

Graduation Plan

Master of Science Architecture, Urbanism

& Building Sciences

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information		
Name	Matthew Philip André Touzet	
Student number	4999398	
Studio		
Name / Theme	Borders & Territories – Emerging Border Conditions In Eurasia	
Main mentor	Filip Geerts	Architecture and Urbanism
Second mentor	Gilbert Koskamp	Architecture and Urbanism
Third mentor	Negar Sanaan Bensi	Architecture and Urbanism
Argumentation of choice of the studio	Borders & Territories investigates contemporary border conditions within the larger urban and territorial scales, while taking global political developments into consideration and questioning the contemporary role of the architect.	
Graduation project		
Title of the graduation project	Discourse, Surveillance, and the Social	
Goal		
Location:	Xinjiang, China	
The posed problem,	When performing the search query of Xinjiang China, a list of articles is returned that focus on either tourism or terror. Sensational articles from western-media outlets are outraged by the Uyghur "concentration camps" and the portrayed human-rights atrocities happening within them. Articles from Chinese media focus on positive aspects of the post-earthquake reconstruction of Kashgar, the de-extremification and integration of the Uyghur culture into the Han-Chinese culture, and newly developed cultural sites for tourism. These contrasting yet equally sensational articles constitute the majority of what is available to us as researchers. They are discourse loaded with propaganda, ideology, and mystery, received through the digital terminals of a communication network, and we are completely reliant upon them to perform research during a global pandemic.	
research questions and	Can the discourse be analyzed and mapped in tandem with satellite imagery to deconstruct the embedded statements and reconstruct an 'unbiased' virtual representation of Xinjiang, China? How can an architecture protect the vulnerabilities of a deteriorating social realm and the data collected by surveillance capitalism?	
design assignment in which these result.	Either a data center, internet exchange point, or edge node, that deals with the contemporary issues of internet data, energy, and the social realm.	

Process

Method description

METHODOLOGICAL APPROACH

The discourse analysis will utilize a semiological approach, using plain text harvested from internet websites and Youtube videos as an input, with wordcloud and sentence summarizations as outputs, and utilizing custom Python scripts and open-source modules such as “word_cloud” by amueller on Github and “Spacy”. The outputs will be mapped in coordination with satellite imagery as per guidance by the Borders & Territories faculty.

DATA SELECTION CRITERIA

Because web browsers and search engines use digital cookies to track and monitor user activity, and control the information provided to them based on algorithmic criteria, I will be using an open-source Linux based operating system with a cookie-free version of the Firefox browser. This will create a default user profile when utilizing the Google and Baidu search engines.

Keywords will be selected by topic. The first four pages of search results will be used. The text on webpages (that directly relate to the keywords) will be scraped using a manual copy/paste method into plain text files. This process will be done for each set of keywords on Google, Youtube, and Baidu. Baidu will be used with Chinese translations of the keywords in an attempt to access Chinese discourse.

A free ‘youtube caption to txt file’ converter will be used in order to get the discourse of Youtube videos into text format. This means that not all relevant Youtube videos will be usable, only the ones with subtitle captions.

Once the text files have been saved, they need to be cleaned and organized before being used as inputs in the word_cloud or Spacy software. I have written a Python script to handle the cleaning of the text files and will provide the code with the final submission. The script removes all non-ASCII characters, deletes extra spaces or tabs, and combines all text files in the input folder to one output database. These databases will be labeled by the keywords used with a timestamp.

DISCOURSE ANALYSIS THROUGH WORD CLOUDS AND SENTENCE SUMMARIES

Word cloud algorithms examine a body of text and count the occurrence of each word to determine a frequency, excluding ‘stop words’ such as: the, and, a, if, them, etc. The result is a dictionary containing the frequency of each word in the database. This dictionary can then be used to generate a word cloud diagram that displays the words within a cloud, with the hierarchy of frequencies represented by font size. The word with the highest frequency will have the largest font size, while the lowest frequency words will be very small.

The benefits of a word cloud is that they quickly demonstrate the nature of a discourse by showing the words that are commonly used. This is useful as a simple and accessible graphic to summarize the nature of a topic. The biggest disadvantage to a word cloud is that the words are pulled out of their sentences and the context is lost, which causes linguistic issues when trying to derive meaning.

A sentence summary algorithm thus helps retain the context of the sentences. It works similarly to a word cloud because the frequencies of each word’s occurrence is first calculated. However, it takes the analysis a step further by using natural language processing to identify statements (typically sentences) and generate a weighted value for each sentence based on the occurrence of the words (with their frequencies). For example, if ‘tomato’ and ‘soup’ are two words with the highest occurrence frequency, then sentences that have ‘tomato’ and ‘soup’ in them will have a higher weighted value than those that do not. What this provides is quantifiable relevance for each sentence in a database.

Literature and general practical preference

I will be referencing: Foucault's notion of discourse from the *Archaeology of Knowledge*, Herman and Chomsky's media propaganda machine from *Manufacturing Consent*, aspects of contemporary surveillance theory as summarized in *Bentham, Deleuze and Beyond: An Overview of Surveillance Theories from the Panopticon to Participation*, Jonathan Crary's reflection on the future of sleep and the social under the effects of capitalism in *24/7: Late Capitalism and the Ends of Sleep*, the research of Michele Bertomen on the architectural significance of communication networks and their effects on society in *Transmission Towers on the Long Island Expressway*.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

My graduation topic relates to the studio topic by investigating global political developments stemming from big data and surveillance practices while questioning the role of the architect and the tools available for approaching these issues. It relates to the Architecture master track and program by investigating an architectural application to the issues and a position for the profession within a global context.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

My graduation work is relevant to the academic discussion of post-panoptic surveillance and the growing industry of big data, working in tandem with sociopolitical issues of digital representations of the real, such as the phenomenon of fake news. Jonathan Crary argues that the final frontier for capitalism is the appropriation of sleep and the complete social sphere for the market place. My graduation work thus contributes to the discussion of the contemporary role of the public and private sphere under the increasing effects of internet technology.