San Francisco Space Fiction

Notions of nature in a Dataism age

Master Graduation Project of Leyang Chen
TU Delft | Landscape Architecture
In the recent years, I was often in a deep insecurity. I'm afraid, one day, I'll wake up losing all my super abilities, curiosity and possibility. Now, I'm glad that they are still with me, in my master graduation project.

Till now, it sounds still risky that I have chosen such a fantasy as my graduation project, Space Fiction. As my first mentor Inge said for several times, "it is an experiment for all of us; and we should all be aware that it is also a risk". We witnessed the project lost and reborn. Now, looking back to the trials and failures in the last year, I finally get a holistic view and find that the crucial phases of the process can be drawn out as the growth of a tree.

The Roots: Space Fiction

The concept Space Fiction came after P1. I presented my P1 pitch in front of the whole Flowscape studio and proposed a research topic about long-term adoptive urban development strategy reacting to sea level rise, which harvested almost no reaction or discussion. In another word, it was boring. The only thing I can't bear in my life is to be boring for a second, let alone to do a boring project for a whole year. From that moment on, I made up my mind to create something emotional and controversial. If it's about future, let it be a radical one.

I started to go bold and search for a fascination from my personal interests. Science fiction is one of them, which inspired me to question, is climate or sea level the only significant change when we talk about the time scale of 100 years. As the Canadian writer, Margaret Atwood, wrote, "it's not climate change; it's everything change." (2015) Later, the term "Space fiction" is fabricated to address my role as a landscape architect. Accordingly, the research question was formulated as, what new urban spatial configuration can adapt to the long-term environmental changes.

In this stage, architectural utopia and Capriccio are taken as references for the case study.

The Trunk: Scenario Study

While I was mapping and analyzing the site, San Francisco, a methodology was needed to theorize the research and limit the boundless imagination. I chose the most popular tool for future study, scenario making. By drawing lessons from the cyclic approach, scenario making technics and scenario typologies, I built up my own methodology. The complex system contained 3 cyclic phases, the predictive scenario, the explorative scenario and the normative scenario. Each phase can be operated in 4 steps, scenario base, scenario context and visualization and reflection.

This methodical tool offered a way to integrate the
scientific scenario making and intuitive speculating through constant reflection. However, it has its limitations. Scenarios are mostly used for a relatively short future within 30 years, thus variations are differed by one or several actions. My project has a time span of 100 years and is aiming to consider several aspects of changes, which makes the design process too intricate. My solution at that time was to take reactions to nature in the condition of climate change as the domain variable and redeem the other variables as outcomes. Despite this doubtable simplification, I proposed resiling as the base for the predictive scenario and three alternative reactions as bases for explorative scenarios. They were, reclaiming, retreating and residing. This was presented in my P2 presentation.

*A Lateral Limb: Let's Talk About Water*

After P2, although satisfied with my methodology, I found myself lost in the rational research model. Keeping the original intention of something emotional in mind, I wanted to experiment with some alternative approach to activate my project. That was the moment I encountered the workshop, Let's talk about water, organized by a film festival.

I took it as an opportunity to try out some thoughts for my explorative scenarios. And through the process, I gained the skill of movie making as a narrative and presentation tool.

Although I won the best picture award in the workshop with my movie, The daydream of a cable car, I was not satisfied with the outcomes. The collages I made for future San Francisco were merely fragmented thoughts without strong arguments. I needed a tool to integrate the thoughts through space and time.

*The Branches: Fictional History:*

Ever since I chose the topic, Space Fiction, I had been expecting a sci-fi movie and a sci-fi novel as final products. After the movie making, I immediately thought about novel writing as the way to integrate my thoughts. I started to conceive 4 fictional histories of San Francisco in the next 100 years, from a personal perspective as the representation of the scenarios

The first story about the resilience was a success, in the sense that it managed to order all the variables into a timeline and position them into space, which made it convincing. However, when I was writing the second story, which was about reclaiming nature, the problems were revealed. First of all, a single action to nature was not sufficient to summarize or differ the building practices for 100 years. Some technologies, such as solar panels and flying cars, could occur in any of the scenarios. Thus a more fundamental variable was required to differ the scenarios in a philosophical level. Secondly, through writing, I realized that climate change is not the domain driver which connects everything. There are tons of revolutionary technologies to deal with climate change and to change our lives. How they will re-shape our living environment depends on humans' collective environmental philosophy. It, of course, has a lot to do with climate change. But the real question for a landscape architect is, what is nature.

Although I failed in completing the stories, the writing technic remained the important method to make the research and design coherent.

*The Foliage: Notions of Nature & Dataism*

What is nature? It was not a coincidence that I finally came to the question. Through the study of landscape architecture history in TU Delft, I'm convinced that landscape architecture is the representation of nature and any kind of landscape architectural praxes are the fruits of the nature notions at a certain time. However, I was confused by the fact that we landscape architects do not have a consensus of what is nature today, let alone what will be nature tomorrow.

I'm glad that I encountered these big questions directly in my graduation research and managed to propose an answer for discussion.
In order to speculate on the future notions of nature, the first step I took is to point out the nature notions behind the historical landscape architecture praxes by literature reviewing. Then based on Yuval Noah Harari's new book, Homo Deus: a brief history of tomorrow, I positioned those notions of nature in the three dominating social ideologies through history. They are animism, theism, and humanism. Finally, inspired by Harari’s speculation on Dataism, a new era mankind is entering, I proposed three possible notions of nature, nature as post-humanity, nature as trans-reality and nature as eco-programme.

This research positioned the project into a philosophic discussion. At the same time, with involving too many new concepts, which are not widely accepted, the project became more controversial and less academically rigorous.

The Flowers: Future Images

I came up with my proposal of the three new notions of nature just right before my P3 presentation. And the discussion on their definitions could be endless. But it was the time I had to stop the theoretical research and shift my focus to the landscape representation of the three notions. Several innovative technics were implemented on the representation, such as technology galaxy, future depiction, future timeline and future images.

Among them, I regard future images as the most fruitful outcome, which is not only an implementation of my skills as a landscape architect but also a powerful tool for communication with non-specialists. Methodology paper is developed to elaborate the three ways to make future images.

The Fruits: Contribution to the discipline

As what I was aiming to from the beginning, the main contribution of my project is to raise a discussion by proposing a question with my personal answers.

Human-beings are facing a collective threat, climate change, which is caused by the conflicts between the short-term urban development and the long-term environmental changes. To deal with the problem, we need a long-term vision. The research calls for a utopia discussion on future cities and helps to evoke the awareness and ambitions for a long-term radical achievement. By setting the future context as a Dataism era and proposing the three related nature notions, an initial viewpoint is put on the table which works as a trigger for both additions or oppositions.

How and where the discussion will go will first be examined by a student workshop after P4, then possibly by a bigger debate in public.

Under the big research question, there are some sub-researches have been working out, which can be regarded as side-contributions of the project. Firstly, a methodical model is built up as an integrate of scientific scenario making and intuitive speculating. Secondly, notions of nature behind the historical landscape architecture praxes are pointed out and related to the dominating ideology at their time. Last but not least, four innovative technics are tested in the project. They are technology galaxy, fictional story, future timeline and future images, among which the making of future images is studied and formulated into a methodology paper.

New Seeds: Recommendation for Further Research

I regard this project as a brief and trigger for a much bigger research.

On one hand, the notions of nature could be researched deeper by landscape architects and philosophers. The three notions of nature in the data-ism era I proposed, nature as post-humanity, nature as trans-reality, nature as eco-programme, are arguable. Interested researchers are more than welcome to prove, redefine or even overturn them. More fundamentally, the concept of data-ism is also doubtable. Personally, I agree with Harari's speculation that Dataism will come and take over Humanism, although I depict the details differently.
However, it is not an affirmation or consensus of human-beings yet. From other viewpoints, there could some alternatives for future ideology, with which the similar researches could be done. Moreover, the historic story of nature notions and ideologies is so confined within the mainstream western history. By involving landscape architecture praxes from other cultures, the argument will be more convincing and some unexpected thoughts might be added to the discussion of future.

On the other hand, the representation of nature notions could be experimented further by all spatial designers or visual artists. In my case, I used fictional history to compose the technical actions through time, then emotionalized them with stories and visualized with future images. This is a very prototype trial and could be filled in with more thoughts and efforts by the followers. The project shows the possibilities to represent those nature notions in literature, fine art, and film. I believe those artistic creations could be done better by professional artists. In return, their artworks could make the research and discussion richer.

**The gardener: self-critics and thoughts**

Even as a brief for a further research, the project is not completed as much as I expected. As a landscape architect, I could have put more effort into the spatial design, which will make the project more convincing and discussable. The project actually can be de-composited into three parts, a scenario making methodology, a historical and philosophical deduction and an artistic presentation. The job of a spatial designer is missing. Though I can argue it is not necessary for telling the story, it will definitely add a dimension to the project.

On the other hand, it might not be the proper time yet for this research question. In order to go that far to the cutting-edge in one year, I took big steps, where few the precedents and previous research can fill the gaps in between. Therefore, the credibility of the research is not high. However, through those big steps, I'm able to know what are the gaps at least.

After all, I would still regard the project a success to myself, in the sense that I managed to execute such a complex research, jumping from a wide range of disciplines, with the help of my mentor group. The knowledge I gained about science, technology, history, philosophy, as well as CG drawing and filmmaking, opened my mind to realize the complexity of the world. At the same time, it helps me to situate the discipline, landscape architecture, better.

Alpha-go, artificial intelligent designed by Google, has won the game of go, which was regarded as the last defense line of human-being against AI. For centuries, our education and decisions have been based on experience and knowledge. The more experienced and knowledgeable people are in a profession, the more professional they are. This is especially true to architectural professions like architecture, urbanism and landscape architecture. However, due to the ability to access and process big data, nobody would be more experienced or knowledgeable than AI in the future. Will our jobs be taken by a design program or the programmer behind it? In a Dataism era, every single kid will learn to programme from the primary school like what we do with mathematics and physics today. To be an "adaptive" landscape architect, should I start programming my design? Or since AI will not be able to understand aesthetics or entertainment in the foreseeable future, shall we work as artistic or playful advisors in a project? Here comes the crossing, where landscape architects have to choose a way both personally and collectively.