

Design for This Century [D4TC]

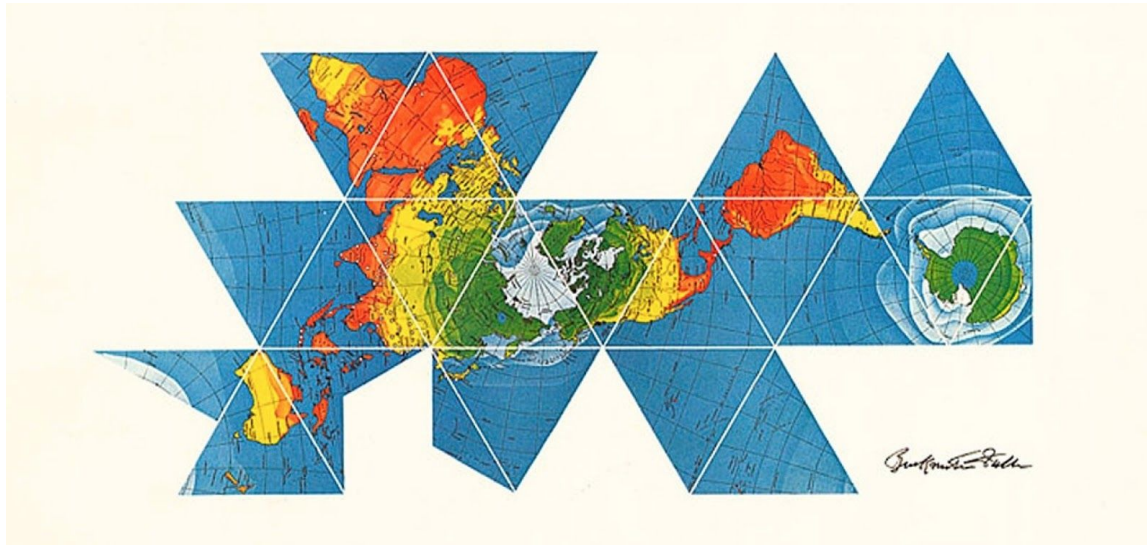
PGHT 5600/CRN 3965

Professors: Ed Keller, Melanie Crean

kellere@newschool.edu, creanm@newschool.edu

Office hours: [via e-mail appointment]

Fall 2017



Buckminster Fuller, 'Dymaxion Map'

Lectures: Thursdays 12.10-1.25, Johnson / Kaplan 66 W 12th rm 404

[Melanie Crean](#), [Ed Keller](#), *The New School, Parsons* [course leaders]

Mattie Brice, *Game critic, designer, activist* <http://www.mattiebrice.com/>

Keller Easterling, *Yale Architecture* <http://kellereasterling.com/>

Nora Khan, *writer, technology theorist, Eyebeam fellow* <http://noranahidkhan.com/>

Metropolarity, *sci-fi & action collective* <http://metropolarity.net/>

Ken Wark, *The New School, Lang College & NSSR* <http://www.publicseminar.org/author/kenwark/>

Stephanie Wakefield, *The New School, Lang College* <https://stephaniewakefield.com/>

Recitation Sections: Thursday, 1.40 - 2.55

Crn	Seq	Bldg	Room	Instructor
2853	A	6 East 16th Street	1006	Dora Vanette
2854	B	66 West 12th	404	Mattie Brice
2855	C	6 East 16th Street	1008	Christina LaFontaine
2856	D	6 East 16th Street	904	Justin Charles
2857	E	6 East 16th Street	909	Andrea Burqueño Castro
2858	F	6 East 16th Street	912	Mina Rafiee
2859	G	6 East 16th Street	603	Magnus Pind Bjerre
2860	H	6 East 16th Street	611	Sam Haddix
7641	I	63 Fifth Ave	511	Jon Beilin

Course Overview

Design for this Century is an introduction to thinking critically and affirmatively toward designing and working with technology in the epoch that is now emerging around us. This course will address the potential roles of art, design and technology in the 21st century, as well as key issues that people will contend with while working in these disciplines. We will discuss challenges and concepts that creative people should be familiar with at each of these three levels:

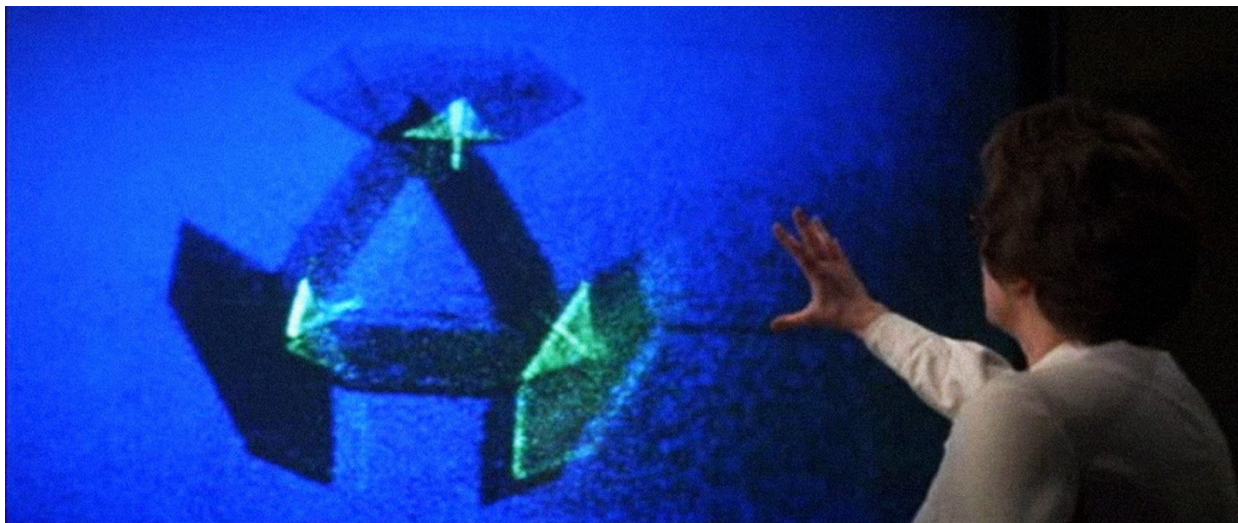
1. individual level, concerning: identity, representation, power, resistance
2. systems level, concerning: smart cities, biospheres, networks
3. global level, concerning: privacy, war, anthropocene

Ultimately D4TC radically questions what 'the human' is: how can we act, and how we can be, both in relation to each other, and to all aspects of our planetary scale context. We address these wider questions through the human and non-human relationships facilitated by technology and design in the broad frame of our planet today.

The aim of the course is for students to think critically about the present and then beyond, to think about the emerging century as a whole. We will ask what the potentials (and limits) of the human as an agent of technology might be in the context of this century's specific and unique challenges. Historical examples provide contrast to the unique situation of the present.

The lectures are curated systematically to take you through a series of issues working from a redefinition of the individual as they relate to larger systems, the evolving conflation between 'natural' and 'constructed' systems, and the reshaping of global patterns of ecology, information and power.

A substantial challenge in a course which takes on prediction for a century to come lies in the unreliability of predictions and forecasts in general; and in the context of a rapidly accelerating global context of technology, networks, cultures, and new 'natures,' this challenge becomes even more difficult. The scenarios we will examine, then, are presented not as an absolute prediction of where we may be a decade [or eight decades] from today, but as provocations to understand the key factors, catalysts, variables, and tasks that we need to engage as designers.



Andromeda Strain, Wise, 1971

Guiding Questions

Some key themes will emerge across the semester:

- What are the ethics, politics, capacities, and dangers of designing for social innovation, change?
- What are viable design approaches at the scales that we operate at now, from the cellular and chemical to the individual, urban, infrastructural, and planetary?
- How can historical time be rethought in the context of the design and technology of this century?
- How are the limits of life transformed in the landscape of emerging technology?
- Can design respond to the Anthropocene and climate change?
- What forms of political, material, and cultural structures are necessary when we think of designing for a CENTURY, and what kind of human is produced?

Schedule Overview

D4TC Fall 2016	Lectures
#1: August 31st	Ed Keller, Melanie Crean (Parsons) : Introduction EK : ~20 minutes on Design Horizons- Histories, Tech, Economies, Resources, Ethics, Time MC : ~20 min Pacemakers, shapes & patterns that define knowledge epochs, and slime mold
#2: September 7th	Ed Keller : Horizons of the Human: relations to the late-post-human; genders; tech; AI; alien life; geologic systems
#3: September 14th	Melanie Crean : on vision, representation and power
#4: September 21st	ROSH HASHANAH HOLIDAY, NO CLASS
#5: September 28th	MetroPolarity : Against Empire [CONVENING, MEET IN WOLLMAN , B500, W11TH ST, 5TH FLOOR]
#6: October 5th	Stephanie Wakefield : Infrastructure, design in gov, alt civic systems, transparency / participatory systems on civic level, environmental info
#7: October 12th	Melanie Crean : Algorithmic democracy (algo's role in social systems, advertising, privacy, democracy)
#8: October 19th	Mattie Brice [1st Manifestos due, 1st half read responses due]
#9: October 26th	Ed Keller : Design and 'Nature': Technology, Shadow Ecologies
#10: November 2nd	Nora Khan : Internet and Resistance [CONVENING, MEET UL102 , UNIVERSITY CENTER, LOWER FLOOR]
#11: November 9th	Melanie Crean : surveillance capitalism
#12: November 16th	Ken Wark (Lang): Where We Are: Climate Science as Sensory infrastructure
#13: November 30th	Ed Keller : Planetary Horizons: Infrastructure, Risk, Security
#14: December 7th	Keller Easterling (Yale): Extrastatecraft
#15: December 14th	FINAL CONVENING [Final Manifesto & 11 final read response deliverables due, MEET OLD TISHMAN 66 W12th 1st fl auditorium]

For details of the lectures, with weekly readings/assignments, see Appendix 1

Learning Outcomes

By the end of the course, students should be able to:

- Demonstrate the ability to critically analyze lectures and readings, and clearly articulate an individual opinion about their themes during recitation discussions.
- Demonstrate the ability to think hypothetically and speculatively, to make informed arguments about the the themes discussed in the course, ie, integrated systems of self, locality and planet; in the present as well as in the projected future.
- Demonstrate ability to construct, defend, articulate and write analytical arguments about contemporary design practices and themes covered in the course.

Course Components and Coursework

Lectures: the course has two central components: an open lecture with a question & answer session for the entire cohort; followed by small group “recitation” sections.

Discussion and readings: Each lecture is supported by required readings, which will be further analyzed in recitation sections. During discussion, students are expected to be conversant with main points of the reading, to incorporate social and creative examples addressing weekly themes, and to make connections across respective readings, theory and reference works. While there are various styles of active seminar participation, all students must speak in each recitation section.

Weekly blog posts: students will post short written and visual meditations about weekly readings and themes before their respective discussion sections. These responses are not meant to summarize readings, but rather to offer brief opinion and commentary. Reading Moderators (see below) will provide a short list of optional questions for students to respond to if they so choose. These writings should include analytic applications of course materials to contemporary events, creative works of art, design, technology etc. Weekly posts should be a minimum of 250 words, compiling 2500 words over the span of the course. Blog posts will be reviewed twice during the semester, before midterm and finals. Additionally, students may explore the option, with their recitation leaders’ approval, to edit and expand these blog posts to use as working material for their midterm and final papers.

Reading moderation: students will sign up in pairs twice per semester to serve as weekly reading moderators for online and in class recitation discussion. This involves writing a more substantial (500 - 600 words) introductory blog post which ends in a short list of discussion questions posted 48 hours before recitation, as well as initiating class discussion of their respective assigned texts.

Final Deliverables: students will compile reading responses, midterm & final papers into a single PDF document, to be delivered at their final recitation session. Though students are not required to write a response for readings assigned for the final class, the remaining 13 responses are due in PDF form at the final session.

Major Writing: Students will produce a midterm and a final paper.

Midterm Writing Assignment

MANIFESTO: TOWARDS a CRITICAL DESIGN

<https://docs.google.com/document/d/1wmhSkN6XHkY8Ox6NV5TZBIY8c6qtAsGSEpfK17HR78/edit>

All designers have a tacit or explicit "manifesto" of design values/ideas/axioms that, sometimes loosely, sometimes closely, help guide and direct their work. Having such principles/axioms helps designers keep their own voice; helps them resist pressures (especially commercial); gives their work a more critical edge. This exercise is designed to begin that process, i.e., to begin the process of your developing a future design manifesto, one that's not necessarily rooted in your present practice, but rather related to how you see yourselves in, say 1, 5, 10, 20, 40 years out of grad school.

For this assignment, you will write a short piece—at least 1000, but no more than 2500 words—that will show your capability to read the course assignments/texts in terms of winning from them some principles or ideas that can motivate and direct your practice.

Final Writing Assignment

[CRITICAL] DESIGN for Our Century

<https://docs.google.com/document/d/1bl8zNifGA2Oga9YFmmJCxRVORTPyU3P5EGV1laMUd2E/edit>

For your first, midterm writing project, we asked you to develop a "manifesto" of design values/ideas/axioms that, sometimes loosely, sometimes closely, would help guide and direct your work. For your second, final project, you will write a 2000 to 3000 word essay extending your Manifesto into the realm of design at a very comprehensive scale: our century and planet. In this text you will construct a critical design proposal for what you consider the most crucial challenge[s] we face across the century we are now 16 years into. You should describe your vision concerning a key aspect of the designed world that you would like to work toward. For example, what is your vision for networked information & communication (what we would now consider the internet / social media), how would you ultimately like it to function, what purpose would you ultimately like it to serve, and how might you design to achieve that? (For background on these particular design questions, see Maciej Cegłowski, [Web Design: The First 100 Years](#) (2014). You will explain why your design proposal is necessary; how it can be realized; who the design and user communities will be; who might fund it; what its lifespan will be [the entire century? a year? A decade?]; etc. You should include a summary overview of site, timeframe, general economics, required technology, anticipated roadblocks, manufacturing needs, etc. The paper should include drawings and images to support the text, but regardless of image content your word count should be a minimum of 2500 words, and no more than 3500-4000.

Rough draft due Dec 7, final draft due Dec 14

While there is no set textbook for the course we strongly encourage students to read seriously in areas of art, design and critical reflection on new technology.

Assessment and Grading

Students will be graded on four course components:

Participation in lecture, seminar discussion (20%)

Blog posts, moderating readings (30%)

Midterm paper (20%)

Final paper (30%)

Attendance is mandatory. If students miss three or more classes they will receive a failing grade.

Assessment within the sections is the responsibility of the faculty member teaching that section, who will give weekly assignments and evaluate participation. [For the criteria for grades A-F see the Appendix below] Further notes on weekly writing assignments will be issued later in the course.



Machinery of Life, Goodsell

APPENDIX 1: DETAILED LECTURE SCHEDULE

THE INDIVIDUAL: representing identity & designing agency, wks 1 - 5 **QUESTIONS**

We think we're designing for humans; but we are really designing for individuals in negotiation with other systems. How does the individual relate to these larger systems?

How are power & control constructed through images, design, networks, algorithms and economies?

How is agency constructed? What is it, who has it, how is it acquired and facilitated?

How do we design and represent our own identities, and design those of others?

What bodies and users are empowered through different kinds socially designed frameworks?

What are social, political, economic implications of the data we generate and information we monetize?

wk 1 (August 31st): Intro: scope, scale, questions, methods; short talks by EK, MC

Across the fields of media, technology, economy, we ask what DESIGN variables are, and how they are embedded in a network of social, political, cultural and material situations which condition the act of design- which indeed condition our ability to PERCEIVE the horizons of design possibility. The examples shown map an attempt to come to terms with what the horizons of design were in the 20th century, and what we face in the new century.

wk 2 (Sep 07th): Ed Keller: HORIZONS of the HUMAN lecture.

Relations between: humans and new humans; non-humans; technologies; general economies; AI; ecosystems; 'alien' life; geological systems and the planet.

REQUIRED READING

The-mastery-of-non-mastery http://www.publicseminar.org/2015/08/the-mastery-of-non-mastery/#.VljDCcr8_8f

xenofem manifesto http://www.laboriacuboniks.net/20150612-xf_layout_web.pdf

Bratton Outing Turing test <http://opinionator.blogs.nytimes.com/2015/02/23/outing-a-i-beyond-the-turing-test/>

Sand County Almanac, Leopold: excerpts <http://faculty.ithaca.edu/mismith/docs/environmental/leopold.pdf>

Corpus Atomicus lecture, Ed Keller <https://www.scribd.com/doc/110678124/Corpus-Atomicus>

REQUIRED SCREENING

Cave of Forgotten Dreams- Herzog Netflix: <http://www.netflix.com/title/70145740>

Keywords: Intelligence, limits of the human

RECOMMENDED READING, SCREENING

Under the Skin- Glazer [warning: extremely disturbing themes/images/action]

Amazon prime: <http://www.amazon.com/Under-Skin-Scarlett-Johansson/dp/B00JH3S0AI>

Google Play \$\$ https://play.google.com/store/movies/details/Under_the_Skin?id=5ITIIMYSGbY

The Accursed Share, Vol. 1- Georges Bataille [pdf] read: [Theoretical Introduction](#)

SUPPLEMENTARY readings, films

Southern Reach trilogy- [intro chapter](#)

<http://www.kunsthallewien.at/#/blog/2015/12/next-universal-interview-laboria-cuboniks>

<https://socialecologies.wordpress.com/2014/06/11/accelerationism-the-new-prometheans-red-stack-attack/>

<http://www.euronomade.info/?p=2268>

<http://tripleampersand.org/donna-haraway-the-dialogical-avatar/>

Blog Post for Cyborgs, Ken Wark: <http://www.publicseminar.org/2015/09/blog-post-for-cyborgs/>

Friends of the Pleistocene [Ellsworth & Kruse] on Sudbury geological time

<https://fopnews.wordpress.com/2011/07/29/star-wound-sudbury-ontario/>
Manufactured Landscapes- Baichwal, Burtynsky
The Logic of an Endless, Living Desert, Ed Keller lecture 2011, ProtoEcologies conference, Croatia
The Things, Watts http://clarkesworldmagazine.com/watts_01_10/

wk 3 (Sep 14th): Melanie Crean, historical relation of vision & power dynamics

Required Reading:

1. Sturken & Cartwright, *Practices of Looking. Introduction to Visual Culture*, 2009: "Images, Power & Politics," and "Representation," pp 9-16; "How We Negotiate the Meaning of Imgs" pp 26-30; "Appropriation & Cultural Production," pp 82 - 86.
Keywords (most from section titles): representation, identification, semiotics, myth, icon, the Gaze, the Other
Questions:
Is power related to looking, and if so, how?
Images don't inherently have worth, yet they do have monetary, social and political value; what gives them value?
Do images relate to identify, if so, how?
2. Michel Foucault, "The Eye of Power," interview from *The Impossible Prison*, pp 8 - 15
Keyword, panopticon, disciplinary gaze
Questions: how did the panopticon function when it was first designed? Does it still function now, and if so, how?
3. Judith Butler, *Bodies in Alliance* (excerpts), 2011
Keyword: "space of appearance"
Guiding question: who has the right to appear in urban space, who does not, and why?

Suggested Reading:

Sturken & Cartwright, *Practices of Looking. Introduction to Visual Culture*, 2009, "Spectatorship," "Discourse and Power," The Gaze and The Other," pp 101 - 120
Hito Steyerl, *In Defense of the Poor Image*, e-flux journal #10, Nov 2009
Stuart Hall, *Representation. Meaning. Language*, 1997

Key Concepts: representation, identification, the Gaze, the Other, panopticon, disciplinary gaze, space of appearance

wk 4 (Sep 21st): HOLIDAY, no class

wk 5 (Sep 28th): *MetroPolarity* [M. Tellez, Alex Smith]: AGAINST EMPIRE

How do "we" situate ourselves within/against "empire" and its repeated depiction as the natural pinnacle of human organization? A questioning of our own romantic myths in support of a ruling class/order and its necessary/benevolent social control. A discussion of the roles that media and the arts play in empire, gentrification, white supremacy, and white/heteronormativity as default.

MEDITATION

"We do not believe in the harmful dreams of utopia or dystopia. We exist between within fluctuating and beyond these 2 (binary) options. A binary is an outdated control switch for old technology that we no longer wish to live by. We would be fools not to study the reasons why the old technologies came to be, and how they've changed us to who we are. This is a necessary meditation in an ongoing process to sense a way out."

REQUIRED READING/VIEWING

What is the White Fantastic Imagination? | M Asli Duka: <https://www.youtube.com/watch?v=nICbiccXM1k>
What is Black Quantum Futurism?
read: <http://www.nodecenter.org/black-quantum-futurism-theory-and-practice-bqf-collective/>
listen: <https://blackquantumfuturism.bandcamp.com/album/black-quantum-futurism-soundwaves>
Weapons of Perception | METROPOLARITY
Is Sci-Fi Political? | METROPOLARITY
The Secret Life of Plants (1979) | documentary scored by Stevie Wonder (best version you can watch for free)

[Born Sexy Yesterday](#) | Pop Culture Detective

Key Concepts: Binary / non-binary, Cultural appropriation, Colonialism and empire, Black Quantum Futurism

RECOMMENDED

[The Sky Crawlers](#) | Mamoru Oshii (2008) (currently streaming on Netflix and less reputable places)

[Remember Life Outside the Ivory Tower](#) | M Téllez (read out loud to self in mirror)

[Style of Attack Report](#) | METROPOLARITY

[NOVA](#) | Samuel Delany

[Stories for Chip](#) | Rosarium Publishing

[Black Quantum Futurism](#) Vol 1 and [Vol 2](#)

[Blade Runner](#), 1982, bonus: Harrison Ford's entire career. See also *Predatory Romance in Harrison Ford Movies*

[The Romance of the Colony](#) | M Téllez

CONVENING

Instructions:

- The cohort divides into 14 - 15 groups, based on their alpha-numerical # from section
- Each group signs up for a keyword from the list below, one group per keyword. Groups co-author some type of written response or "treatise" for that keyword, based on their consideration of its current significance, and how they feel it might change in the future. Here are examples of treatises about Attention, Care Work and Interplanetary Colonization from [Speculations, the Future Is](#)
- Groups create a visual mapping of that theme, in relation to other events and concepts from the course / world / their experience. [laptop, or paper and sharpies... take pictures of all paper docs!]
- Groups generate 1 - 3 questions based on their writings and mappings
- If, at any time, a group wants to ask a question of the entire cohort, they should stand to get everyone's attention, and ask.
- Each group should create a single post for the Slack #general channel that includes their written response, mapping, and question(s)

Keyword list:

1. Binary / non-binary - Group 1
2. Black Quantum Futurism
3. Cultural appropriation - GROUP 5
4. Colonialism and empire - GROUP 4
5. Disciplinary gaze
6. the Gaze - Group 3
7. Identification - GROUP 2
8. Intelligence - Group 12
9. Limits of the human - Group 9
10. the Other - Group 11
11. Panopticon Group 14
12. the Poor Image
13. Representation - Group 6
14. Space of appearance
15. White fantastic imagination GROUP 7 / Group 15

SYSTEMS: smart cities, networks, biospheres, wks 6 - 10

QUESTIONS:

What are systems that connect objects, humans, populations, landscapes?

What forms of interrelated systems are inherent in creating a place, a city, and how does technology interrupt or facilitate that?

How are global systems of information, industry, finance, and ecology related to the construction of power?

wk 6 (Oct 05): Stephanie Wakefield

'I will discuss the contemporary problematic of the Anthropocene, and outline my argument that we are living in its 'back loop.' From there I will suggest that at present we are witness to three dominant ways of responding to this situation: 1. efforts to preserve and manage the old safe operating space (resilience, nostalgia), 2. perverse antihumanism (life of things, 'dwelling in ruins'), 3. free experimentation with new trajectories amidst an already unsafe operating space. I will emphasize how across these different responses we find some commonality, namely an emphasis on techniques of imagination, design, and pragmatic 'use' of the world.'

READING/FILMS:

** Wakefield, S (2017) "Field Notes from the Anthropocene: Living in the Back Loop" Brooklyn Rail, June.

<http://brooklynrail.org/2017/06/field-notes/Field-Notes-from-the-Anthropocene-Living-in-the-Back-Loop>

Interview by Miami New Times: "Urban Geographer Stephanie Wakefield on Climate Change: 'This Could Be Our Opportunity'"

<http://www.miaminewtimes.com/arts/stephanie-wakefield-climate-change-lecture-at-institute-of-contemporary-art-miami-july-15-9486685>

Wakefield, S and Braun, B (2018) "Oystertecture: infrastructure, profanation and the sacred figure of the human," Hetherington, K. Infrastructure, Environment, and Life in the Anthropocene. Durham, Duke University Press.

http://www.academia.edu/32608144/Oystertecture_infrastructure_profanation_and_the_sacred_figure_of_the_human

Braun, B. & Wakefield, S. (2018) "Destituent Power and Common Use: Reading Agamben in the Anthropocene," Coleman, M. and Agne, J. Geographies of Power. Georgia, University of Georgia Press. (Draft please do not circulate)

<https://drive.google.com/open?id=0BxeiMVMQITUASVNuQIBQM1NZSig>

Key concepts: anthropocene, resilience theory, C.S. Holling's "back loop" and back loop urbanism, aqua-urban life

Project references: Mary Mattingly's [Swale](#), Mel Chin's [Revival Field](#), Andrea Polli's [Queensbridge Wind Power Project](#), [Biosphere X](#), Britta Riley's [Window Farms](#), [Estudio Teddy Cruz](#)

wk 7 (Oct 12): Melanie Crean, [algorithmic democracy](#):

shifts in how we acquire info, debate, adjudicate, vote

READING:

[The Algorithmic Democracy](#), Kelsey Campbell-Dollaghan, Nov 14, 2016

[The Cloud, the State, the Stack](#); Benjamin Bratton in Conversation w Metahaven, 2014

[US Cyber Weapons, Our Demon Pinball](#), Sue Halpern, 2016 [SKIM]

RECOMMENDED VIEWING:

Douglas Rushkoff, [Generation Like](#), Frontline PBS video, 2014 (54 min)

RECOMMENDED LISTENING:

[The Wrong Number](#), NPR's On the Media from 11/11/16 on the role of data (and delusion) in the election

RECOMMENDED READING:

[Big Data Meets Brother as China Moves to Rate its Citizens](#), Rachel Botsman, 2017

[Machine Bias in Criminal Sentencing](#), ProPublica, May 2016

wk 8 (Oct 19): [Mattie Brice](#), designing power dynamics & identity for ourselves & others online

READING:

Naomi Clark and Merritt Kopas [Queering Human Game Relations](http://deadpixel.co/QGCON-2014.keynote.kopas-clark.pdf)
<http://deadpixel.co/QGCON-2014.keynote.kopas-clark.pdf> [as transcript]
 Donna Haraway's [Cyborg Manifesto: Science, Technology, Socialist-Feminism in Late 20th Century](#)
Recommended
 Allan Kaprow - "Assemblages, Environments, and Happenings"
 José Esteban Muñoz - "Introduction - Performing Disidentifications"

ALSO on OCT 19th: 1st Manifestos due, 1st half read responses due

wk 9 (Oct 26): Ed Keller: DESIGN and NATURE lecture

Cities, technology, architecture, networks, shadow ecologies. The interface.

"What will these emerging forms of hybrid media do to individual and collective agency, to the concept of a common that exists at a global scale? Massively open datascares, techniques of encryption, of datamining, of disinformation, are transforming the nature of the citizen/agent. These changes are taking place so rapidly that most of us do not notice, as the consequences of ubiquitous computation and communication have so deeply penetrated our daily lives, rendering us ever more as 'naked life' in the global theatre. Unanticipated forms of transparency become the rule rather than the exception." *Ed Keller*

READING**Required**

Sadie Plant- foreword to *The Spam Book*
<http://www.sadieplant.com/home/publications/spam>
 Mark Wigley_ *Network Fever*
 [pdf in google drive, <https://drive.google.com/open?id=0BxeiMVMQITUASFBacGM5UkNUT1E>]
<https://medium.com/after-us/towards-a-poetics-of-artificial-superintelligence-ebff11d2d249>

Recommended

Parikka and Sampson- [Intro to The Spam Book](#)
<http://www.e-flux.com/journal/53/59883/the-black-stack/>
<http://discovermagazine.com/2001/apr/featbomb>
<http://www.the-compost-gardener.com/haber-process.html>
 <<https://www.scribd.com/doc/110675262/Agent-Intellects-Pattern-as-a-Form-of-Thought>>
 <<https://www.scribd.com/doc/110673594/On-Architecture-s-use-and-abuse-of-models-of-life>>
 Carlson-Biological_Technology_in_2050
 [pdf in google drive, D4TC readings 2016]
<http://www.fastcodesign.com/3051140/designing-women/daisy-ginsberg-is-natures-most-deadly-synthetic-designer>
www.pnas.org/content/112/38/11899.abstract
https://archive.org/stream/fp_Silent_Spring-Rachel_Carson-1962/Silent_Spring-Rachel_Carson-1962_djvu.txt
<http://nautil.us/blog/-if-you-were-a-secret-message-where-in-the-human-genome-would-you-hide>
 Turning-away <http://tripleampersand.org/turning-away/>
<https://socialecologies.wordpress.com/2014/06/11/accelerationism-the-new-prometheans-red-stack-attack/>
<http://www.euronomade.info/?p=2268>

FILM:

<https://9anime.to/watch/ghost-in-the-shell-2-innocence-dub.ly23/xxo54z>
Koyaanisqatsi, Reggio

wk 10: Nora Khan (Nov 02nd): Force Change: Engineering the Sublime

Themes: Alien ontology of artificial and nonhuman intelligences as they relate to design; ethical potential of simulations; artificial seeing and aesthetics; on engineering artificial language, conversation, and interfaces, to enhance and force change; internet and resistance; human creativity in hybrid formation with artificial.

NOTE: we will have our 2nd **CONVENING**, we will meet in **UNIVERSITY CENTER, UL102**, lower floor.

READING:

The Great AI Awakening:

https://mobile.nytimes.com/2016/12/14/magazine/the-great-ai-awakening.html?_r=0&referrer=http://m.facebook.com

On the Beauty of Move 37: <http://moussemagazine.it/john-menick-ai-1-2016/>

Invisible Images: <https://thenewinquiry.com/invisible-images-your-pictures-are-looking-at-you/>

Benjamin Bratton, "Can the Bot Speak?" from the transmediale reader, 2017.
LINK / PDF to be sent

Jenn Frank, On Simulations: <https://unwinnable.com/2012/05/25/diablo-3/>

Making Music for the Future: Delores Catherino, who makes polychromatic music, talks about her process and thinking around 'music for the future' explicitly in this wonderful video
https://www.youtube.com/watch?v=ZMRUm_CoW-I

Recommended reading:

In Submission, Ryan Kuo: <http://artjournal.collegeart.org/?p=8621>

As part of a larger project, Building a Table: <http://artjournal.collegeart.org/?p=8621>

WhiteCollar Crime Risk Zones: <https://whitecollar.thenewinquiry.com/>

https://monoskop.org/images/7/7d/Hecker_Florian_Mackay_Robin_2015_On_Sound_and_Artificial_Neural_Networks.pdf

Gene Kogan and Francis Tseng: How Neural Networks are Trained:
http://ml4a.github.io/ml4a/how_neural_networks_are_trained/

Data Streams, Crawford and Steyerl: <https://thenewinquiry.com/data-streams/>
<http://www.andreykurenkov.com/writing/a-brief-history-of-neural-nets-and-deep-learning/>

THE GLOBAL: evolving planetary ecologies & systems, weeks 11-15

QUESTIONS:

What are the limits of life as seen through the lens of emerging tech?

Can design respond to the Anthropocene and climate change?

How do we, all of us, design war?

What are the politics & ramifications of speculation, on economies, ecologies, security & electoral process?

wk 11 (Nov 9th): Melanie Crean: Surveillance, borders, the global other

READING

- [*The Secrets of Surveillance Capitalism*](#), Shoshana Zuboff, 2016
- Machine vision, pattern recognition: Hito Stereyl, *A Sea of Data: Apophenia and Pattern (Mis-) Recognition*, 2016
- Aerial view; drone aesthetic: Honor Harger, [*Drones Eye View*](#), *a Look at How Artists are Revealing the Killing Fields*, 2012
- City surveillance & control: Conor Friedersdorf, [*Eyes Over Compton: How Police Spied on a Whole City*](#), 2014

Recommended Reading

- Zizek, Slavoj. "Big Brother, or, the Triumph of the Gaze over the Eye." 2002 (WARNING, Rated R)

Recommended Viewing

- Ondi Timoner, *We Live in Public*, 2009, on [YouTube](#) or Amazon

wk 12 (Nov 16th): Ken Wark

global sensing, militarization of weather & prediction

Climate Science as Sensory Infrastructure

How do we know the climate is changing? Through the creation of a science via a global infrastructure of sensory and computing infrastructure, among other things. Today we look at the design of that infrastructure, and then briefly at the design of urban infrastructure for New York to respond to one aspect of climate change, rising sea levels.

READINGS

<http://www.thewhitereview.org/features/climate-science-as-sensory-infrastructure/>

http://www.moma.org/explore/inside_out/category/rising-currents

THANKSGIVING THU NOV 23: no class

wk 13 (Nov 30th): Ed Keller, [PLANETARY HORIZONS](#) lecture

Climate change, global infrastructure, energy, resources, governance, risk, security. Scenarios.

"The future of the global city has already been determined. This 'already present future' was brought into being over the past three decades by rapidly emerging and unprecedented connections between security, biopolitics and ubiquitous computation. Accelerating technological innovations continuously drive the production of this new urban/planetary landscape. The shrinking cost and greater efficiency of computation create opportunities for the merging of economic, political, media, and biopolitical landscapes which until now been historically separate. Massively open datascares, techniques of encryption, of datamining, of disinformation; all are transforming the nature of the citizen/agent, rendering us ever more as 'bare life' in the global theatre, but also facilitating a new global collectivity. Design of the city now has to ask how we can harness networked systems of capital, transnational entities, and technologically enabled relationships to devise sustainable, innovative forms of spatial and political organization." *Ed Keller, Carla Leita*

REQUIRED READINGS and FILM CLIPS

Stross, How Low Power Can You Go?

<http://www.antipope.org/charlie/blog-static/2012/08/how-low-power-can-you-go.html>

The Socialist Origins of Big Data, Cybersyn article

<http://www.newyorker.com/magazine/2014/10/13/planning-machine>

Thalience text, Karl Schroeder

<http://www.kschroeder.com/my-books/ventus/thalience>

Global Catastrophic Risks- Intro [skim]

<http://www.global-catastrophic-risks.com/docs/global-catastrophic-risks.pdf>

film

- Code 46- Winterbottom, <https://youtu.be/RcRZacLNS48>

watch two excerpts 0 - 14 mins 36 - 50 mins

- Leviathan- Castaing-Taylor, Paravel [Netflix]

Watch trailer [5 minutes] on Vimeo; <https://vimeo.com/45252172>

Recommended READINGS and FILMS

Limits of Growth, Donella Meadows et al

<http://www.donellameadows.org/the-limits-to-growth-now-available-to-read-online/>

Bratton, various texts on the Stack, for example:

<http://mthvn.tumblr.com/post/38098461078/thecloudthestateandthestack>

NASA planetary skin project <http://www.planetaryskin.org/>

<http://www.fastcompany.com/3024393/internet-of-things/how-nasa-cisco-and-a-tricked-out-planetary-skin-could-make-the-world-a-sa#9>

Extinction, Introduction and browse

<http://www.livingbooksaboutlife.org/books/Extinction#Introduction: Framing the End of the Species>

Rainbows End, Vinge, excerpt from week 1

browse DIIGO weblinks for related topics/keywords

https://groups.diigo.com/group/d4_tc-fall-2015-readings

A Scanner Darkly- Linklater [<https://youtu.be/uTtVGQzJegs>]

Manufactured Landscapes- Baichwal, Burtynsky [amazon streaming]

Red Desert- Antonioni [Hulu streaming]

wk 14 (Dec 07): Keller Easterling, extrastatecraft

Repeatable formulas like spatial products and free zone world cities make most of the space in the world. Some of the most radical changes to that globalizing world are being written in the language of an almost infrastructural spatial matrix. Administered by mixtures of state and non-state players and driven by profound irrationalities, infrastructure space generates *de facto*, undeclared forms of polity that can outpace law, and it is the secret weapon of some of the world's most powerful players. Even at a moment of ubiquitous computing, infrastructure space itself is an information system with the power and currency of software—a spatial operating system for shaping the city. Exposing evidence of this operating system is as important as acquiring skills to hack into it. Infrastructure space prompts the rehearsal of expanded techniques of form-making and surprising approaches to political activism.

READINGS

Required

Keller Easterling, *Extrastatecraft: the Power of Infrastructure Space* (Verso, 2014), Introduction, Zone, and Disposition, 11-93.

<https://drive.google.com/open?id=0BxeiMVMQITUANTNPenFMLVBmNGc>

Recommended

Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network Theory* (Oxford:

Oxford University Press 2005), 43-52. http://dss-edit.com/plu/Latour_Reassembling.pdf

James C. Scott, *Domination and the Arts of Resistance: Hidden Transcripts* (New Haven;

Yale University Press, 1990), 136-152. http://libcom.org/files/scott_dominationandresistance.pdf

Rosalind Williams, "Cultural Origins and Environmental Impacts of Large Technical Systems," *Science in Context* 6, 2(1993), 377-403.

<http://rosalindwilliams.com/wp-content/themes/twentyten-child/resources/culturalorigins.pdf>

wk 15 (Dec 14): FINAL CONVENING [Final Manifesto & 11 final read response deliverables due]

APPENDIX 2: MIDTERM & FINAL PAPER DETAILS; RESEARCH RESOURCES

Midterm Writing Assignment

MANIFESTO: TOWARDS a CRITICAL DESIGN

Instructions on format, methodology, and example manifestos here:

<https://docs.google.com/document/d/1wmhSkN6XHKjY8Ox6NV5TZBIY8c6qtAsGSEpfK17HR78/edit>

Final Writing Assignment

[CRITICAL] DESIGN for Our Century

<https://docs.google.com/document/d/1bl8zNifGA2Oga9YFmmJCxRVORTPyU3P5EGV1IaMUd2E/edit>

APPENDIX 3: Research

Links for suggested readings, diigo articles, gdoc research directories: A comprehensive list of online references including book excerpts is available here as a supplement to the main readings:

https://groups.diigo.com/group/d4_tc-fall-2015-readings

And here in directories organized by keyword:

<https://drive.google.com/drive/u/0/folders/0BxeiMVMQITUAR1hSQIE0Njc4ekU>

A few suggested book titles are below, from a range of genres, including visual culture, critical theory, historical analysis, philosophy, general fiction and science fiction. Extracts from a number of these may appear in the weekly readings.

The Sixth Extinction, Elizabeth Kolbert

Extinction, Claire Colebrook ed.

The Collapse of Western Civilization, Naomi Orestes, Erik Conway

Vibrant Matter, Jane Bennett

This Changes Everything, Naomi Klein

Extrastatecraft, Keller Easterling

Global Catastrophic Risks, ed. Nick Bostrom, Milan Cirkovic

When Species Meet, Donna Haraway

The Global Genome, Eugene Thacker

Emergence, Steven Johnson

Making the Geologic Now, ed. Elizabeth Ellsworth, Jamie Kruse

Beautiful Data, Orit Halpern

Limits to Growth, Donella Meadows, Jorgen Randers, Dennis Meadows

Do Androids Dream Electric Sheep (and others by) Phillip K. Dick

Lilith's Brood, Octavia Butler

Practices of Everyday Life, Michel De Certeau

Critique of Everyday Life, Henri Lefebvre
 Power / Knowledge, Selected Interviews & Other Writings, Michel Foucault
 Practices of Looking, Marita Sturken and Lisa Cartwright
 Ways of Seeing, John Berger
 On Photography, Susan Sontag
 Jacques Rancière, The Emancipated Spectator
 Reassembling the Social: An Introduction to Actor-Network Theory, Bruno Latour
 Domination and the Arts of Resistance: Hidden Transcripts, James C. Scott
 Technology as Symptom and Dream, New York: Routledge
 A Cautious Prometheus? A Few Steps Toward a Philosophy of Design, Bruno Latour
 Black Looks: Race and Representation, bell hooks
 Megalopolis: Contemporary Cultural Sensibilities, Celeste Olalquiaga
 The Vision Machine, Paul Virillio
 Rainbows End, Vernor Vinge
 Shaping Things, Bruce Sterling
 Networked Publics, ed. Kazys Varnelis
 The Archeworks Papers, Vol1, #2, Clive Dilnot, Stanley Tigerman, Daniel Friedman
 The Geopolitical Aesthetic, Fredric Jameson
 A Hacker Manifesto, McKenzie Wark
 The Exploit, Alex Galloway and Eugene Thacker
 Deep Mapping the Media City, Shannon Mattern
 Telomorphosis- Theory in the Era of Climate Change, ed. Tom Cohen
 Means Without End, Giorgio Agamben
 Limits to Growth, Donella Meadows, Jorgen Randers, Dennis Meadows
 Annihilation, Jeff Vandemeer

APPENDIX 4: university policies

Resources

The university provides many resources to help students achieve academic and artistic excellence. These resources include:

- The University (and associated) Libraries: <http://library.newschool.edu>
- The University Learning Center: <http://www.newschool.edu/learning-center>
- University Disabilities Service: www.newschool.edu/student-disability-services/

In keeping with the university's policy of providing equal access for students with disabilities, any student with a disability who needs academic accommodations is welcome to meet with me privately. All conversations will be kept confidential. Students requesting any accommodations will also need to contact Student Disability Service (SDS). SDS will conduct an intake and, if appropriate, the Director will provide an academic accommodation notification letter for you to bring to me. At that point, I will review the letter with you and discuss these accommodations in relation to this course.

Grading Standards, Graduate

A	Work of exceptional quality
A-	Work of high quality
B+	Very good work
B	Good work; satisfies course requirements
Satisfactory completion of a course is considered to be a grade of B or higher.	
B-	Below-average work
C+	Less than adequate work
C	Well below average work
C-	Poor work; lowest possible passing grade
F	Failure
GM	Grade missing for an individual

Grades of D are not used in graduate level courses.

Grade of W

The grade of W may be issued by the Office of the Registrar to a student who officially withdraws from a course within the applicable deadline. There is no academic penalty, but the grade will appear on the student transcript. A grade of W may also be issued by an instructor to a graduate student (except at Parsons and Mannes) who has not completed course requirements nor arranged for an Incomplete.

Grade of Z

The grade of Z is issued by an instructor to a student who has not attended or not completed all required work in a course but did not officially withdraw before the withdrawal deadline. It differs from an "F," which would indicate that the student technically completed requirements but that the level of work did not qualify for a passing grade.

Grades of Incomplete

The grade of I, or temporary incomplete, may be granted to a student under unusual and extenuating circumstances, such as when the student's academic life is interrupted by a medical or personal emergency. This mark is not given automatically but only upon the student's request and at the discretion of the instructor. A Request for Incomplete form must be completed and signed by student and instructor. The time allowed for completion of the work and removal of the "I" mark will be set by the instructor with the following limitations: [You should include one the following standards, depending on the level of your course].

Undergraduate students: Work must be completed no later than the seventh week of the following fall semester for spring or summer term incompletes and no later than the seventh week of the following spring semester for fall term incompletes. Grades of "I" not revised in the prescribed time will be recorded as a final grade of "F" by the Office of the Registrar.

Graduate students: Work must be completed no later than one year following the end of the class. Grades of "I" not revised in the prescribed time will be recorded as a final grade of "WF" (for Parsons and Mannes graduate students) or "N" (for all other graduate students) by the Office of the Registrar. The grade of "N" does not affect the GPA but does indicate a permanent incomplete.

Divisional, Program and Class Policies

- **Responsibility**

Students are responsible for all assignments, even if they are absent. Late assignments, failure to complete the assignments for class discussion and/or critique, and lack of preparedness for in-class discussions, presentations and/or critiques will jeopardize your successful completion of this course.

- **Participation**

Class participation is an essential part of class and includes: keeping up with reading, assignments, projects, contributing meaningfully to class discussions, active participation in group work, and coming to class regularly and on time.

- **Attendance**

Parsons' attendance guidelines were developed to encourage students' success in all aspects of their academic programs. Full participation is essential to the successful completion of coursework and enhances the quality of the educational experience for all, particularly in courses where group work is integral; thus, Parsons promotes high levels of attendance. Students are expected to attend classes regularly and promptly and in compliance with the standards stated in this course syllabus.

While attendance is just one aspect of active participation, absence from a significant portion of class time may prevent the successful attainment of course objectives. A significant portion of class time is generally defined as the equivalent of three weeks, or 20%, of class time. Lateness or early departure from class may be recorded as one full absence. Students may be asked to withdraw from a course if habitual absenteeism or tardiness has a negative impact on the class environment.

Whether the course is a lecture, seminar or studio, faculty will assess each student's performance against all of the assessment criteria in determining the student's final grade.

- **Canvas**

Use of Canvas may be an important resource for this class. Students should check it for announcements before coming to class each week.

- Delays

In rare instances, I may be delayed arriving to class. If I have not arrived by the time class is scheduled to start, you must wait a minimum of thirty minutes for my arrival. In the event that I will miss class entirely, a sign will be posted at the classroom indicating your assignment for the next class meeting.

- Electronic Devices

The use of electronic devices (phones, tablets, laptops, cameras, etc.) is permitted when the device is being used in relation to the course's work. All other uses are prohibited in the classroom and devices should be turned off before class starts.

- Academic Honesty and Integrity

Compromising your academic integrity may lead to serious consequences, including (but not limited to) one or more of the following: failure of the assignment, failure of the course, academic warning, disciplinary probation, suspension from the university, or dismissal from the university.

Students are responsible for understanding the University's policy on academic honesty and integrity and must make use of proper citations of sources for writing papers, creating, presenting, and performing their work, taking examinations, and doing research. It is the responsibility of students to learn the procedures specific to their discipline for correctly and appropriately differentiating their own work from that of others. The full text of the policy, including adjudication procedures, is found at

<http://www.newschool.edu/policies/#> Resources regarding what plagiarism is and how to avoid it can be found on the Learning Center's website: <http://www.newschool.edu/university-learning-center/student-resources/>

The New School views "academic honesty and integrity" as the duty of every member of an academic community to claim authorship for his or her own work and only for that work, and to recognize the contributions of others accurately and completely. This obligation is fundamental to the integrity of intellectual debate, and creative and academic pursuits. Academic honesty and integrity includes accurate use of quotations, as well as appropriate and explicit citation of sources in instances of paraphrasing and describing ideas, or reporting on research findings or any aspect of the work of others (including that of faculty members and other students). Academic dishonesty results from infractions of this "accurate use". The standards of academic honesty and integrity, and citation of sources, apply to all forms of academic work, including submissions of drafts of final papers or projects. All members of the University community are expected to conduct themselves in accord with the standards of academic honesty and integrity. Please see the complete policy in the Parsons Catalog.

- Intellectual Property Rights: <http://www.newschool.edu/policies/#>