept 25

In class
Review Corner essay

View and discuss
Networked, collaborative mapmaking:

Guest ER to introduce
Cabspotting TBC;

*(this may move up and swap with another earlier week, depending on when ER is in NYC in Sept)*

Key question for now + next week
Today we have the opportunity to co-author, interpret and use maps. Are we taking part in maps or taking maps apart?
Week 4: Sept 25

Resources
1) Nathan Shedroff
Towards a Unified Theory of Design
(on relationship btw data, info, knowledge, wisdom)
www.nathan.com/thoughts/unified/

From Nathan Shedroff's Unified Theory of Design
Assignment to conclude Section I:

This is DUE IN WEEK 6 (so do Shedroff Reading first, this week)

Begin your mapping ‘journal’:

1) Reflect on your own work/intended projects in response to any of: Mapping networks, mapping conversation, mapping territories, mapping mapping. Write 1-2 paragraphs, or draw to represent your reflections.

And

2) Select several maps from Katharine Harmon’s You are Here or any others from your own research. What are the questions to which these maps respond? Focusing on one or two in particular, tell a coherent story in a few lines of text about the range of questions and answers they represent.

Resources

Katherine Harmon, You Are Here
Part II: What are maps made of?
Week 5: Oct 2
From scrolls to scrolling

Giles Lane, Urban Tapestries
© Turnstone Consulting LLC 2007
In class:
Review Shedroff

Key questions for class discussion
A map on paper, a map on screen, a word in your ear:

How does the interpretive experience of mapping change according to the medium?

What’s the difference between instructions and a map? What do maps and board games have in common?

How might we use these artifacts to share experience/express a collective imagination?

Resources

Extracts from:
Janet Cardiff
Matthew Gidley on Perec
Homunculus

Eric Zimmerman, The Rules of the Game in If/Then (pdf)
Week 5: Oct 2

Remember to hand in your assignment from week 4 in week 6.

Two conferences this week:

Idea conference at Parsons
www.ideaconference.org
(Rachel is speaking on Thurs 4 Oct at 1.30pm)

And also on Oct 4

New Urban Research: Mapping New York Communities Workshop, An Intro to GIS and Community Analysis
See www.nur-online.com for details
Week 6: Oct 9
Extracting across many domains:
Plotting and scheming with maps
Week 6: Oct 9

In class
Hand in week 4 assignment;
Present the map narratives from
Second part of assignment.

View and discuss
How and when are maps constructed to
persuade and change behavior: How
do maps reveal insights, tell stories,
persuade and assist decision-making?

Frumin’s Fundrace ‘Visualizing
Democracy’ in Else/Where (p113-117
(pdf)
Josh On’s They Rule

Resources
2 groups, to read either
A) Denis Wood: The Power of Maps
(pdf);
Ch 1: Maps work by serving interests

B) Peter Galison, War Against the Center,
2001 (pdf);
http://www.mitpressjournals.org/doi/pdf/10
.1162/grey.2001.1.04.5
Week 7: Oct 16
Outta space into other realms…
In class
Galison in the context of Wood
Guest: DL (from Gehry) TBC

Discuss
- How do maps help us conceive non-physical and physical spaces and places?
- To navigate what kinds of geographical+information landscapes?
- What does representation of the intangible/invisible reveal?

Resources:
Eviatar Zerubavel, Time Maps: Collective Memory and the Social Shape of the Past, esp. The Social Structure of Memory (intro) and The Social Shape of the Past (pdf)

- NYPL Places and Spaces science maps: DVD and podcast
http://www.nypl.org/research/calendar/exhib/sibl/uelistsibl.cfm and
http://www.scimaps.org/nypl/
Week 8: Oct 23

...And back down to earth:
An introduction to urban mapping
Week 8: Oct 23

In class
Discuss Zerubavel and science maps
Is collecting easier than clarifying? (after Ben Fry)

View and introduce
- Children’s maps (Nottingham)
- Derive
- Mental maps
  Peter Gould, Mental Maps, intro/ch6 (pdf)

Logistics for fieldtrip in week 8

For next week’s trip
What signs, symbols and other elements of representation give a map its character?

Split into two groups
A) Kevin Lynch, Image of the City
Ch 3: The city image and its elements

Or

B) Denis Wood: The Power of Maps
Ch 5: The interest is embodied in the map in signs and myths
Week 9: Oct 30
Mid-semester fieldtrip
Week 9: Oct 30

In class:
Trip to the Queens Museum (TBC)
Journey time+Tour the Panorama at QMA
Discuss Lynch and Wood

Bring your copy of Else/Where

Key questions for now into next week
How do representations of places inform our experience of them?

Resources
In class
Rebecca Ross, The Perils of Precision, p184-185 in Else/where (a specific discussion of The Panorama)

After class
Alison Sant, Redefining the Basemap, http://intelligentagent.com/archive/ia6_2_interactivecity_sant_baseline.pdf

Italo Calvino, Invisible Cities (excerpts)
Week 9: Oct 30

After this trip, assignment to conclude Section II:
Preliminary intro to assignment for weeks 13 and 14; designate everyone to group A or B

Review map journal with Rachel during this week
Part III: What’s next in mapping?
Week 10: Nov 6
From why to how:
Representing relationships and the media of mapping
In class
Where is mapping today in the context of IT?

**Carlota Perez,** *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*

Key question
How else can we map besides on paper and on screen?

Resource
**Evan Ratcliff,** Google Maps Is Changing the Way we see the World, Wired, July 2007  
www.wired.com/techbiz/it/magazine/15-07/ff_maps
Evolution of the IT Industry

1890
PUNCH CARDS AND MECHANICAL CALCULATING
Punch card tabulators allow large-scale accounting, completing the 1890 U.S. Census in record time.

1939
VACUUM TUBES AND ELECTRO-MECHANICAL CALCULATING
The Atanasoff-Berry Computer paves the way for more complex calculations in science and industry.

1952
TRANSISTORS AND ELECTRONICS
AT&T licenses Bell Labs’ transistor technology, leading to solid-state electronics and more powerful computing machines for governments and large enterprises.

1964
MAINFRAME COMPUTING
The IBM System/360—first general-purpose, scalable and compatible family of computers—makes mainframe computing accessible to mainstream business.

1971
MICRO-PROCESSORS
Intel commercializes the first computer-on-a-chip, which powers devices from handheld calculators to the Pioneer 10 spacecraft; minicomputers emerge.

1981
PERSONAL COMPUTERS
The IBM Personal Computer sets a standard, accelerating the adoption of computing by individuals, departments and small businesses.

1994
THE INTERNET
The release of Netscape’s Navigator browser popularizes the World Wide Web for business and transforms personal computing devices into powerful information portals.

REPRESENTATIVE COMPANIES BY ERA
- Burroughs Adding Machine
- Computing-Tabulating-Recording Company (later, IBM)
- Felt & Tarrant Manufacturing
- National Cash Register
- Remington Typewriter
- Burroughs Adding Machine
- Eckert-Mauchly Computer
- Engineering Research Associates
- IBM
- Remington Rand
- Burroughs
- IBM
- Philco
- Sperry Rand
- Control Data
- General Electric
- Honeywell
- IBM
- RCA
- Sperry Rand
- Amdahl
- Data General
- DEC
- Fujitsu
- Groupe Bull
- Hitachi
- IBM
- Siemens
- Nixdorf
- Apple
- Compaq
- Computer Associates
- EDS
- IBM
- Intel
- Microsoft
- Accenture
- Dell
- EMC
- Hewlett-Packard
- IBM
- Intel
- Microsoft
- Oracle
- SAP
- Sun Microsystems

Industry growth data source: IDC. 40 Years of IT: Looking Back, Looking Ahead, An IDC Special Edition Executive Whitepaper authored by Chief Research Officer John Gantz, 2004

Historical data source: IBM
Week 11: Nov 13
GIS: Where physical place and information space intersect
Week 11: Nov 13

Intro to GIS

In class review
Ratcliff in Wired

View/discuss public policy/mapping work of:
Guests RRW+EY
TBC

Resource for week 13 (2 weeks’ time)


And Ch 7: *Can there be a cartographic ethics?*
Excerpt, Prison Expenditure, Brooklyn from SIDL’s Million Dollar Blocks
Week 12: Nov 20

Who are maps for and who could they reach?

In class

Guest SH on wayfinding/project mapping/voting project

In class resources
Laura Kurgan, Million Dollar Blocks

Minnesota Design Institute’s voting project (guest)
(http://design.umn.edu/go/project/VOTE)

Vote411.org pollfinder (guest)

Key question in class and for next week
What do maps exclude by what they include?

Resources: Keep reading for wk 13


And Ch 7: Can there be a cartographic ethics?
Week 13: Nov 27
Group A presentations
Concluding discussion Pt 1
Week 14: Dec 4

View and discuss
Group A Presentations
Guests critics TBD

In class discussion
Can there be a cartographic ethics?

What would ours be in light of everything we’ve covered/experienced this semester?
Week 14: Dec 4

Group B presentations and
Concluding discussion
Week 14: Dec 4

View and discuss
Group B Presentations
Guests critics TBD

In class
Can there be a cartographic ethics?
What would ours be in light of everything we’ve covered/experienced this semester?
How this class works
Widespread Content encourages dialogue and participation
Widespread Content requires some reading

Core texts
You Are Here, Katharine Harmon (ed)
Else/Where, Abrams/Hall (eds)
Mappings Dennis Cosgrove

Many other texts are available at the URLs provided in the syllabus that follows. Otherwise see the server for materials the instructor will upload for specific classes.
Read...but also **view**, **listen**, **share** + **draw** to learn

Each week we will:
- Addresses a specific topic under one of those three main questions.
- Recap of the previous week’s discussion,
- Review any preparatory reading or fieldwork assigned beforehand
- Preview next topic, readings or assignments.

Occasional guest experts/fellow mapgeeks will attend to contribute further insight or introduce a new topic.

Students lead discussions, the instructor or guest moderates.

Weekly, a core group of 2-3 students will lead a discussion, comparing a range of research, or individuals will present their own work for peer review and discussion.
Widespread Content invites presentations
About Presentations

As you will learn, mapping is as much about representation and display and story telling as it is about the raw data you collect.

A mapping activity in itself, all students in this seminar class will be expected to gather notes/drawings/insights as they progress through the semester and its assignments.

There will be opportunities for all students to share your insights through presentations.

Specific details about preparing these, formats for display and discussion and about assessment will be given during the semester.
Widespread Content involves assessment
About Assessment

**Graded Requirements**
- 1 short personal statement paper in week 2 (worth 20%)
- Moderating an individual seminar (worth 25%)
- Group project presentation (25%)
- Contribution to class discussion (continuous) (30%)
From time to time, the instructor will invite guests to participate in specific classes.

Information designers, city planners, programmers, architects from the East and West Coast, they will share their expertise in way-finding, dynamic data visualization, and GIS/geo-spatial mapping with us. Details tbc.

Some may also return for end-of-semester crits, to attend your presentations.
About this class

Class is held weekly
Room 442, conference room

Your seminar leader/instructor is
Rachel Abrams

Contact information:

Email: rda1@nyu.edu

Office Hours:
TBD and by appointment

Telephone

Class server
Questions now or later? Please ask Rachel.

Thank you.