THE CITY AND TECHNOLOGY: A CASE STUDY OF THE PAST AND THE FUTURE

Dr. Lili Wang March 26, 2025

Assignment Overview

Throughout the semester, you will work individually on a project examining technologies associated with one facet of urban life – such as food, housing, clothing, transportation, shopping, work, entertainment, communication, education, healthcare, or safety. The assignment serves two key goals. Firstly, it provides an opportunity for students to explore and better understand the intertwined relationship between technology and urban life, both historically and in the future. Secondly, it serves as an exercise for students to develop research skills and apply analytical tools from the Social Sciences.

The assignment is divided into two stages:

- Stage 1 (Historical analysis): Investigate the development of a past technology.
- Stage 2 (Future imagination): Speculate how technology might evolve to address future urban challenges.

Each stage of the assignment consists of three tasks:

- A topic statement (short essay)
- A presentation (poster for Stage 1, slides for Stage 2)
- Feedback on peers' work

The individual project accounts for 56% of the final grade. The breakdown of marks for each task is as follows:

Stage 1	Topic statement	4%
	Presentation	20%
	Feedback	4%
Stage 2	Topic statement	4%
	Presentation	20%
	Feedback	4%

Step-By-Step Guide

1) Choose Your Research Topic

Select one facet of urban life and an associated technology that you are mostly interested in. The technology can be something "big" and highly visible, e.g., transportation networks, buildings, production facilities, or seemingly trivial, e.g., home appliances, pre-cooked/canned food. It can be tangible, e.g., various physical infrastructures and devices, or intangible, e.g., zoning regulations and digital platforms.

Key guidelines:

- For Stage 1: Focus on a technology developed between the Industrial Revolution and the 1990s. Approach this as a historian-sociologist of technology.
- For Stage 2: Speculate on a technology from 2045–2055. For this task, you are expected to think like a science-fiction (sci-fi) writer.
- In any case, avoid technologies that have been covered extensively in lectures, e.g., railroads, cars, telephones.
- Maintain consistency your "past" and "future" topics should address the same facet of urban life.

2) Complete Stage 1 – Historical Analysis

• <u>Topic statement:</u> Briefly explain your research topic, justify your choice (why you choose the topic), and outline your research approach (how you will proceed with the research).

Format:

Length: 300-400 wordsFile format: WORD

- <u>Presentation:</u> For Stage 1, you need to make a poster presentation of roughly 4 minutes, examining at least three questions as follows:
 - The contexts in which the technology emerged: What urban problems/needs led to the invention of the technology?
 - The development process of the technology: How, by whom, and through what processes, was the technology developed?
 - The impacts of the technology on urban life social, economic, cultural, political, ecological, spatial, philosophical, or psychological.

Try to present a vivid and well-supported historical analysis, using solid evidence such as historical data, images, or accounts of people living in that historical period.

Format:

- File format: JPEG, PNG, or PDF

Size: 80cm * 120 cm (portrait)

DPI: 300+

- Must-include elements: Title, Presenter's information, Introduction, Historical context, Development process, Impacts, Conclusion, References.
- <u>Feeback on peers' work:</u> In each stage, students are required to assess two peers' presentations based on the grading sheet provided (including a comment section of min. 100 words).

3) Complete Stage 2 – Future Imagination

Stage 2 follows the same three-task structure as Stage 1, though its Presentation needs to examine a different set of questions and takes a different format.

<u>Presentation:</u> For Stage 2, you are required to create a <u>slide-based</u> presentation lasting approximately 5 minutes. In this presentation, you should explore what future cities and urban living might be like. Notice that you need to ground your exploration and speculation within a specific temporal and geographical context and for a particular social, economic, or

cultural group. Specifically, you need to complete the following tasks:

- Specify the future scenario in which your research is situated, including time (when),
 place (where), and subjects (who), as well as the problems or needs that will need to be
 addressed in the scenario.
- Speculate on the technologies that can address these problems or needs. To accomplish that, you must develop a comprehensive understanding of the cutting-edge technologies in the relevant fields nowadays and anticipate how these technologies may evolve and function between 2045 and 2055. Your envisioning of the future should be based on a thorough assessment of the present.
- Speculate on the potential impacts of the case technology on urban forms (how the city will look like) and/or urban living (how people will lead their lives in the city).
- Juxtapose and compare your perspective with an existing sci-fi work that has dealt with similar matters. Explain how your perspective is related to or diverges from the sci-fi work.
- Utilize AI tools to create an image that visualizes the future city or urban life as you imagine it.

Format of the presentation:

- File format: PPTX
- Must-include elements: Title, Presenter's information, Introduction, Future scenario, Future technology, Potential impacts, Comparison with an existing sci-fi work, Conclusion, Al-generated future image (can be placed in any parts of the presentation), and References.

4) About Research Sources and Methods for The Presentations

For the presentations of both stages, collect information closely relevant to your chosen topic from scholarly sources and reputable news media. For each presentation, you are suggested to use at least three academic sources to develop a sound understanding of the research topic. For useful scholarly databases and news sources, see below.

Suggested scholarly sources:

- Google Scholar (<u>scholar.google.com</u>)
- Web of Science (<u>webofscience.com</u>)
- Scopus (<u>scopus.com</u>)
- University libraries

Suggested news resources:

- BBC News (news.bbc.co.uk)
- The Economist (<u>economist.com</u>)
- Reuters (<u>reuters.com</u>)
- South China Morning Post (scmp.com)

Provide proper citations for all sources used in your essay, including author, date, article title, and source name. If using online sources, include the URL and the date of access. Use an appropriate citation style such as APA, MLA, or Chicago format. If you are new to citation styles, visit this website for more information.

While the assignment focuses on historical review or future speculation, you can explore various research methods such as archival studies, interviews, statistical analysis, spatial analysis and mapping, content analysis, or videography, to develop and present your arguments. Moreover, utilize a variety of presentation tools to effectively and creatively present your research in an engaging manner. These tools can include maps, images, diagrams, tables, videos, infographics, and even animations (for the presentation of Stage 2). If you need help with research sources, data

collection, or presentation tools, feel free to contact me at any time.

5) Extracurricular meetings

To help you advance your work, I will schedule individual meetings with each of you after you submit your two topic statements. At the meeting, I will provide feedback on your topic statements, help you improve your research plan, and address any issues or challenges you may encounter.

6) Submission

The deadline for each research task is listed in Table 1 below. Please submit all of your work via Blackboard. Please name all of your assignments using your full name.

Table 1: A summary of the assignment

Tasks	Format	Key tasks	Deadline	
Stage 1 (Time frame: Industrial Revolution – 1990s)				
Topic statement – 1	A written essay (300-400 words)	Topic (What?)Rationale (Why?)Plan (How?)	Apr. 2 (Midnight) Followed by a meeting in Week 7	
Presentation – 1	A poster presentation (4 minutes)	ContextDevelopment trajectoryImpacts	Apr. 23, 30 Poster needs to be submitted one day before the presentation day	
Feedback – 1	A feedback sheet	/	Apr. 23, 30	
Stage 2 (Time frame: 2045 – 2055)				
Topic statement – 2	A written essay (300-400 words)	- Topic (What?) - Rationale (Why?) - Plan (How?)	May 14 (Midnight) Followed by a meeting in Week 13	
Presentation – 2	Slides presentation (5 minutes)	ScenarioTechnologiesImpactsComparisonImage of the future	May 28, Jun. 4	
Feedback – 2	A feedback sheet	/	May 28, Jun. 4	

Grading criteria

Topic statement (4 points in total)

- A clear statement of the research topic that meets the assignment requirements.
- A robust understanding of the significance of the topic.
- A thoughtful and feasible research plan.
- Word limit: 300-400 words (It is not advisable to exceed this limit.)

Presentation (20 points in total)

- Quality of the research
 - The research poses important and meaningful questions and provides clear and well-developed answers.

- The research addresses all the research questions as required.
- The research is substantive and informative.
- The research is well-structured and delivered with clarity.
- The research is innovative and presents original insights.
- The research includes at least three academic sources.
- Quality of the presentation
 - Effective and appropriate presentation methods that engage the audience (poster design for Stage 1 and slide design for Stage 2).
 - Spoken English skills, including fluency, vocabulary, intonation.
 - Time management.

Feedback sheet (4 points in total)

- Accurate understanding and detailed notes on the presentation under review.
- Substantive and critical feedback on the presentation.

If you have any questions, please email me or visit me during my office hours. I look forward to seeing your work!