Abstract

Where do things begin and end? What are the role of things in our everyday lives? The things that we make, use, discard, admire, hate and struggle to understand have long been explicit and or implicit topics of anthropological scrutiny. This seminar engages with a diverse set of recent works that explore the topic of materiality with a global cross-cultural emphasis. Participants will examine, and become conversant in various approaches that have influenced – critical race and social justice theory, digital anthropology, decolonial perspectives, feminism, new materialism, as well as science and technology studies – the study of things: architecture, the body, the digital, the environment, everyday objects, food, infrastructure, and technology. Students will think through ways of bringing these overlapping but at times divergent perspectives into a dialogue with one another and discuss a variety of methods used to understand materiality. Due to the current closure of the Smithsonian's National Museum of Natural History, students will meet on the George Washington Campus. Over the course of the semester students will apply the range of approaches examined during to explore a single thing or discrete set of things.

The course is intended to help demonstrate how the core lessons of SIMA – understanding museum objects through close multisensorial engagement and other forms of analysis – can be applied to objects in our everyday life.

Materials contributed by Joshua A. Bell
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This is a course that I teach for both undergraduate and graduate students in anthropology at George Washington University: *ANTH 3991/6591: Materiality – The Anthropology of Things*. This version of the seminar is the third iteration that I have taught and is very much shaped by the realities of not being able to access the anthropology collections at the National Museum of Natural History (NMNH) during the pandemic. The seminar draws on core concepts that I have developed over the last decade of my teaching for SIMA. The seminar is intended to help students see the possibilities of engaging the material world around them. The students gain primary and secondary research skills as well as the ability to engage a wide-array of material forms. The course is focused on readings but with two projects designed to get them out into the world and or contribute to an exhibit happening at NMNH.

The seminar meets over the course of fifteen weeks for thirteen sessions (two breaks occur over the fall semester – fall break and thanksgiving) which last for 110 minutes. Due to the pandemic, the course met at George Washington University campus. In this iteration, the seminar consisted of 19 students (20 is the maximum). Previous iterations of the course have ranged from 8-20. This was the second time that I have offered it as a mixed upper undergraduate-graduate course. The majority of the students are anthropology majors with a

variety of minors in museum students, and then some students from American studies, International Relations, Sociology, and Decorative Arts.

An explicit aim of this course is to take core aspects of the engagement of objects that I have taught in relation to museum collections and take them outside of the museum and into the world. While a necessity of the pandemic, an underlaying core of this seminar is to take theories around objects and materiality and to apply them more widely. As part of this, the course engaged a new set of readings which I had not explicitly taught with before. A major aspect of the seminar is in-class discussions which is facilitated by the questions that are required to be posted via blackboard prior to the seminar. This helped students demonstrate their engagement with the readings and helped to seed in-seminar discussions. Part of the seminar's design that I work to instill is that the seminar is a safe space to ask any and all questions about the readings, and that we as a group are here to debate ideas but be respectful of each other. As with other seminars I teach, I use teaching as an opportunity to read things I have wanted to read. As a result, there is usually a 50% or more set of the readings that I have not read (other than skim) prior to the seminar. While this can mean that some of the readings fall flat, the upshot is that everyone is engaging the readings together for the first time. This helps to create a mutual sense of discovery and some equality in that we are all new to the material.

The first assignment that the students have is to lead a seminar. In this case due to the seminar's size, this was done in small groups. With the mixed level care needs to be taken to balance these groups and to make sure members contribute to the presentation equally. The other two assignments – *Exploded Street-Corner* and *Pre-Cellular Technologies and Objects biography* – are rather self-explanatory. However, aspects of each assignment should be unpacked.

Exploded Street-Corner builds upon a lesson that I have developed within SIMA and explored further at NMNH. As I detail in my other course *Anthropological Histories* in the repository, this is a lesson in close-looking, networks of makers, tools and materials and silences within objects (see https://naturalhistory.si.edu/education/professional-development/webinar-exploding-objects-teaching-everyday-things). Applying this to Street-Corners emerged from work developed with research assistant Katelyn Schoenike, a MA student at GWU, while we mentored two high-school students in NMNH's Youth Engagement in Science (YES!) internship program during the summer of 2018. We were working with the students to map cellular infrastructure in Washington DC, and the various bundling of technologies on street-corners captured my attention. Week 10 is when we met outside as a group and I demonstrated the assignment for them at a street-corner nearby. After discussing aspects of the readings, the students were given around 20 minutes to choose a corner of a four-corner intersection and start drawing with an eye to 1 or 2 key features of their corner. I walked around and spoke to each of them to encourage their work and point out aspects that they might want to consider. Here the key is not to be prescriptive but rather help the students see things they might have overlooked. We then reconvened as a group and I asked for volunteers to talk about what they focused on for each corner. Through doing this, I hoped to connect the reading to the realities

of infrastructure and get them to see how the drawing part of the exercise need not be super technical.

Pre-Cellular Technologies and Objects biography builds upon the tried and true methods of following the thing approach outlined by Kopytoff (1986) as well as Joyce and Gillespie (2015) but is aimed not at teasing out the particular trajectories of a singular object but rather to look at the social and cultural impacts of a given technology. Thus the assignment is more in keeping with social histories of technology. The aim of the assignment is to help create content that can be used by educators to engage visitors in the exhibit *Cellphone: Unseen Connections* that I am curating, as well as helping to create potential content for social media posts and the catalogue. Students will be credited with their contribution, and the hope is that in this small way the students can be part of the wider exhibit process.

MATERIALS POSTED (from Fall 2021)
00 Syllabus
01 Exploded Street Corner Assignment
02 Final Project – Cellphone: Unseen Connections – Pre-Cellular Technologies and Objects

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Materiality: The Anthropology of Things
Anth 3991/6591

I want to be a hairbrush. Recycle me.
IWantToBeRecycled.org
KEEP AMERICA BEAUTIFUL

Dr. Joshua A. Bell
Friday 11.10 – 1.00 pm || James Monroe (Mon) 252 (2115 G Street NW)
Office Hours: Friday 10-11 or by appointment
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Cover Image: "The Desire of Things" Baltimore, 2016 by Joshua A. Bell

Where do things begin and end? What are the role of things in our everyday lives? The things that we make, use, discard, admire, hate and struggle to understand have long been explicit and or implicit topics of anthropological scrutiny. This seminar engages with a diverse set of recent works that explore the topic of materiality with a global cross-cultural emphasis. Participants will examine, and become conversant in various approaches that have influenced – critical race and social justice theory, digital anthropology, decolonial perspectives, feminism, new materialism, as well as science and technology studies – the study of things: architecture, the body, the digital, the environment, everyday objects, food, infrastructure, and technology. Students will think through ways of bringing these overlapping but at times divergent perspectives into a dialogue with one another and discuss a variety of methods used to understand materiality. Due to the current closure of the Smithsonian's National Museum of Natural History, students will meet on the George Washington Campus. Over the course of the semester students will apply the range of approaches examined during to explore a single thing or discrete set of things.

Learning Outcomes

By the end of this seminar students will

- be conversant in the major theories in anthropology about materiality
- understand the ways in which these theories and key topics have been developed and applied in different settings and times in anthropology and adjacent disciplines
- be able to apply these theories to understand a range of things encountered
- be conversant in a diverse set of methodological skills to examine material culture
- have developed more critical speaking and writing skills

Assignments

1. **Class Participation and Engagement with the Readings – 20%** Students will participate in each seminar discussion – this means you will do two things: (1) send to the class your questions by 10am on the day of the seminar _three questions you have about the readings_. These are questions meant to demonstrate you have done the readings and need to be about content and or theoretical issues that the readings raise; (2) It means that you will each be expected to speak in class. This means saying reasonably well thought0out things that demonstrate that you have done and thought about the assigned readings. I strongly advise you to, use the questions you have sent me in the seminar.

2. **Leading Seminar Discussion & Questions – 20%** Student will work in pairs to lead a seminar discussion (Weeks 3-7; 9, 11-12). This does not mean that you will summarize the readings for the seminar, rather you will prepare a set of discussion questions that will be the basis for the seminar discussion which you will lead. _Please feel free to create a power-point, hand-out or bring something to help lead the discussion. I encourage you to be creative and critical about the readings._ I normally ask for a short paper as part of this assignment but am foregoing this, which means your grade will be based on your creativity and presentation.

3. **Exploding a Street Corner – 15%** As part of Week 10's seminar we will begin a short assignment that each student will complete on their own (due the following week on November 12). The assignment will consist of an exploded diagram of a street-corner. This consists of an annotated drawing of a street corner that focuses on 2 aspects of the materiality of a street corner. In addition to the drawing, you will write a 3-page paper (1.5 spacing) discussing your annotation and the technological relations you are elaborating in light of the readings. I will explain this project and provide you with examples.

4. **Final Project – 45%** Each of you will do a final research project (6 page paper, 1.5 space) that with either be a social/cultural history of a technology, or in consultation with me on a topic of your choice**. Regardless of your project, you will need to meet with me to discuss your project.** Having chosen a topic, using the readings for the seminar, as well as other sources, you will research and produce a final project that outlines a social/cultural history of your technological object (see the end of the syllabus for details).

October 29 - before or by the seminar you will email me an outline of your final project. This outline will provide in a minimum of two-page a sketch intended paper in addition to a working bibliography of relevant sources. While you can draw on materials from this syllabus, I expect that you will have done research as to what exists on the given topic. This is worth 15% of your final grade on the project. **To have a successful paper you will need to meet with me to discuss your project as the semester unfolds.**

December 3 and 10 - Given the size of the seminar, for our final two seminars (8-9 students presenting each seminar) students will each give a short presentation of their final project (10 minute, with c. 5 minutes for comments). While I don't expect your project to be finished at this point, I do expect a coherent and well-argued presentation. These presentations are designed to create a forum for group feedback about your topic, which will improve your final projects. They will count be 10% of your final project grade.

The final paper is due on **December 17 (before 12 midnight)**.

General guidelines for written assignments: Please submit assignments on time. All written assignments should be typed in standard fonts (12 point Times, Palatino, or Calibri are recommended) with 1-inch margins and 1.5 spacing. Please paginate papers and put your name on each page. Please also follow the citation/bibliographic format used in Current Anthropology.

All work should be submitted to me via email as a word document.

I strongly advise you to read Orwell's 1946 essay "Politics and the English Language" before you begin this and the other written assignment. Good writing takes time and thought: https://www.mtholyoke.edu/acad/intrel/orwell46.htm

5. Attendance to this seminar is mandatory and absences must be accompanied with a valid excuse. However, given the realities of COVID, if you are not feeling well please do not come to seminar but work with me to arrange how to connect virtually. I offer this as your participation is part of your grade. This does not mean I expect you to participate if you are feeling horribly, but if you have a minor cold and can function you should participate virtually.

   More to the point, given the realities of the pandemic, we may need to transition the course virtually in the event of new restrictions or in the event that I am not well. If this is needed, I will share a zoom link for the seminar.

Other Information
Email Policy: Email is a necessary evil, but it creates a false sense of social relations and allows us to become increasingly alienated from our colleagues and students. Please make every effort

to call me or come by my office hours if you have questions about this class, and its assignments.

Required texts are made available in the **GWU library**. Assigned articles and chapters will be available via e-mail as PDFs on blackboard. The readings are divided between **required** and **further reading**. **Further readings** are intended to help provide further context for the assigned reading, and should be read by those of you leading a seminar discussion.

- Chin, Elizabeth. 2016. *My life with things: the consumer diaries*. Durham: Duke University Press. *
- Mavhunga, C.C., 2014. *Transient workspaces: technologies of everyday innovation in Zimbabwe*. MIT Press.*
- Dawdy, Shannon Lee. 2016. *Patina: A Profane Archaeology.* Durham: Duke University Press.
- Liboiron, Max. 2021. *Pollution is colonialism*. Durham: Duke University Press.*
- Reese, Ashanté M. 2019. *Black Food Geographies: Race, Self-Reliance, and Food Access in Washington D.C..* Chapel Hill: University of North Carolina Press.*
- von Schnitzler, Antina. 2017. *Democracy's Infrastructure: Techno-Politics and Protest after Apartheid.* Princeton: Princeton University Press.*
- Crawford, Kate. 2021. *Atlas of AI: power, politics, and the planetary costs of artificial intelligence*. New Haven: Yale University Press.*
- Ishiguro, Kazuo 2021. *Klara and the Sun*. New York: Knopf

*Available via GWU Library online

Expectations: I expect you to come to the seminar having done the readings and be ready to actively discuss the topics at hand each class.

Week 1   (Sept 3)   Orientations - We Make Things and They Make Us
During this initial meeting we will discuss the syllabus and seminar's goals, and introduce ourselves to each other.

Week 2   (Sept. 10)   Materiality – Defining the Terrain
Materiality has become a defining, albeit contested term by which scholars refer to the intersections between object and subject, people and things. In this seminar we will discuss what the term means (what it doesn't) and where its limits may lie through the perspectives of Mol, Strathern, TallBear and Tsing.

Required Reading
- Mol, A. 2021. "Knowing" and "Doing" in *Eating in Theory*. Pp. 50-101. Durham: Duke University Press. **51 pages**
- Strathern M. 2001. "The Patent and the Malanggan." *Theory, Culture & Society*. 18(4):1-26. **26 pages**
- TallBear, K. 2019. "Caretaking Relations, Not American Dreaming." *Kalfou: A Journal of Comparative and Relational Ethnic Studies* 6(1): 24-41. **25 pages**

- Tsing, AL. 2019. "When the Things We Study Respond to Each Other: Tools for Unpacking "the Material" In *Anthropos and the Material* (eds) P. Harvey, C. Krohn-Hansen, and K. Nustad. Pp. 221-244. Durham: Duke University Press. **25 pages**

Further Reading
- Haraway, D. 1988. 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspectives.' *Feminist Studies* 14(3): 575-599. **24 pages**
- Bennett, J. 2004. "The Force of Things: Steps toward an Ecology of Matter." Political Theory 32(3): 347-372. **25 pages**
- Bell, J.A., Kobak, B., Kuipers, J., and Kemble, A., 2018. "Unseen Connections: Introduction." In Unseen Connections: The Materiality of Cell phones Special Issue of Anthropological Quarterly 91(2): 465-484. **19 pages**
- Newell, S. 2018. "The Affectiveness of Symbols: Materiality, Magicality, and the Limits of the Anti-Semiotic Turn." *Current Anthropology* 59(1): 1-22. **22 pages**

Week 3   (Sept. 17)   Things I: Everyday Things, Consumption and Identities
We live in a world where various things define our lives. Focusing on Chin's autoethnography we will consider the various intersections we personally have with everyday objects and how these engagements help configure our identities.

Required Reading
- Chin, Elizabeth. 2016. *My life with things: the consumer diaries*. Durham: Duke University Press. **220 pages**

Further Reading
- Kopytoff, I. 1986. "The cultural biography of things: commoditization as process." In *The Social Life of Things: Commodities in Cultural Perspective*. Edited by A. Appadurai, pp. 64-94. Cambridge: Cambridge University Press. **30 pages**
- Joyce, Rosemary A., and Susan D. Gillespie. 2015. "Making Things out of Objects That Move." In *Things in Motion: Object Itineraries in Anthropological Practice*, edited by R. A. Joyce and S. D. Gillespie. Pp. 3-21. Santa Fe: SAR Press. **18 pages**
- Weiner, Annette B. 1985. 'Inalienable Wealth.' *American Ethnologist* 12 (2):210-227. **17 pages**

Week 4   (Sept. 24)   Things II: Objects, Buildings and Time
One inevitability of our lives is the passage of time and with it decay. Through focusing on Dawdy's monograph, we will consider the nostalgic practices and things (everyday objects, buildings and the landscape) that make our world(s).

Required Reading
- Dawdy, Shannon Lee. 2016. *Patina: A Profane Archaeology.* Durham: Duke University Press. **155 pages**

Further Reading
- DeSilvey C. 2006. "Observed decay: telling stories with mutable things." *Journal of Material Culture* 11(3), 318-338. **20 pages**
- Jackson S.J. 2014. "Rethinking Repair," in *Media Technologies: Essays on Communication, Materiality and Society*. T. Gillespie, P. Boczkowski, and K. Foot (eds.), Pp. 221-240. Cambridge: MIT Press. **21 pages**
- Feld, S. 2015 Acoustemology, in *Keywords in Sound*, D. Novak and M. Sakakeeny, (eds.) Pp. 12-21. Duke University Press. **9 pages**

Week 5   (Oct. 1)   Things III: Technology, Mobility and Knowledge

Technology has long been a topic of fascination within anthropology being erroneously seen as a marker of civilization to more recently being an assemblage of material and social relations by which actions are carried out in the world. Through a reading of Mavhunga's examination of hunting practices in Zimbabwe, we will discuss this lineage and how technology moves and is materialized.

Required Reading
- Mavhunga, C.C., 2014. *Transient workspaces: technologies of everyday innovation in Zimbabwe*. MIT Press. **239 pages**

Further Reading
- Gell, Alfred. 1992. "The Technology of Enchantment and the Enchantment of Technology". In *Anthropology Art and Aesthetics*. Edited by Jeremy Coote and Anthony Shelton. Pp. 40-63. Oxford: Clarendon Press. **23 pages**
- de Laet, M., and Mol, A. 2000. "The Zimbabwe Bush Pump: Mechanics of a Fluid Technology." *Social Studies of Science* 30(2):225-263.
- Coupaye, L. 2020. Things ain't the same anymore' Towards an anthropology of technical objects (or 'When Leroi-Gourhan and Simondon meet MCS') In *Lineages and Advancements in Material Culture Studies Perspectives from UCL Anthropology*. (eds) T. Carroll, A. Walford, and S. Walton. Pp. 46-60. London: Bloomsbury. **14 pages**

Week 6   (Oct. 8)   Things IV: Pollution, Land and Ethics

We live in a world awash with the detritus of the stuff that we and others consume. Reading Liboiron's book we will think about the ethics, methods and urgency to understand the realities of this detritus and how it impacts human and non-human bodies as well as the ecologies we inhabit.

Required Reading

- Liboiron, M. 2021. *Pollution is colonialism*. Durham: Duke University Press. **156 pages**

Further Reading

- Nixon, R. 2009. "Neoliberalism, slow violence, and the environmental picaresque." *MFS Modern Fiction Studies*, *55*(3): 443-467. **24 pages**
- Latour, B., Stengers, I., Tsing, A. and Bubandt, N. 2018. 'Anthropologists Are Talking – About Capitalism, Ecology, and Apocalypse.' *Ethnos* 83(3): 587-606. **18 pages**
- Alexander, C. and O'Hare, P. 2020. "Waste and Its Disguises: Technologies of (Un)Knowing." *Ethnos* **24 pages**

Week 7   (Oct. 15)   Things V: Food, Racism and Social Justice

Food is a foundational aspect of materiality, helping to not only create our bodies but our relations with each other and the environment. Through Reese's examination of food access in Washington DC, we will consider the structures by which inequality have come to be, are currently enacted and are being challenged through food.

Required Reading

- Reese, Ashanté M. 2019. *Black Food Geographies: Race, Self-Reliance, and Food Access in Washington D.C..* Chapel Hill: University of North Carolina Press. **139 pages**

Further Reading

- Karrebæk, M.S., Riley, K.C. and J.R. Cavanaugh 2018. "Food and Language: Production, Consumption, and Circulation of Meaning and Value." *Annual Review of Anthropology* 47(1): 17-32. **25 pages**
- Jones, N., 2019. "Dying to eat? Black food geographies of slow violence and resilience." *ACME: An International Journal for Critical Geographies*, *18*(5): 1076-1099.
- Jegathesan, M., 2021. Black Feminist Plots before the Plantationocene and Anthropology's "Regional Closets" *Feminist Anthropology* 2(1): 78-93.

Week 8 (Oct. 22)   Fall Break

Week 9 (Oct 29)   Things VI: Infrastructure, Politics and Survival

We are surrounded by things which facilitate and make various aspects of our lives possible. Reading von Schnitzler's work on prepaid water meters in South Africa, we will think about the promises and failures of infrastructure and how this shapes politics.

Required Reading
- von Schnitzler, Antina. 2017. *Democracy's Infrastructure: Techno-Politics and Protest after Apartheid.* Princeton: Princeton University Press. **201 pages**

Further Reading
- Star, S.L. 1999 "The Ethnography of Infrastructure." *American Behavioral Scientist* 43(3): 377–391.
- Graham, S and Thrift, N. 2007. "Out of Order: Understanding Repair and Maintenance." *Theory, Culture & Society* 24(3): 1-25.
- Larkin, Brian. 2013. "The Politics and Poetics of Infrastructure.". *Annual Review of Anthropology* 42:327-343.

**** Social/Culture History of Technological Object Outline Due ****

Week 10 (Nov 5)   Things VII: Cities, Media and Networks

What are the technologies around us as we walk through the Washington, D.C. or any city? If infrastructures are designed to be invisible, what unseen connections can be made visible through their examination? In this seminar, we will be outside drawing and discussing infrastructure through the work of Mattern and Fukushima, and consider method through Gan.

Required Reading
- Mattern, Shannon C. 2017. "Introduction: Ether/Ore" and "Waves and Wires." In *Code + clay... data + dirt: five thousand years of urban media*. Pp. i-xl, 1-42. Minneapolis: University of Minnesota Press. **74 pages**
- Fukushima M. "Noise in the landscape: Disputing the visibility of mundane technological objects." *Journal of Material Culture*. 2021;26(1):64-84. **20 pages**
- Gan, Elaine 2021. "Diagrams: Making Multispecies Temporalities Visible." In *Experimenting with Ethnography: A Companion to Analysis*. Ballestero, A. and Ross, B. Winthereik, (eds). Pp. 106-120. Durham: Duke University Press. **14 pages**

Further Reading
- Burrington, Ingrid 2016. "Ground Level" and "Above Ground." In *Networks of New York. An Illustrated Field Guide to Urban Internet Infrastructure*. Pp. 47-98. New York: Melville House Publishing. http://seeingnetworks.in/nyc/
- *Cast in India* (Dir. Natasha Raheja, 26 min, USA/India, 2014)

Week 11 (Nov. 12)   Things VIII: Artificial Intelligence, Technology and the Earth

How is AI entangled with us and the planet? What are the intimate and macro-politics of AI? We will consider these issues through the work of Crawford.

Required Reading
- Crawford, K. 2021. *Atlas of AI: power, politics, and the planetary costs of artificial intelligence*. New Haven: Yale University Press. **237 pages**

Further Reading
- Amrute, S. (2019). "Of techno-ethics and techno-affects." *Feminist Review*, *123*(1), 56-73. **17 pages**
- Kwet M. 2019. "Digital colonialism: US empire and the new imperialism in the Global South." *Race & Class*. 60(4):3-26. **23 pages**
- Benjamin, R. 2016. "Innovating inequity: if race is a technology, postracialism is the genius bar." *Ethnic and Racial Studies* 39(13): 2227-2234 **7 pages**

**** Exploded Street Corner Due ****

Week 12 (Nov. 19)   Things IX: Robots, Humanity and the Future

What does it mean to be human in a world defined by machines? In this session we will think about robots and their entanglement with humanity through a reading of Ishiguro's new novel *Klara and the Sun.*

Required Reading
- Ishiguro, Kazuo 2021. *Klara and the Sun*. New York: Knopf **303 pages**

Further Reading
- Haraway, D. 2016. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Manifestly Haraway*. Pp. 5-90. Minneapolis: University of Minnesota Press. **85 pages**
- Suchman L. 2011. "Subject objects." *Feminist Theory* 12(2):119-145.
- Birhane, A., & van Dijk, J. 2020. "Robot Rights? Let's Talk about Human Welfare Instead." *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, 207–213. **7 pages**

Week 13 (Nov. 26)   Thanksgiving (No Seminar)

Week 14 (Dec 3) Presentations

Week 15 (Dec 10) Presentations

Week 16 (Dec. 17)   Final project due

EXPLODING STREET CORNER ASSIGNMENT

This assignment consists of two aspects: (1) an annotated drawing of a street corner in the Washington DC Metro region that focuses on 2 aspects of the materiality of a street corner, and (2) write a 3-page paper (1.5 spacing) discussing your annotation and the technological relations you are elaborating in light of the readings (particular Weeks 9, 10 - listed see below – and 11). This assignment is designed to get you to think about infrastructure and global connections through our material world. I've attached an example below – which is a combination of the image of the street corner I drew and partially annotated. You will see that I annotated the reflective paint on the ground and looked at the composition of the paint which has zinc in it. I then traced out the place of zinc in the planet. I could have easily annotated the pole, the trash/recycling cans, etc.

My guidelines to you all are as follows:
1. Don't worry about drawing - this is not an exercise to evaluate your drawing skills.
2. In choosing your street corner to explode - look for a corner that has some a variety of materials/things on it.
3. In looking at your corner – choose a 10 foot diameter from the corner to focus on. This is just a way to decide how far out to draw and what you will focus on.
4. When drawing make sure to walk around the spot. Look at things both from afar and up close. To this end, you could decide to annotate the DC city barcode label sticker which is on the side of a sign; or the sticker or graffiti tag on the pole/object.
5. Do tell me where your corner is and include a photograph of the corner with your drawing. This will help me see what you've decided to highlight and or not highlight.
6. Thinking about how far to go with your annotation - I am open to anything but in your three page paper just make sure to argue/explain why you have done what you've done. Here the key thing - is drawing on the last 3 weeks of readings (Weeks 9, 10 and 11) - substantiate your drawing and focus. For instance, in my example what does focusing on the zinc in the street painting help one to see/understand? What relationships and histories are made apparant by focusing on this aspect? Why does this matter? **Remember you do need to cite works from the syllabus**
7. Given the nature of the assignment, the citations for your annotations can be wikipedia and other "non-academic" sources. Much of the infrastructural knowledge is not in books/academic articles per say. Do however look at http://seeingnetworks.in/nyc/ as this has lots of useful identifications
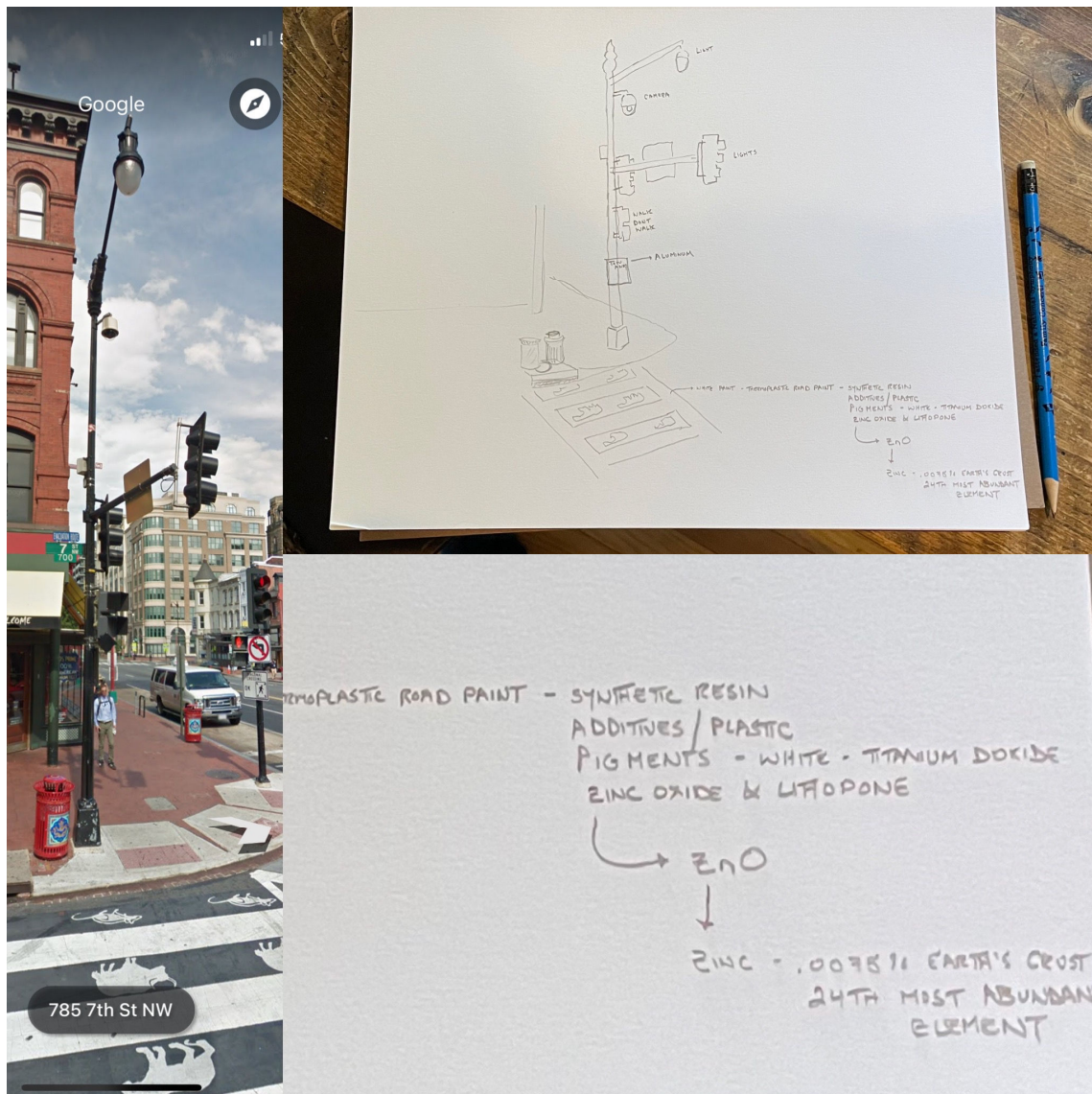
Week 10 Readings
- Mattern, Shannon C. 2017. "Introduction: Ether/Ore" and "Waves and Wires." In *Code + clay... data + dirt: five thousand years of urban media*. Pp. i-xl, 1-42. Minneapolis: University of Minnesota Press. **74 pages**
- Fukushima M. "Noise in the landscape: Disputing the visibility of mundane technological objects." *Journal of Material Culture*. 2021;26(1):64-84. **20 pages**

- Gan, Elaine 2021. "Diagrams: Making Multispecies Temporalities Visible." In *Experimenting with Ethnography: A Companion to Analysis*. Ballestero, A. and Ross, B. Winthereik, (eds). Pp. 106-120. Durham: Duke University Press. **14 pages**

Further Reading
- Burrington, Ingrid 2016. "Ground Level" and "Above Ground." In *Networks of New York. An Illustrated Field Guide to Urban Internet Infrastructure*. Pp. 47-98. New York: Melville House Publishing. http://seeingnetworks.in/nyc/
- *Cast in India* (Dir. Natasha Raheja, 26 min, USA/India, 2014)

Example of an annotation of the SW corner of 7th and H street NW. In this example I have included a shot taken from Google Maps (left), my drawing (upper right) and a detail showing my annotation of the Thermoplastic road paint (lower right). As I hope this example shows the point is to explore connections and materials materialized in the street corner, and think about where things begin and end.

FINAL PROJECT - CELLPHONE: UNSEEN CONNECTIONS - PRE-CELLULAR TECHNOLOGIES & OBJECTS

The goal of this project is to three-fold: (1) to create object biographies of the technological objects (see below list). These objects have been assembled range from those were in use in 1973 (the year of the first cellphone call) until 2007 when the iPhone emerged and smartphones began to become widespread. These are all objects/technologies that the smartphone has subsumed into its functions; (2) the object biographies are intended to be a resource for exhibit volunteers/docents who will be leading tours of the exhibit Cellphone: Unseen Connections (opening in June 2023), and to help with educational prompts; (3) the biographies are also intended to help with provide research for the exhibit catalogue and for social media around the exhibit. If your work is used, your authorship will be noted, and your piece attributed.

The idea behind the display of these technologies and their earlier forms is to provide visitors with a point of reflection about changing technology and the shift from analogue to digital. Biographies need to be 6 pages long (1.5 pages not including bibliographies) and accompanying media references. The entries should do the following: (1) give a date of when the technology first emerged, who invented the technology and how the technology (in broad terms) changed from the 1970s to 2007, key cultural facets of the technology during the period. Please feel free to make note of key cultural references found in movies, TV shows, novels and music, etc.; (2) please follow the tone of the exhibit (which I have pasted below); (3) In addition to the sources you cite for the entry, you should compile a bibliography of key sources (5-7 sources) that someone wanting to know more can follow up with – that is key texts that can serve as further reference. Again the key thing here is to think about the cultural/social history of this technology; (4) finally as part of the biography you need to compile a list of examples from the Smithsonian archives and collections of these technologies. These could be key ads, images by artists, and objects. You should use the Smithsonian Collections Search Engine (https://collections.si.edu/search/) which crosses all the museum's online collections. These references can be listed after the bibliography.

Voice and Tone

When reading text in this exhibition, visitors should feel that they are engaging with a **knowledgeable explainer and compelling storyteller**—someone who can get to the heart of the matter succinctly and without jargon. The voice, or persona, of this exhibition is **authentic, informative, trustworthy, and conversational**. Some labels may feature the first-person voices of cellphone users, producers, designers, repairers, and recyclers, as well as experts in the field.

Based on our key insights about our target audience revealed in visitor testing, the tone, or attitude, of this exhibition strives to be **candid, personal, clever, and provocative, but not moralizing or preaching**.
- The exhibition should be straightforward and to the point in presenting tough or complex topics.
- The text will engage visitors directly in an informal and familiar manner.

- We will play with words and meanings, turn visitor expectations on their heads, and apply unexpected twists to intrigue visitors and get them thinking in new ways.
- Where appropriate for the content and goals of the exhibit, the text will boldly challenge visitors through unconventional statements, speculative questions, and multiple perspectives.

This exhibition will not lecture and is not meant to be an explicitly didactic or comprehensive survey of the topic.

Technology List
As noted this is a list of technologies and objects which the smartphone has subsumed (but not necessarily replaced) through its functions.
1. Magellan
2. GPS
3. Pedometer
4. Measuring tape
5. Light meter
6. Radio
7. CD Player
8. Walkman
9. Boombox
10. Payphone
11. Walkie talkie
12. Pager Scanner
13. Bulletin board
14. Fax machine
15. Microscope
16. Flashlight
17. Calculator
18. Audio tape
19. video camera
20. still camera
21. VHS tape
22. photo album
23. television
24. portable video game console (Nintendo, etc)
25. encyclopedia
26. newspaper
27. comic book
28. Rolodex
29. yellow pages
30. Takeout menus
31. Wallet