

Data and Human Space

NYU Abu Dhabi Fall 2018

CDAD-UH 1033Q

Core competency: Data and Discovery

Meeting Time/Place: MW

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Office: A6 1151

Office hours: TuTh 1030-1200, or by appt

This course counts both as a quantitative (Q) requirement for the Core.

Course description:

Societies have traditionally used maps to represent, even construct, the spaces in which we live and the territories over which we assert control. But what becomes of the map in the (post-) digital age? Has our relationship to human space changed in our data-rich world? Are we unknowingly mapmakers by virtue of walking around with smart devices? This course explores the specific role that technology can play in our understanding of both historical and contemporary map making. Through regional and global examples of urban culture mapping, the course allows students to generate and interpret their own data within familiar environments. In addition to seminar discussion of readings and audiovisual materials, the course will feature guest speakers. It also has a lab component with two main assignments. The first will focus on the history of cartography in the greater Arabian Gulf region. The second will turn to Abu Dhabi itself to see how (and why) we might map some of its spaces using simple technologies. The course assumes no prior computer skills, but a willingness to explore new technologies is essential for success.

Teaching and Learning Methodologies:

- The course will be part seminar, part lab. The seminar portion of the course will involve discussion of selected pages of short readings, podcasts and recorded lectures and writing some reflective research blog postings about them. The lab portion will consist of hands-on creative and technical activities.
- Students will collaborate in group projects, as well as design, create and evaluate project concepts. They will present their practical work to the group incorporating feedback.
- Over the semester we will try out different digital environments—from the easy to the less easy—and use prepared materials to explore analysis of maps with computers. Students are encouraged to reflect critically on their engagements with tools and technology for what they allow us, and do not allow us, to say.
- All writing is public and open in research blog format. Students may opt for anonymity in these blogs and may also erase the content at the end of the semester if they so desire. They will also have the option of archiving their work in a digital repository.
- Accessibility will be a persistent point of inquiry in the course.

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Suggested Citation:

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Outcomes:

By the end of this course, students will have

- (1) Developed a basic awareness of the history of changing spatial technologies since the 1990s;
- (2) Compared and contrasted analog and digital representations of geographic space;
- (3) Learned basic ways to integrate digital maps into their own writing and research;
- (4) Gained important data literacy skills, such as creating and manipulating spatial data; as well as learned to describe and publish them for reuse;
- (5) Reflected critically about the evolving world of wearables, devices and privacy, especially from a locational perspective;
- (6) Participated collaboratively in project-based research about urban space;
- (7) Learned to model questions in the humanities using technology;
- (8) Practiced effective communication skills in a written research blog in addition to oral presentation format.

Policies:

Openness: One of the characteristics of the digital humanities is its open, public quality. Most of the work in this course you will be documenting in a site you create in your own NYU web hosting. It is a new and interesting experience for students to work in the open, since it asks us to think about our audience more than if we were only writing a paper for a single person to read. You will have your own web address in the form {avatar}.hosting.nyu.edu. You can use your own name if you want, or you can chose an avatar. If you do not want your postings to be public and open, it is possible for them to be protected with a password that you share with the instructor. At the end of the semester once all is graded, you can keep or delete your work. Your web hosting will remain active as long as you are a student at NYU— one of the final assignments of the course is designed to teach you how to make that data portable when you graduate from NYU.

Attendance and participation: *Attendance* and *participation* in class will be an essential part of the final grade. *Attendance* means that you are present and that you bring your laptop. Class *participation* means that you come prepared to discuss the materials, that you speak up when you have something relevant to say and that you are respectful of all students' desire to speak.

Attendance Policy: The course is based on regular, progressive exercises. It is required for students to attend course. A maximum of three unexcused absences in the semester is allowed,

but not suggested. Excused absences should come with a note or be negotiated with the instructor.

Device policy: Devices are allowed, even encouraged, in the course since they provide multiple points of access to information in our age. This does not mean a phone. You should not text in class. We will discuss “digital drift.” You should close applications that are not class related. Sometimes you will be offered the opportunity to connect your machine to the screen—in which case everything you see, the class will see. Keep your computer organized and orderly. In the case of some exercises and/or assessment you will be asked to close or put away your devices. Device abuse may require the instructor to revise this policy.

Other Course policies

- If you must leave class early, inform me in advance.
- If you know that you have to miss class, please inform the instructor ahead of time, and preferably in writing. Staying in communication is the key.
- Students should make sure the readings are downloaded to a device and that you have read them on the day they are required and that you have jotted down notes about them.
- Excused absences should come from a physician or a counselor, and are subject to verification.

Integrity: Academic integrity and honesty are central components of a student’s education. Ethical conduct maintained in an academic context will be taken eventually into a student’s professional career. Academic honesty is essential to a community of teachers and learners. Anything less than total commitment to honesty undermines the efforts of the entire academic community.

NYU Abu Dhabi expects its students to adhere to the highest possible standards of scholarship and academic conduct. Students should be aware that engaging in behaviors that violate the standards of academic integrity will be subject to review and may face the imposition of penalties in accordance with the procedures set out in the [NYUAD policy](#).

Requirements:

Students will be assessed according to the following breakdown:

Class participation 10%

I expect active participation from all participants in the course. This course will require experimentation with new digital environments and a willingness to try and fail. Between the course meetings, students may have to investigate a problem to learn how to do it themselves—taking initiative will be rewarded. In addition, we come to the course with different skills and helping out fellow students and fostering a collaborative spirit in the classroom will be rewarded. A laptop will be essential for almost every session. Participation will be assessed by the extent to which the students have prepared for in-class discussion and are ready to address the thought questions found in this syllabus. Attendance policies are described below.

Short assignments 40%

There will be short writing assignments every three weeks (5 total, i.e. 8% per assignment, I drop one of them). The format for this will be a blog, a key form of 21st-century public writing. Your first writing assignment will be on paper and then you will transform it into a blog—and I will ask you to reflect on the difference. They will be either reflective pieces on a conceptual issue that has arisen in class or a report or review about a project or experiment carried out. The main issue here is to learn to communicate ideas in an open forum and to develop a voice for research blogging. Students will learn how to install an instance of WordPress.org and to choose a theme appropriate to representing embedded digital materials. (Students who are proficient in other blogging platforms or sustainable web development may opt for those). Students choose at the end of the term if you keep your blog or if you delete it. See <http://hosting.nyu.edu> for more details.

Dataset 15%

We will be build on datasets built by previous NYUAD courses to practice using devices for capturing data to describe human space (Mapping Karak, [Food Cultures of Abu Dhabi](#), [Mapping Lorimer](#)). Students will not only collect data, but reflect on its ease and/or difficulty, from both a technical and social perspective. Detailed instructions will be distributed to students.

Final project 35%

Over the course of the term, we will engage in project-based learning. Each student will carry out a small individual projects using the ideas and methods we have covered in class to make a spatial model. The mini projects will be experimental and necessarily small in scope, but will require reflective analysis and contextualization. We will begin to work on these around the midterm and continue through the semester. They will be assembled in a blog portfolio with reflective essays before the last week of the term, including specifications for how such work might be archived. They will be presented in blog format online—there should be a total of about 1000-1500 words of writing across multiple pages in the site in addition to 5 clear visuals that help us understand your projects. You will be asked to present your project during exam week as well—you can present from your website. Detailed instructions will be distributed to students.

Schedule:

Week 1 From Lying Maps to New Forms of Knowledge?

1 (M 3 Sept) Introduction to the course (syllabus, location, methodologies, course drive)

Monmonier, [“Lying With Maps” \(2005\)](#).
Prunel-Joyeux, [“Do Maps Lie?” Artl@s 2.2\(2013\)](#)
O’Beirne, [What Happened to Google maps?](#)
[Google Maps now depicts the Earth as a Globe](#)

2 (W 5 Sept)

Watch: [Geospatial Revolution Episodes 1-4](#)
Listen: BBC 4 [“The Digital Human: Maps”](#) (starts 1:20)
Read: [Past, Present, Future of Geospatial Data Use](#)
Algorithms of Oppression (excerpt in drive)

Discussion: Paper maps vs digital maps. What are maps anymore?

Geospatial Data: New Knowledge or New Forms of Surveillance? Can we opt out from the geospatial revolution?

Week 2 **The Map and the Territory: Late 20th Century Mapping Technologies**

3 (S 8 Sept) On early spatial technologies and military intelligence

Watch: [Microfix, early GIS, c 1985](#)

Watch: [Data for Decision \(Canada Film Board\) 1967](#).

Watch: [“GPS will be the next big thing”](#) (1992)

Watch: [“Early 1990s GPS”](#)

Read: [“On Maps and Mapping Technologies in the Persian Gulf War”](#) (Clarke)

Compare 1993 map journalism with 2012 and 2018:

[1993 maps from book about the Gulf War](#)

[Snow Fall: The Avalanche at Tunnel Creek](#)

[A Extremely Detailed Map of the 2016 Election](#)

4 (M 10 Sept) **Mapping and the Digital Humanities**

Explore some spatial humanities examples:

[Digital Harlem / Virtual Harlem](#) (mentioned in the Jones’ article)

[Mapping the Lake District: A Literary GIS](#)

[Panorama: An Atlas of US History](#)

Read: Jones, [“Places”](#) *The Emergence of the Digital Humanities*, ch 4, also in drive

(W 12 Sept) Classes on a Tuesday/Thursday schedule

15 Sept *Drop deadline*

Week 3 **ArcGIS**

5 (M 16 Sept) Introduction to ArcGIS Online (with Taylor) – **meet in C2 339**.

6 (W 18 Sept) Introduction to StoryMaps (with Taylor) – **meet in C2 329**.

Week 4 **Web Hosting and Digital Identity**

7 (M 24 Sept) Instructor illness – follow up TBA

8 (W 26 Sept) **Hands on: Managing your own domain** – installation, organization, thinking about digital identity

Examples from previous courses

A Brief History of Domain of One's Own [Part 1](#), [Part 2](#)

[“Leveling up with Domain of One's Own”](#)

World Economic Forum, [Digital Citizenship, Creativity and Entrepreneurship](#)

Discussion: What would it mean to have a “domain of one’s own”? to control {yourname}.com? What would you want to be the first search results to be when someone googles your name? If you could shape your own digital identity instead of letting other third-party services do it for you, what identity would you shape? When you graduate what happens to your NYU hosting? How can you “back up” your digital identity?

Once you have received confirmation of the creation of your web hosting account, you will chose the name for your domain {yourname}.hosting.nyu.edu you can sign in [here](#) and create your own domain. Remember no spaces or special characters or upper case.

From the dashboard, try to download WordPress from the (most common) Applications at the top of CPanel. Be sure to chose a name for the directory like “curation” or “cadtuh1018” or something distinctive for this class. Choose an administrator username and password and write these down for safe keeping.

Try to configure your WordPress when you are done and publish some basic content. If you would like to watch some videos, [lynda.com](#) has many about wordpress (choosing a theme, customization). We will have much more of a chance to work with WordPress together, just try it out for now.

Blog 1: What are the elements of a spatial perspective that have interested you the most so far in the class? Refer back to the videos, reading or class conversations in your answer, citing them in your blog as you can.

Week 5 **Jumping into Mapping Projects**

9 (M 1 Oct) **Exploring Spatial Humanities Projects** Student presentations

Today you will present in groups (of two persons, listed below), and you will choose **two** of the three projects listed below. For your presentation, please plan on talking for 5-6 minutes **maximum** total about the projects your choose. I have split up the projects simply by going down the class roster. Be in touch with your partner before Monday, gather your thoughts, decide who will present, or how you will divide up the presentation. We will pass around the cable to present on your computer.

You might think about the following questions:

How do the projects represent research about space? What are the data contained in them? Where did they come from? How are those data “brought to life”? Do the projects “make an argument”? If so, what do you think that is? Is some special contextual knowledge needed to understand the projects? How many people worked on the projects? How long did they take? Are they finished? How transparent are the projects about goals, challenges? How might the maps represented be said to be “lies”? How might they be said to create new knowledge?

Group 1 (Tamer, Dhabia) [Atlas of Early Printing](#) | [Interactive Ibn Jubayr](#) | [Legacies of Labor](#)

Group 2 (Alyazia, Afraa) [London Chatty Map](#) | [Slave Revolt in Jamaica](#) | [“Moon”](#)

Group 3 (Autumn, Muhammad) [Mapping the Mahjar](#) | [Z-axis mapping](#) | [Comparing 1001 Nights](#)

Group 4 (Mikolaj, Jaime) [Stories of the Susquehanna](#) | [Photogrammar](#) | [Street Poetry \(In English and Italian\)](#)

Group 5 (Seungjun, Kevin) [NYC Space/Time](#) | [Going to the Show](#) | [Queering the Map](#)

Group 6 (Segun, Benjamin) [Mapping Dante](#) | [Torn Apart/Separados](#) | [Mapping Beirut Print Culture](#)

Group 7 (Laura, Aruzhan) [Mapping Paintings](#) | [Tenement Housing in Rio](#) | [Geography of the Post](#)

PS: For future reference, many more can be found [here](#) and [here](#).

10 (W 3 Oct) **Maps as “Data” about the Arabian Gulf Region, aka** Close reading maps without a computer.

Explore: Take a look at these openly available maps of Abu Dhabi, or that include Abu Dhabi and the UAE (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14), (15), (16), (17), (18), (19), (20), (21), (22)

What do the maps above represent? What do they tell us about the way spaces are understood and constructed by map makers? What kinds of data have the map making chosen to put on to the terrain? What kinds of power are bound up in these maps? Can we characterize them as data? If so, how? How are they different from the research projects we examined last class?

Week 6

11 (M 8 Oct) Guest speaker [Kaki King](#) (personal [site](#)) on data and performance

Watch [“The Neck is a Bridge to the Body”](#); [“The Data We Don’t See.”](#)

MEETING PLACE C3 116, our listed classroom.

How can data be inscribed into artistic expression? How can performance help us explore how data and the self intersect?

[View image on Twitter](#)



music
COM.AU

theMusic.com.au@TheMusicComAu

INTERVIEW - Ahead of her appearance at the [@sydguitarfest](#) we caught up with [@KakiKing](#) to talk about projection mapping, the evolution of her live show and taking audiences on a journey through light: <http://themusic.com.au/interviews/all/2018/08/03/kaki-king-rod-whitfield/> ...
[8:50 AM - Aug 3, 2018](#)

The correct link to the above interview with Rod Whitfield is [here](#).

12 (W 10 Oct) Georeferencing maps with MapWarper (with Taylor)

In advance of today's class, please sign up for a [MapWarper account](#).

Reminder: [Photogrammar](#), [Digital Atlas of New Haven](#)

Why did the map creators use georeferenced layers? What do they add to the project?

We'll start with this [map](#). We will do a hands on. Some directions can be found in the drive.

We will collectively geo-reference this [map of Kolkata](#) in 1924.

Blog 2 Choose one of the projects that you and your partner worked on. Write a blog posting of 400-500 words in which you explain where the data comes/seems to come from, how the map

tells a story, what it achieves and what its shortcomings might be said to be. Be sure to include screenshots. If you would prefer to work in a Google doc first and then publish to WordPress, you might try one of the many plugins that allow such publishing. Read this [article](#) for more information. (due 27 October)

Week 7

13 (M 15 Oct) Comparative georeferencing with ArcMap — in GIS Lab, C2 303.

We will geo-reference using another more complex tool, ArcMap, 4 maps of Mumbai in 1893, 1909, 1924, 1933 (resources in Drive).

14 (W 17 Oct)

Continued Georeferencing and feature extraction from maps — in GIS Lab, C2 303.

We will do an example of feature extraction (tracing lines, polygons, dots on a map) in ArcMap using our maps of Mumbai. This is turning raster data into vector data. Then we will do a hands on in pairs with this [map](#) of caravan routes in Abu Dhabi. This exercise will show you how to create some portable lines and polygons for your projects in ArcGIS Online.

Blog 3: Reproduce the ArcMap geo-referencing exercise for two of the maps of Mumbai. Choose at least two of the four maps of Mumbai. Write a blog posting about how the city is represented in a different way on those two maps. What are the differences due to? individual cartographic choice? temporal change? etc. You can use any of the additional maps found in [Wikimedia](#). ArcGIS is accessible from the locations on campus found on this [list](#). Be sure to include screenshots and transparency from ArcMap that make your point effectively. (due 31 Oct) NB: You may not opt out of this blog as one of the “cancellable” grades.

Fall Break 22-26 October! If you stay in Abu Dhabi, explore the city to get ideas for potential culture mapping projects!

15 (S 27 Oct) Midterm summary and discussion of mobile data collection. What kinds of data stories will we tell about Abu Dhabi?

Download the Survey 123 app for your phone in advance of class.

Create a sample survey about the trees.

Before class on Monday, please download the survey “Trees of the Highline” and complete it for at least ten trees on the highline. We will discuss them at the beginning of class on Monday.

Week 8 Self Quantification and its Discontents

16 (M 29 Oct) See the Abu Dhabi Food Cultures project and our trees of the highline results.

C2 303. Continued Georeferencing and feature extraction from maps — in GIS Lab,

17 (W 31 Oct) TED Talk: Gary Wolf "[The Quantified Self](#)" (5 mins)
[On the fitbit, sleep and gender](#)
[How wearable technology is disrupting the insurance industry](#)
"Interactivity, Wearability & the Rhetoric of Proposed Brain-Machine Interfaces" (Pedersen) – in drive

["Openpaths \(2011\)"](#) ["Help us resurrect OpenPaths"](#)

Discussion: What kinds of wearables/carryables do you own or use (fitbit, Apple Watch?) What kinds of data are generated by them? Can you qualify your own data as a map of yourself? Do you have access to that data? How private are such data? Do you agree with the claim that "technology is not an extension of people's lives, but is integral to it"?

Week 9 Urban Mapping Projects, or Towards an Intentional Quantification...

18 (M 5 Nov) "Geosocial Footprints and Geoprivacy Concerns" (Weidemann et al) – in drive

Trying the [geosocialfootprint](#) application

Collective vs individual quantification: [WikiPedia Live Monitor](#), [Edits per](#)

[minute](#)

Geolocating devices and human solidarity: Alan Walker's 2016 hit single

["Alone"](#)

Discussion: What do think about the idea that geolocating devices make us feel "not alone", as in the 2016 Norwegian pop hit, creating solidarity amongst like minded people (Walker)? (Hint: The 20-year old Walker is the main hacker at 0:27 sending the message "Walkers join.") Can you think of other artistic references to geolocation? What about the geo-traces you leave in the world? What tensions can you imagine between solidarity and tracking? Who possess the data you leave in the world? What kind of a "map of you" do they create? What is the definition of volunteered geographic information (VGI)? How can it be said to be "volunteered"?

[View image on Twitter](#)



[DJ Wrisley](#)@DJWrisley

I had forgotten that video of Fascination by the Human League begins with a map...

[10:45 PM - Sep 26, 2016](#) · [Abu Dhabi, United Arab Emirates](#)

19 (W 7 Nov) Guest speaker — Dale Hudson (Film and New Media) on the [Dérive app](#)

Blog 4: This blog posting should be written in response to the readings for 31 October and 5 November. What does the map of yourself look like? What ways can you think of that your self is quantified, either by yourself and your motion or by others and your transactions in the world? Are there ways that you can disrupt that? Connect your response to the readings. (due 20 November)

Week 10 Crowdmapping Abu Dhabi

20 (M 12 Nov) Looking at Other Urban Mapping Projects

[Linguistic Landscapes of Beirut](#), [Mapping Edinburgh's Social History](#), [Shanghai Street Food](#), [New York Scapes](#), [Mapping Little Bangladesh](#)

Check out this [course](#) at NYU Shanghai on culture mapping and this [one](#) at NYU New York and Buenos Aires

Discussion: With what depth do the mapping projects document urban space? How is the individual inscribed in such projects? In your individual project, you won't be able to achieve the size of the data that we can see here. What would you like to put on your culture map of Abu Dhabi? **Ideas:** karak stands (this one is partially mapped [here](#)), public art on the corniche, different Arabic stores of Khalidiya, services at the different Hafilat stops, varieties of *baqala* in a specific neighborhood, location of perfume shops, the difference between the inside and the outside of superblocks, the presence of your native language in public space in Abu Dhabi...

Wrisley/Hawat/Rahme "Creating Geotagged Humanities Data"

Blog 5: Describe the small structured data set (with spatial information in the form of polygons, vectors or points) that you would like to create about Abu Dhabi. The basic idea is to go beyond what you might be able to find in a map engine like Google. A good way to think about it is what file do you want someone else in the future (or near present) to open and be able to reuse in their own thinking about Abu Dhabi? In your blog posting, explain what you want kind of data you hope to capture. What part of the city will be included? Where will you get your data from? Will you use Survey123? or other data collection methods? How much of yourself do you want to have in the data? How community-based or anonymous would it be? (due 16 Nov)

21 (W 14 Nov) In class lab

Learning to embed ArcGis and StoryMap.

Week 11

22 (M 19 Nov) Individual project curation

23 (W 21 Nov) No class, Mawlid

Blog 6: Describe the concept of your final project. To what concepts in the reading will you link it? What elements of human space will you bring together? Geographic coordinates? georeferenced maps? mobile data collection? self-quantification? derive-style discovery? community building? What kinds of tools will you use? Will your information on the map only represent "evidence" (Hudson)? If your structured dataset is connected to the project (it does not have to be!), then what exactly is the relationship of the two? (due 25 Nov)

Week 12

24 (M 26 Nov) Individual project curation

25 (W 28 Nov) Describing our datasets for publication in [NYU's Spatial Data Repository](#) (with Taylor)

30 Nov (Martyr's Day) and 2 Dec (UAE National Day!!)

Weeks 13 and 14 Lab – Finalizing semester projects, write-ups, student presentations and critiques and public presentations

26 (M 3 Dec) Data analysis and linking to theory

Discussion of the portability and sustainability of data: Making a backup of your course wordpress and exporting it; what to do with web hosting after you graduate.

27 (W 5 Dec), 28 (10 Dec) Individual and group presentations in class

29 (12 Dec) – no class

Please complete your final blog, individual and collective exhibit by Th 13 Dec, 11:59pm. Further detailed instructions will be available for submission.

Rubric:

Rubric for academic blog writing in the digital humanities:

The tone of a research blog is decidedly different from academic prose writing, but many other things are included. Below is a rubric used to assess digital humanities blog writing:

Criterion	Exemplary	Well Done	Developing	Inadequate
Concision	Excellent balance of concision, interpretation and detail. Excellent use of visuals, cross-referencing.	Well balanced in concision and detail. Good use of visuals or cross-referenced with links.	Perhaps a bit too long or a too short.	Runs on for far too long, or conversely, does not demonstrate enough thinking and is too short.
Platform	Takes excellent advantage of the affordances of the platform.	Uses most of the affordance of the platform.	Some of the affordances of the platform are used, resembles more writing pasted into a website.	Basically writing pasted into a website.
Audience	Exemplary in the balance of public facing writing and translating the issues of the course to a general audience.	Very good in the balance of public facing writing and translating the issues of the course to a	Perhaps too informal or personal at the expense of the ability to communicate to	Either too technical or too informal.

		general audience.	an educated reader.	
Data	Includes downloadable links to all data used, well-structured and in appropriate formats.	Data provided, perhaps not complete, explained or well structured.	Data incomplete or poorly structured	Data not present.
Incorporation of Reading / Citation	Makes excellent use of 2-3 of the readings of the unit, or other web-based knowledge on the topic. Concisely integrated.	Good use of readings or other web-based knowledge on the topic. Basically integrated.	Has begun to learn about citation and links in web writing, but more improvement necessary.	Does not cite others, integrate the main ideas of the course, no links to web knowledge.
Process	Exemplary balance of explaining issues of process and interpretation of product.	Does a good job of describing process and product, but perhaps not integrated.	Focuses too much on the process or the product.	Either process or product is missing.