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Reflections Paper

To begin with, I tried and sampled about 2 groups before deciding on my third group, with Kennedy and Long, a study of the smart cities phenom, with a concentration on Sidewalk Toronto. This process of elimination was interesting. With such an open format, I knew I wanted to pick something I felt strongly about. I was drawn to the idea of the smart city because it's an area I think most of us have lived through, as our cities have become automated around us.

At first, the study of smart cities was overwhelming. I think I read through 9 papers before I started to see a pattern, and started to realize what the paper needed to be about. Climate change is something I'm passionate about and the link between smart cities and climate change was pretty apparent. Whether it be mass transit, or bicycling and walkability, or the mass timber projects, there were many aspects to the project which appealed to me as climate specific.

At this point, I took it upon myself to direct the team to concentrate on separate aspects of the project. The team seemed to appreciate my direction, and we got to work on it. I would focus my energy on an introduction to aspects of climate change, and Kennedy and Long would focus on Toronto and Portland respectively. I suggested putting some emphasis on Portland because it's a city we live in and I felt it would lend a healthy bit of weight to our observations.

I organized the articles according to what I thought was a good order, and we started working on some slides to demonstrate our understanding of the material. My partners seemed comfortable, but I immediately started feeling a bit daunted by the task of conveying the urgency and truth of climate change, while keeping it educational and trivial enough to be an introduction. Eventually I decided on the pattern of worldwide, to local, to show that the world as a whole was in danger, and we have to act locally to save the planet.

This was a great opportunity to talk about the Paris Climate agreement and some local activism happening, with groups such as Greenpeace, 350.org, the Sunrise Movement and Extinction Rebellion. This was also a great opportunity to learn about and get involved in the Zenith Tar Sands project that is trying to ramp up development here in Portland by expanding efficiency by

up to 4X. Fossil fuel infrastructure is something the city has promised to not promote, so this bringing this to light in class was a nice benefit to spread the messaging about what is happening in our city.

Ultimately, the slides seemed like a success. I was pretty satisfied when the presentation ended and many people seemed to be clamoring for more information about what could be done. Indeed the situation calls for a lot of urgency, and there is much that can be done on an individual or collective level, as a society, but we do have to act now.

From here, it was important that we focused on a paper which delved deeper into the topics and conveyed a greater sense of learning process. I believe the paper became a truly high point in the project, as it allowed me to truly drill down to each topic while glossing over filler bits that were more important for dramatic presentation, but wouldn't necessarily belong in a paper. For instance, we can get across many meanings in a short bit of time in the paper with links and references, because it can be assumed that a reader can research topics on their own where they must be filled in, and gloss through topics they are familiar with.

For this reason, I included 17 individual links for my part of the paper on climate change. This proved valuable, as I was able to convey the information of growing cities, and the concept of saving the city, that I have been learning about through research. A saving grace of this leg of the project was when I read the book, "This is not a drill." This handbook for Extinction Rebellion activism proved invaluable for its chapter on sustainable cities, authored by Paul Chatterton. Paul's chapter led me to purchase his book, Unlocking Sustainable Cities, where I discovered more enlightened ideas about the future of sustainable cities.

Paul talks about the "car free city," the "Biocity" the "Post Carbon City" and the "Common City" as some of his main concepts. These proved to be fuel for the fire and a great direction for the paper to go in. Using Paul's overall concepts, I laid out some information in the paper I thought would be relevant for a reader attempting to understand what would go into a truly sustainable city that could be resilient to climate change. This kind of framework I felt would help people digest the following writings on Toronto and Portland, as well as tying them back into the world at large.

It is interesting to note that both books I ended up buying to supplement my education were published in 2019, so I was rather surprised when the biggest influencer of all came in the form of an older idea, "Permaculture."

Permaculture design principles is an idea that goes back a few decades, but is now recently being applied to cities in a more responsible way, which is hopefully not too late. The ideas of

permaculture, and the lens through which it allows you to see the world, can help in designing more sustainable cities. This education was reinforced by the website, permaculturepriniciples.com, and of course several youtube videos which provided amazing insight into the theory and rhetoric behind the philosophy.

Eventually, this idea led to what I felt should be the final presentation, a brief introduction to permaculture with an emphasis on city life. This became another high point of the class, as the concepts of permaculture were certainly a powerful tool to share with peers. After some discussion, we decided that the presentation would be the opposite of the paper and previous presentation, and the overall concepts, such as climate change and sustainable cities, would be presented last. This turned out to be a good idea, as it left more opportunity for discussion.

The main takeaway I felt was that slow change is ever so important, especially in our field, because big failures can be lead to big problems. Slow, cutting edge solutions (a concept of permaculture) are good because they allow you to make changes and interact in the moment. This taught me that some problems may not necessarily lend themselves to big coding and engineering problems. For instance, I often find it difficult to identify where my computer science knowledge would be most useful. Permaculture teaches us that this is ok. Just because we have the ability to write complicated models, might not mean that we need to do it or that it should be done. Sometimes it is best to interact and observe (the first principle of permaculture). Of course, interacting and observing is always revisiting, as permaculture creates a circle.

The parts of the course I liked were the work we did together. I did not always appreciate the bias involved in the class surveys, etc. Sometimes I felt the lessons they taught were not worth the risk of alienating people with their differences. For instance, as a vegan, I felt the food survey was offensive. At the end of the class, we all had baked vegan treats, which was nice, but I'd actually prefer that a holistic approach be taken here where more consideration is taken regarding the carbon footprint of society's food. We can't take anything for granted. Perhaps just a watermelon from a local grower can be shared.