

IMPORTANT!

- One long answer question focused on "Social Impacts"
- One long answer question integration across the course
e.g. ANT, privacy, A.I., data privacy, neoliberalism, capitalism, circular economy, etc.
- One short-answer question with multiple parts
The test will be 2.5 hours long. My room will be SF 1013 which is ecf lab.

IMPORTANT!

How to prepare for this?

- Building your own aid sheet
- Try practice questions from old exams
- Making questions and answering them by myself
- Build a mind-map or actor-network diagram for the course itself

Following model will be helpful to write the argument more effectively.

Definition

Toulmin Model of Argumentation

- *Claim*: Confident fact that authors would like to prove to their audience. (Main Argument)
- *Grounds*: Argument are the evidence and facts that help support the claim.
- *Warrant*: Implied or stated explicitly, is the assumption that links the grounds to the claim.
- *Backing*: Any additional support of the warrant. Support for the warrant by giving a specific example that justifies the warrant.
- *Qualifier*: Claim may not be true in all circumstances. "presumably", "some", "many" help people to understand that you know there are instance where my claim might not be accepted.
- *Rebuttal*: Acknowledge of another valid view of the situation.

Example

Example of Toulmin Model of Argumentation

- *Claim*: ABS system will be introduced in Korean Baseball League this year.
- *Grounds*: ABS system decides the strike zone automatically.
- *Warrant*: ABS system is more accurate and fair than human umpires.
- *Backing*: ABS system is based on the data science and data analysis.
- *Qualifier*: ABS system is more accurate and fair than human umpires in most cases.
- *Rebuttal*: ABS system can replace and steal the job of human umpires.

Following is the guide to write the long answer question during the exam.

IMPORTANT!

There are usually *Three Challenges* during the exam.

- *Challenge 1*: Addressing the specifics of the question
- *Challenge 2*: Display of Content Knowledge
- *Challenge 3*: Organizing and writing a clear and coherent answer

Example

Throw back to *midterm* that I wrote:

- I made a mistake of not organizing and writing a clear and coherent answer.
- I was putting everything I know about the topic without organizing them which make grader hard to read and understand.

To address this problem, I need to write the answer concisely and clearly with focusing on the question.

Step-By-Step

- *Step 1*: Read questions until I understand what the question is asking.
- Following verbs are the most common verb that you can understand what the question is asking.
- *Define*: State what smth means, does or achieve. Prepare to explain the nuances, the affordances, or the values taht underlie the thing by its def'n.
- *Describe*: List characteristics or traits of smth. Summarize smth + Analyze really well.
- *Compare and/or Contrast*: Discuss the similarities and differences between two or more things.
TIP: Comparing two ethical situations to a standard of justice would be better than just comparing one situ to another.
- *Explain*: Explain why or how something happened, or justify your position on something.
- *Demonstrate*: Analyze except that you must assume the positive.
- *Discuss*: Analytical but vauge. Take a position, usually with a thesis statment that you will argue. Analyze the advantages or disadvantages of something.
- *Evaluate*: This requires your judgement. Better evaluation involves assessing against a standard.
- *Recommand* Arugment for justification. Consider alternatives an dbuild a logical case. Both defining or describing and evaluating are required.

IMPORTANT!

How to show that you know the contents in *depth*?

- **Providing Example**: well-explained example can demonstrate that you understood correctly.
- **Handling Counter-Example**: To show point is not just only thing you can think of, but I also know the problems of the point.
- **Digging for the deep cutes**: Ability to integrate multiple perspectives or catch subtle details.

IMPORTANT!

How to show that you know the contents in *breadth*?

- **Integrating across the course**: Integration across course concepts.

IMPORTANT!

How to show that you are relevant to the question?

- Apply my knowelge to the specifics of the question.
- Beware of unnecessary flourish.

Theorem

Organizing Answers There are introduction, structure and the paragraph.

- **Introduction:** "PUBS" introduction will be the best way.
Provide the set-up of structure of what is to come immediately elevates an answer.
- **Structure:** DO NOT BE AFRAID OF BLUNT in your structure.
There are actually three good ways to organize an answer.
- **Headings:** Gives reader a sense of the structure of your answer. + Stay me on a track
- **Make my own claim first:** Write my claim at the start and then build my argument.
- **Make an Outline:** Few key sentences that are going to help my structure the answer which are key claims that I want to make.
- **Paragraph:** Each paragraph is mini-argument building to the bigger argument.
Ask my-self four questions for each paragraph.
- 1. What is the point here? - Make **claim**
- 2. What have I got to go on? - Show **evidence** for the claim.
- 3. Why should we accept that point? - Work thorough the **reasoning that justifies my claim.**
- 4. My degree of confidence in this? - **Qualify or limit the argument properly.**

In shorten, *claim-evidence-justification.*

IMPORTANT!

MAKE A CLAIM FIRST AND THEN GIVE USEFUL BACKGROUND

- 1: Direct recommendation would be one that draws on the reading or makes a clear argument.
- 2: Gives evidence to justify what you are saying.
- 3: As developing justification, make sure you are on topic.

Now, I will discuss about the course contents + midterm insights.

IMPORTANT!

Three pillar:

- 1. Environmental protection
- 2. Social
- 3. Economic This is environmental protection, economic growth, and participatory governance. This is implicit belief that all three can be encouraged simultaneously. Suggests all balance each other out.

Donught Economics:

This is the one that takes into consideration planetary boundaries and encourages living within them, while still offering a strong social foundation. However, this social foundation goes beyond “economic growth” and offers a more comprehensive view of what makes a flourishing life. It promotes a regenerative and distributive economy

Example

Engineering and Social and Technical

- 1. Belief that engineering is technical space where social or political issues such as inequality or justice are not relevant.
This leads to overlook the broader social implication of engineering decision.
- 2. Are inequalities the result of a properly functioning social system that rewards the most talented or hard working?
This perspective may ignore structural barriers and systemic issues that contribute to inequality, such as biases, discrimination, and unequal access to opportunities.
- 3. Engineering as a profession, society, employers and practices all shape and impose expectations of engineer. However this lead to messy and complex issues.
may be opposition between the expectations placed on engineers and the broader social implications of their work.

Definition

Meritocracy:

This is the idea that people should be rewarded based on their ability and talent.

However, this has a problem that this can be biased.

For example, if you are born in the rich family, then you will have more opportunity to get the education.

Therefore, there are few points to look at.

- 1. Lack of Perspective Diversity:
This may neglect historical and social context that contribute to the current situation.
- 2. Depliticization of Engineering:
This is the idea that engineering is technical space where social or political issues such as inequality or justice are not relevant.
This will lead to overlook the broader social implication of engineering decision.
- 3. Assumption of Equity:
This is the idea that inequalities are the result of a properly functioning social system that rewards the most talented or hard working.
However, this perspective may ignore structural barriers and systemic issues that contribute to inequality, such as biases, discrimination, and unequal access to opportunities.
- 4. Personal Responsibility:
This perspective may downplay the influence of external factors and systemic inequalities on an individual's opportunities and outcome.

Theorem

EDI:

This is the idea that we should consider the *Equity, Diversity, and Inclusion* when we make a decision.

Design for Social Justice:

- 1. Engineering should work toward the material well-being of all people.
- 2. Design for tech: This is the idea that we should design the technology for the people.
- 3. Human Centred Design for Communities:
Emphasizes users needs, aspiraion, cultural location through the design process.
- 4. Design for Social Justice:
- 5. HCDC:
Usere no longer consumer, but they are "aid-recipients" or "beneficiaries".
Therefore, we require empathy and understanding of the users.

Definition

LLN's seven criteria for design for social justice:

- 1. **listening:**
- 2. **Identifying structural conditions that give rise to needs:**
- 3. Increasing human rights, opportunites, resources, reducing imposed risks and harms, enhancingg human capabilities:

The meritocratic approach is a result of a system of reward and individual potential

Example

Meritocracy and the Engineering Profession:

- 1. THERE WAS A HISTORIC LACK OF DIVERSITY WHICH LED TO A HIGHLIGHT IN MERITOC-RACY IDEOLOGY
- 2. HENCE ENGINEERING AIMED TO HIGHLIGHT DIVERSITY, EQUITY AND INCLUSION INTO THE PROFESSION
- 3. BIOLOGICAL DETERMINISM MAY BE SCIENTIFICALLY DISCREDITED, BUT STILL HAS SIG-NIFICANT NEGATIVE SOCIAL IMPACT

Definition

Back To EDI!:

Diversity is the presence of difference within a given setting.

Equity is the fair treatment, access, opportunity, and advancement for all people, while at the same time striving to identify and eliminate barriers that have prevented the full participation of some groups.
Therefore, this determines and acknowledges the different needs of different groups.

Inclusion is the act of creating environments in which any individual or group can be and feel welcomed, respected, supported, and valued to fully participate.

Therefroee, to make a good decision, we need to consider the EDI. To encourage inclusivity we need to acknowledge dependence of systems, diversify the profession and design for social justice.

Definition

Final Def'n of Social Justice

- 1. To create equitable distribution of resources and opportunities to enhance human capabilities while reducing externally imposed risks and harms
- 2. Design for technology, human centered design for users, human centered design for communities, design for social justice
- 3. We build empathy by seeing the world as others see it, practicing nonjudgement, taking time to understand the feelings, reflecting another person's feelings back

What is *empathy*?

- 1. Cognitive empathy: Understand someone else's perspective
- 2. Affective empathy: Feel what someone else feels and build a connection
- 3. Compassionate empathy: Feel what someone else feels and take action to help

Definition

- ***Behavioral Surplus:***
Information that doesn't have an immediate use but is itself a kind of a control and power that these organization possess that gives them an advantage over other companies.

Behavioural surplus also includes: "how much time a user looks at a piece of material?", "how does a user react to certain digital stimuli?"

Definition

There are *three* things that you can quantify economic inequality.

- 1. **Economic Spread:**
Large and growing differences in income and wealth and other circumstances of life (Social mobility, income inequalities)
- 2. **Social Mobility:**
Measure opportunity for people to move up and down the economic ladder.
- 3. **Merit Goods:**
Goods that are deemed to be socially desirable and that are provided by the state.
This usually contribute to social mobility.
Examples are provision of education, healthcare, and housing.

Definition

- **Intangible Goods:**
Intangible goods are goods that do not have a physical nature, as opposed to *tangible goods* such as cars, clothing, and machinery. Intangible goods constitute the majority of the value of most businesses. Examples of intangible goods include goodwill, brand recognition, copyrights.
- As a matter of course, intangible goods act differently from tangible goods.

Theorem

There is **The Wealth Gap** between the rich and the poor.

- 1. The rich are getting richer and the poor are getting poorer.
- 2. Massive wealth gap in WEIRD countries like Canada.
- 3. Even though everything is getting expensive, the median income is increasing relatively small.
- 4. This is social justice/fairness issue
- 5. High income is playing a bigger gain and role in the society.
- 6. As there are inequalities in the society which is social justice issue, people borrow more to maintain their life.
- 7. Decline in mobility is noted over the generation.

Example

What is *technology's role in the economy*?

- 1. This furthers the economic inequality.
- 2. Currently, there is no certain law that ensures equal benefit to everyone as economic pie gets bigger.
- 3. Therefore, this is significant that we need to think about how to distribute the economic pie fairly.

Theorem

There is *4s of Technocapitalism*.

- **1. Scalability:**
Digital goods are non-rival and easy to produce and distribute.
This means that the cost of producing the first copy of a digital good is very high, but the cost of producing subsequent copies is very low.
- **2. Sunkness:**
Intangibles are more difficult to resell and therefore riskier for banks and those of less equity.
- **3. Synergy:**
Intangibles can be combined in new ways to create new value.
For example, the value of a car is not just the sum of the value of its parts.
Also, when you look in to data science, you can see that the value of data is not just the sum of the value of its parts.
Most of companies will be benefit if they share their data, and make a synergy with other companies.
- **4. Spillover:**
Other businesses can more easily take advantage of intangibles.
For example, if you have a good idea, other people can easily copy your idea and make a new business.
This is why there are so many similar businesses in the world.

There are two effects that we need to consider about:

IMPORTANT!

- **1. Development of Gig Economy:**
Gig economy is the economy where people work as a freelancer, and this got popular because of the development of technology (also COVID 19).
For example, Uber is the company that provides the platform for the people who want to work as a taxi driver.
As companies prefer on-demand workers, this is the reason why gig economy is getting popular.
However, this will be the problem because there is no job security and benefits for the workers.
Also, people who don't have work experience will be in trouble because they don't have any job security.
Replacing traditional employment with more precarious labour.
Flexible working life hides lack of regulation.
Firms outsource human capital to external labour market of competing workers.
Traditional employer/employee relationship dissolves.

Counters: Legislation such as dispute resolution, minimum wage, and transparency.
- **2. Decoupling Productivity and Wages:**
As the technology develops, the productivity of the workers will increase.
However, the wages of the workers are not increasing as much as the productivity.
Also, as I mentioned about the ABS system that can potentially replace the job of umpires, this will be the problem.
A massive amount of jobs will be replaced by automated/robotic systems.

Example

Then what can we do? What will be the *strategy* to solve this problem?

- **1. Wealth Tax:**
Tax on the wealth of the richest people, however, this can be problematic because it can be hard to measure the wealth of the richest people.
Also, this can be problematic because the richest people can move to other countries to avoid the tax.
- **2. Tax Robots and AI?**
This can be problematic because this can discourage the development of technology.
- **3. Universal Basic Income:**
This is the idea that everyone should get the basic income from the government.
This can be problematic because this can discourage people to work.
- **4. Organize around social mobility:**
This is the idea that we should organize around social mobility.
This is good idea since this can help people to get the job and can easily overcome the economic inequality.
- **5. Pay people for data:**
This is the idea that we should pay people for their data.
This is two-sided market, and this can be problematic because this can be hard to measure the value of data.
Also, this will be connected to the privacy issue which will be data leakage issue.
- **6. Public Ownership of intangibles:**
This is the idea that everyone should be able to access to the intangibles.
This is beneficial in terms of synergy effect, and this is coming from the spill-over effect.
However, if those intangible becomes the public, then there will be no incentive for the people to develop the intangibles.
This possibly lead to discourage the development of intangibles.
- **7. Stakeholder Capitalism:**
This is the idea that we should consider the stakeholders when we make a decision.
This is good idea because this can help us to make a fair decision.
However, this can be problematic because this can be hard to measure the value of stakeholders.
- **8. Antitrust Legislation:**
This is the idea that we should make a law that can prevent the monopoly.
This is good idea because this can help us to prevent the monopoly.
Monopoly is the situation where one company has a lot of power in the market.
Monopoly will lead to lagging innovation and high prices.
Therefore, this should be avoided, and this is why we need to make a law that can prevent the monopoly.
- **9. Retraining and Investment in employees:**
This is the idea that we should retrain the employees.
This is good idea because this can help us to prevent the unemployment.
However, this can be difficult to implement this idea since this can be costly.

Now, this is ch.11, which is ***Ethics of Data and Smart Cities.***
This is pretty easy to say that we can predict AI's effect on the society.

Widely, there are two general perspectives of looking at the AI.

- 1. Optimistic - AI used as a tool to boost creativity and help out since AI is more productive than human.
- 2. Pessimistic - Companies will start to replace human with AI to make more profit which will lead to unemployment + widening the wealth gap.

There are current attempts for this:

Example

- 1. Wealth/corporate tax
- 2. Universal basic income
- 3. Tax Robots
- 4. Organize around social mobility
- 5. Public Ownership of intangibles
- 6. Stakeholder Capitalism
- 7. Antitrust Legislation
- 8. Retraining and Investment in employees

Theorem

What is *The Tangible Sphere*?

- **1. Big Data:**
Using data sets that are too large or too complex to be dealt with by traditional data-processing application software.
- **2. Machine Learning:**
Statistical process that starts with data then tries to derive a rule or procedure that explains that data to predict the future.
These two processes leave to challenges in privacy, consent, freedom from discrimination, and transparency.
- First of all, there is a problem with **privacy**.
Big data and machine learning are often used to infer information about individuals.
Therefore, this is significant that we need to think about how to protect the privacy of the individuals.
- Also, there is a problem with **consent**.
Consent is the idea that people should be able to choose what they want to do.
However, as you can see current situation, the consent form is too long, and people don't even bother to understand what they are agreeing to.
Therefore, this should be addressed that we need to make a consent form that is easy to understand.
- Also, there is a problem with **freedom from discrimination**.
This is mostly coming from the bias of the data.
For example, if you have a data that is biased, then the result of the machine learning will be biased.
Therefore, this is significant that we need to think about how to prevent the bias of the data.
Example can be from how the face recognition system is biased to the people of color.
If the dataset is not diverse, then the result of the machine learning will be biased.
This can be problematic because this can lead to discrimination.
- Also, there is a problem with **transparency**.
This is mostly coming from the black box problem.
Black box problem is the problem that we don't know how the machine learning works.
This is significant that we need to think about how to make the machine learning transparent.

Example

Let's dive more in to some of concepts I discussed above.

- **1. Privacy:**
People are all different, therefore, how they feel about sharing their data is different.
Also, they usually feel more comfortable sharing their data with the people they trust.
Therefore, this is significant that we need to think about how to protect the privacy of the individuals.
- **2. Consent:**
This is something that permission is given for something.
This is also can be described as the expression of autonomy.
This is safe line between the public and private.
However, as you can see current situation, the consent form is too long, and people don't even bother to understand what they are agreeing to.
Therefore, this should be addressed that we need to make a consent form that is easy to understand.

Definition

There is *Surveillance Capitalism* which is the idea that the data is the new oil. Unilateral claiming of private human experience as raw material for translation into behavioural data. Surveillance capitalism is not the same as surveillance technology. Main difference is that surveillance capitalism is the economic logic that drives the surveillance technology. Problematic because they sometimes use the data without the explicit consent or knowledge of the user being surveilled.

The difference between surveillance capitalism and surveillance technology is following:

- **1. Surveillance Capitalism:**
This is economic system that leverages these technologies to turn personal data into a commodities. This represents the business model and economic logic that drives the development and deployment of surveillance technologies.
 - **2. Surveillance Technology:**
This is the technology that is used to surveil people. This usually collects the data of the people.
- This will lead to consequences of the widespread collection and use of personal data, raising ethical and privacy concerns in the digital era.

Example

Then do we need to trust A.I. fully?
What will be *What if* scenario?

- 1. **What if** A.I. is biased?
- 2. **What if** A.I. is hacked?
- 3. **What if** What if A.I. know more about you than you do?
- 4. **What if** A.I. is used to manipulate you?

Definition

What is *monopoly*?
Monopoly is the situation where one company has a lot of power in the market.
Monopoly will lead to lagging innovation and high prices.

- 1. Inferring Sensitive Attributes:
- 2. Predatory Microtargeting:
This is the idea that you can target the people based on their sensitive attributes. However, if this is manipulated to be used in the wrong way, then this can be problematic. For example, if this is used in the election, as they have individual's behaviour, data, and sensitive attributes, then they can easily manipulate the election.
- 3. Discriminatory Models:
This can be explained by the example of the face recognition system. If the dataset is not diverse, then the result of the machine learning will be biased. There will be people who are possibly discriminated and being left out.

Definition

- **Dysaffordances:**
by contrast, are defined as not only failing to recognize identity-related differences (as in disaffordances) but as actively forcing non-normative-conforming users to misidentify themselves in order to gain material or social access to the commodities and services provided through these technologies.

Or in better way to say,

Definition

- **Affordance:**
Affordance is the possibility of an action on an object or environment.
What the environment offers to the individual.
 - **Disaffordances:**
Object failed to recognize the attributes of a user or its relevant aspects resulting in either non-affordances or poor affordances.
 - **Dysaffordances:**
This is when user is **required** to improperly identify themselves resulting in failure to access the object or environment.
- Even though those two terms are similar, there is a difference between them.
More likely, dysaffordance is the result of disaffordance.

Definition

What is *Smart Cities*?

- Technologically modern urban area that uses electronic methods and sensors to collect data and that information is used to manage assets, services and resources effectively and improve that city.
- Datafication, dataveillance and geosurveillance.
Datafication is the process of turning social action into quantifiable data.
Dataveillance is the practice of monitoring and collecting online data as well as metadata from individuals.
Geosurveillance is the practice of monitoring and collecting data from individuals based on their location.
Example can be from the smart city in Toronto, GPS tracking, and satellite imagery.
- Inferencing and Predictive Privacy harms
Inferencing is the process of drawing conclusions about individuals based on the data collected about them.
Therefore, our next move can be predicted by the data.
- Anonymization and reidentification
- Obfuscation and reduced control
- Absence of notice and consent
- Data use sharing and repurposing

Now, ch.12 and this will be about computational cities, politics, and community.

Definition

Some of important terms that might be useful to understand this chapter.

- **Anonymization:**
People are anonymized when their identity is not known.
There are two sides of anonymization.
- **1. Positive Side:**
This is the idea that anonymization can help us to protect the privacy of the individuals.
Also, this protects the freedom of speech.
- **2. Negative Side:**
This is the idea that anonymization can be problematic because this can be used to hide the identity of the people who are doing the bad things.
For example, if you are doing the cyberbullying, then you can hide your identity by using the anonymization.
- We will remain unaware of how systems are making decision as algorithms calibrate themselves to the data they are fed.

Example

What do you mean by *Obfuscation and Reduced Control*?

- **1. Smart Cities** will rely on an *interdependent* system run with massive power houses such as corporation and governments. This might lead to monopoly since this is much easier for one company to handle all the data. Therefore, this is needed to have a regulation on this.
- **2.** Data is passed between synergistic and interoperable systems.
- **3.** Data streams can be intercepted and transmitted or stolen by hackers.
- **4.** It is difficult bureaucratically and procedurally to seek access on who touched our data. This is connected to the *black box problem*. As you can see, this is difficult to trace and monitor the data.
- **5.** Poor documentation, wide sharing, repackaged... Many ways to monetize our data. Potentially, the data collected by the smart cities can be used in the wrong way. They might be used to Microtargeting, and this can be problematic because this can be used to manipulate the election.

Example

There is a movie about how police can predict the crime before it happens.

The use of tech, such as hotspots, arrest records, and phone records, the police can predict the crime before it happens.

Even though this has a positive side, this can be problematic because this can lead to discrimination and data concerning.

- 1. **What if** the data is biased and discriminated? This will be happen if they use the dataset are already biased.
This might target certain group of people, and this can be problematic because this can lead to discrimination.
- 2. **Privacy Concerns?**
Peronsal data, including phone records and social networks.. This are all privacy of individuals.
If those datas are collected and surveilled without the consent of the individual,s then they will feel uncomfortable.
Also, as in the book "1984", this can be used to surveil the people which might be big brother in real life.
- 3. **Potential Abuse?**
If those collected data are not secured properly, then this can be hacked, and this can be used in the wrong way.
For example, if the data is hacked, then this can be used to manipulate the entire person's life.
- 4. **Transparency and Accountability?**
As you can see, this is difficult to trace and monitor the data.
Therefore, this is significant that we need to think about how to make the machine learning transparent.
If not, then this can be problematic because this can be used in the wrong way.
Transparency and accountability are the key to the success of the smart cities since this will bring the trust to the people.
- 5. **Unintended Concerns?**
This is important to not just rely on this algorithm only.
As this might not be 100% accurate, this is significant that we need to think about how to prevent the unintended concerns.

Theorem

Rise of digital mediation of social, political, and financial interactions lead to:

- 1. Emergent method allow profiling and targeting of individuals and groups.
- 2. Can have information about individuals and groups that they do not know about themselves.
- 3. Digital networks is equal to real time testing and immediate feedback.
- 4. Requaires access to proprietary expensive data and opaque algorithms.

Then what is *Problematic* about this?

- 1. This generates behaviour problem that is not easily solved by traditional means.
- 2. Can change people's political veiws, incentive structures, and social norms.
- 3. Can be used to manipulate people and groups. All this will be leading to manipulation, misuses, framing innocents, and discrimination.

IMPORTANT!

- 1. Deployment of wedge issues by design.
- 2. *public sphere* diminished by creating individualized tailored targeted and isolated experience information. This is when people are only exposed to the information that they want to see or they are forced to see.
- 3. Creates opportunities for misinformation and disinformation.
- 4. Inequities from information asymmetry between the watcher and the watched. This is when the watcher has more information than the watched.
- 5. Thought experiment where people being watched but unable to see the watcher eventually becomes internalized and everybody becomes their own watcher.

Definition

- **Social Capital:**
Group property measured in terms of connectedness, interpersonal trust, and shared norms and values that enable people to act collectively.
- **Pro-Social Behavior:**
Behavior that is intended to benefit others or society as a whole.
Therefore, social capital and pro-social behaviour are indicators of social cohesion.
This is measured in individual's level of volunteering, sharing, cooperation.
- When individuals trust and feel connected to their social networks, they are more likely to engage in prosocial activities.
- **Bright Side of Social Media:**
Decentralizing content creation, curation, circumvent gatekeepers of knowledge and encourage collective action.
- **Dark Side of Social Media:**
Misinformation, destructive dynamics, manipulation campaigns, ideological segregation and extremism. Korea can be one of examples.. Misinformation is like a virus in social media, therefore, when they are polarized into two groups, then this can be problematic because this can lead to fight between two groups.
However, as there are bright side of social media, this is important to make a balance between them.

Example

Dream, Hope and Failure.

- 1. Social media as a tool for visibility and mobilization.
Powerful tool for spreading information + mobilizing support for social justice movements.
- 2. Government intervention and censorship.
This is when the government is trying to control the social media.
For example, they limit the effectiveness of movements and restrict the freedom of speech + flow of information.
Also, they might release some scandal so that people can be distracted from the main issue.
- 3. Government Surveillance and citizen tracking.
- 4. Gaps in collective decision-making and capacity building
Even though social media connects people, there might be low quality of information and lack of trust.
Traditional method has advantage of making deeper relationship and shared experiences, contributing to more effective collective decision-making.
- 5. Social media ties and vulnerability in implementing changes
Since it's easy to connect with people, but also easy to disconnect with people, this can be problematic because this can lead to lack of trust.
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IMPORTANT!

What is the *conclusions* of this chapter?

- 1. Data can fuel digital economy, represents wealth and power, method and mechanisms of big data create opportunity but also ethical concern around privacy, transparency, consent, freedom, discrimination, and accountability.
- 2. This is important to fight for our rights of data and privacy.
Such as, right of info, access, rectification, erasure, and portability.

Example

Theological Thoughts: Has failure of the neoliberal world view has led to

- 1. Sustainability crisis
- 2. Equity crisis
- 3. Security crisis
- 4. Spiritual crisis

Thank you to Lorenzo who provided us the slides notes, so that I could review all concepts and write this note based on her slides.