

Ethics, Analytics and the Duty of Care



Workshop, Online Educa Berlin

Stephen Downes, 23 November, 2022

<https://www.downes.ca/presentation/567>

The Promise

- Enumerate a broad range of benefits and risks arising from the use of analytic technologies in learning and development.
- Describe how these issues arise at various points in the learning analytics workflow.
- Evaluate how these issues, and potential solutions to them, are proposed by various ethical theories, principles and codes.
- Describe an ethical approach to learning analytics based in practitioner expertise and sentiment of care.

<https://ethics.mooc.ca/>

The Plan

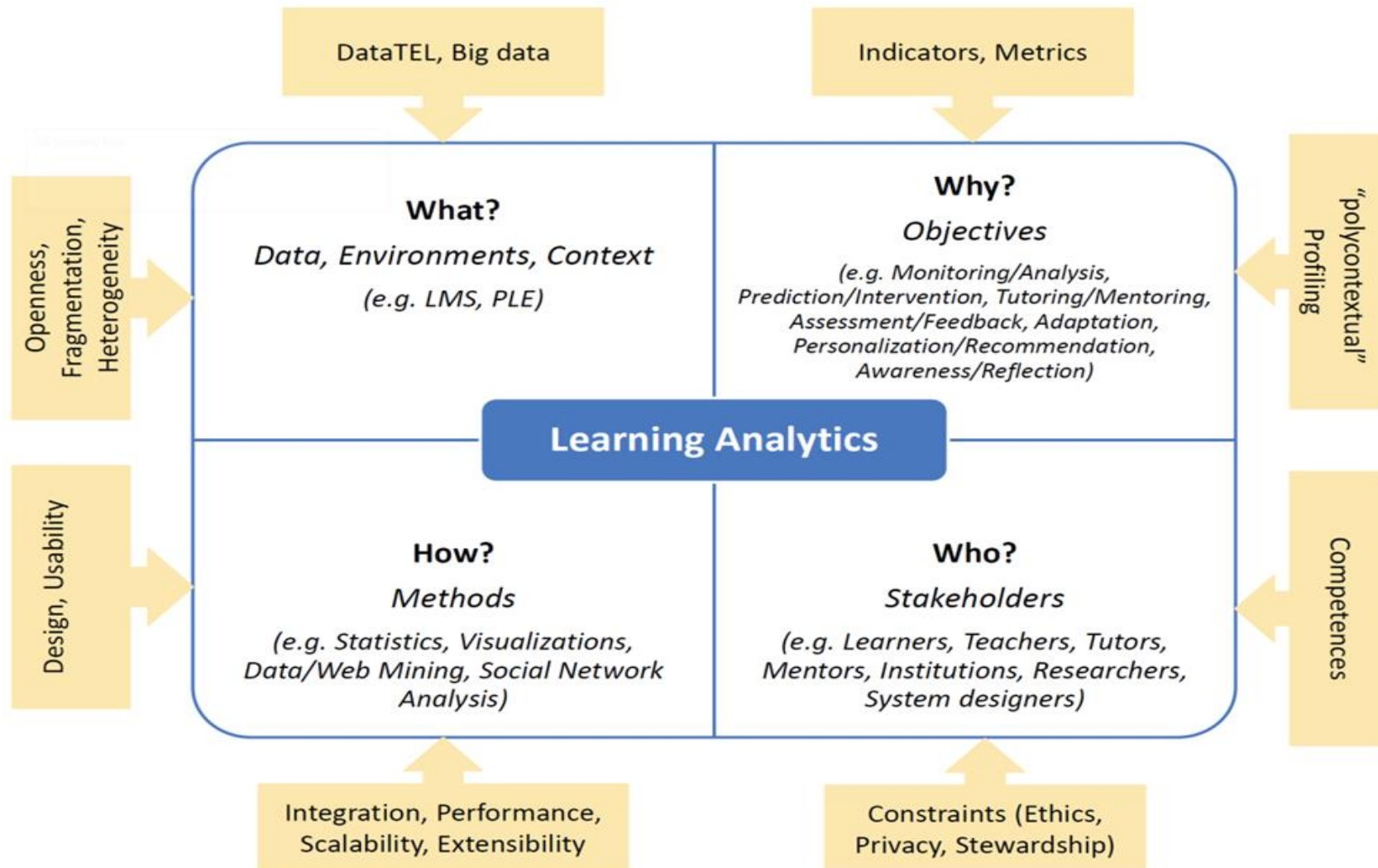
Ethics and Analytics: Introduction	10:00	30 min	
Applications of Analytics	10:30	40 min	10
Ethical Issues in Analytics	11:20	40 min	10
Ethical Codes	12:00	30 min	30
Approaches to Ethics	13:00	30 min	30
The Duty of Care	14:00	40 min	10
The Decisions We Make	14:50	40 min	10
Ethical Practices	15:30	30 min	

Ethics and Analytics: Introduction

Today's Analytics

- Today's artificial intelligence engines are not based on cognitive rules or principles; they are trained using a mass of contextually relevant data.

Ethics and Analytics: Introduction



Ethics and Analytics: Introduction

The Challenge

- When we ask what is right and wrong, we must also ask how we come to know what is right and wrong.
- There are multiple perspectives on ethics, and each issue that arises in learning analytics
- It is no simple task to define successful outcomes, nor how to cause them.

Ethics and Analytics: Introduction

The Joy of Ethics

- Ethics should make us joyful, not afraid. Ethics is not about what's wrong, but what's right.
- The best outcome is achieved not by preventing harm, but rather by creating good.
- Ethics is based on perception, not principle

Ethics and Analytics: Introduction

It's About Us

- The key to understanding both ethics and analytics is to understand that they are not about something abstract and abstruse, but instead are about us.
- If we want better learning analytics - whatever that means - then we have to become better people.

Ethics and Analytics: Introduction

Discussion: what does ethics mean to me?

- Is ethics a way of life for you or is something external?
- Where do my ethical thoughts come from?
- Am I an ethical person?

Applications of Analytics

What Does Analytics Tell Us?

- What happened?
- What kind of thing happened?
- What will happen?
- How can we make it happen?
- Make something new happen?
- What should happen?

Each of these can build on earlier answers

Applications of Analytics

Exercise: Brainstorming

- What applications of analytics in education can we think of?
- What type of application is it?

Call out your answer and we'll record them on the charts

Applications of Analytics

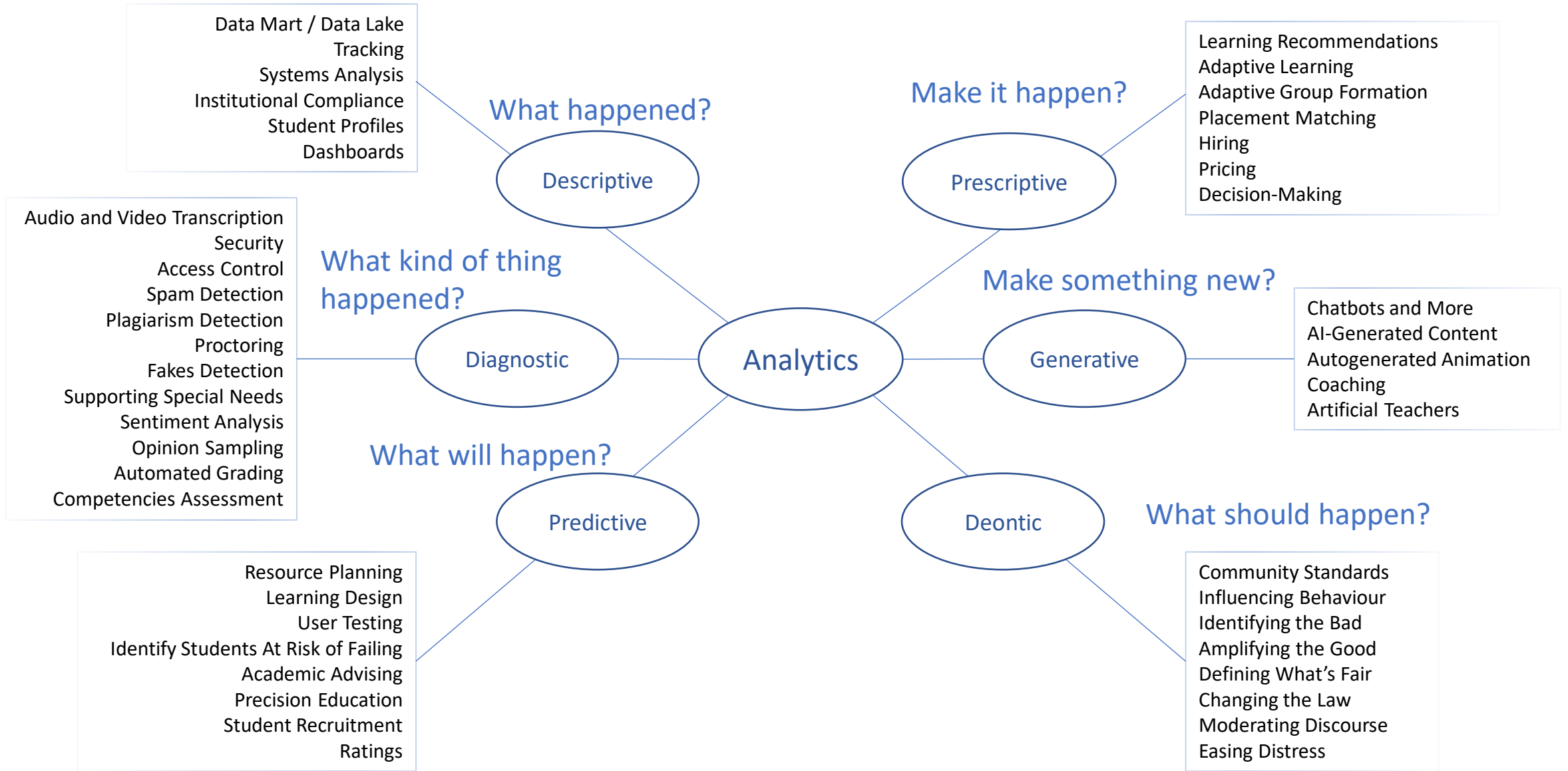
Resource: all applications of analytics

https://ethics.mooc.ca/all_applications.htm

What you can do (exercises for the future)

- Submit your own application
- Submit examples of each application

Applications of Analytics



Ethical Issues in Analytics

Four Major Types of Issue:

- When analytics works as designed
- When it doesn't
- Bad actors
- Social and cultural issues

Ethical Issues in Analytics

Exercise: what ethical issues can we imagine?

- Break into four groups
- Brainstorm on the ethical issues
- Report back

Ethical Issues in Analytics

Bonus: a fifth group of issues where the use of analytics is fundamentally dubious

Ethical Issues in Analytics

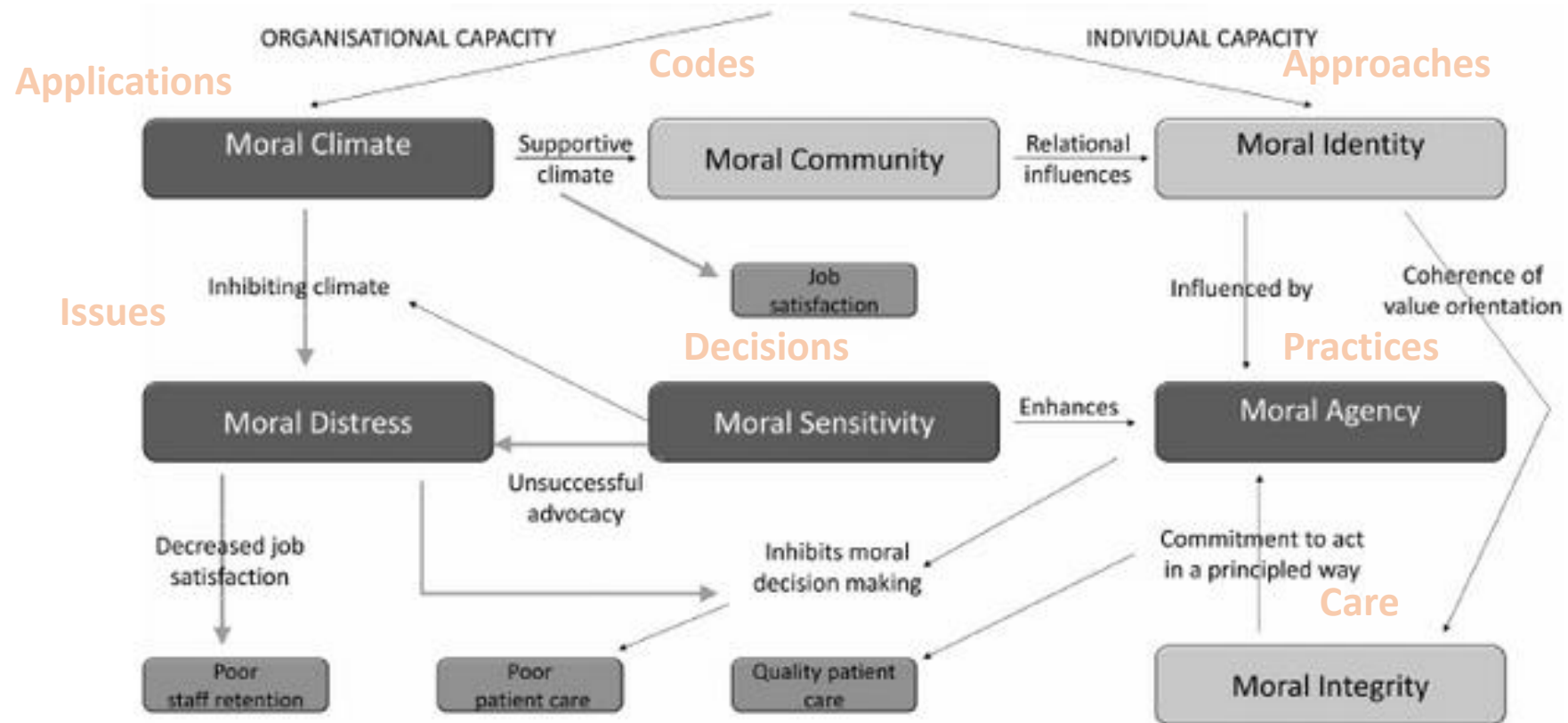
Resource: all the ethical issues

https://ethics.mooc.ca/all_issues.htm

What you can do (exercises for the future)

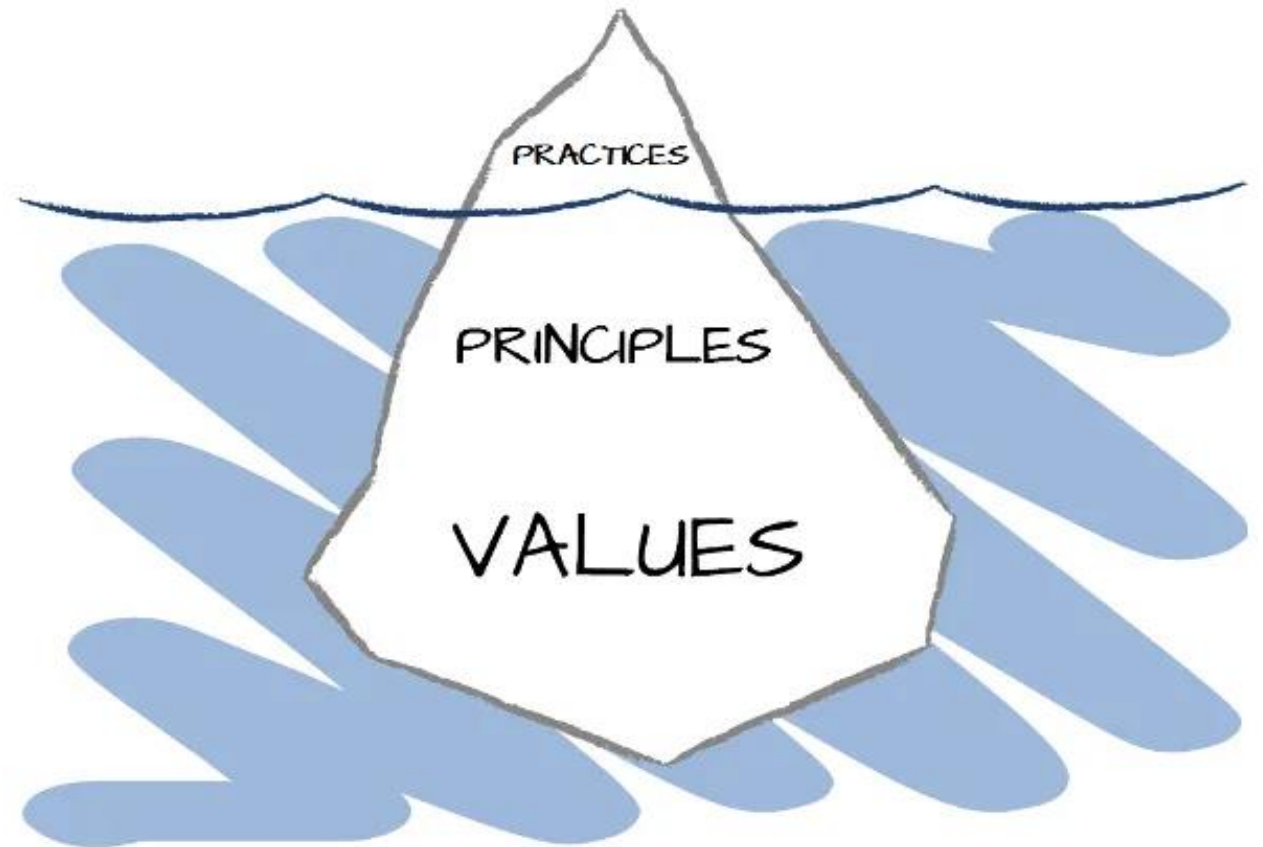
- Submit your own issue
- Submit examples of each issue

Ethical Issues in Analytics



Ethical Codes

- Codes are divided by:
 - *Values* – general moral values, such as ‘honesty’ and ‘trustworthiness’
 - *Principles* – the ethical conditions or behaviors we expect
 - “An ethical principle is a statement concerning the conduct or state of being that is required for the fulfillment of a value; it explicitly links a value with a general mode of action.” (Cooper, 1998)



Ethical Codes

Exercise: break into two groups

- In group one, each person identifies an ethical value that should be the basis for an ethical code (e.g.,
- In group two, each person identifies a person or group of people to whom an ethical duty is owed (this might help: <https://ethics.mooc.ca/cgi-bin/page.cgi?presentation=30>)
- (We'll vote on the ethical values)

Ethical Codes

Resource: all the ethical values

https://ethics.mooc.ca/all_values.htm

What you can do (exercises for the future)

- Submit your own value

Ethical Codes

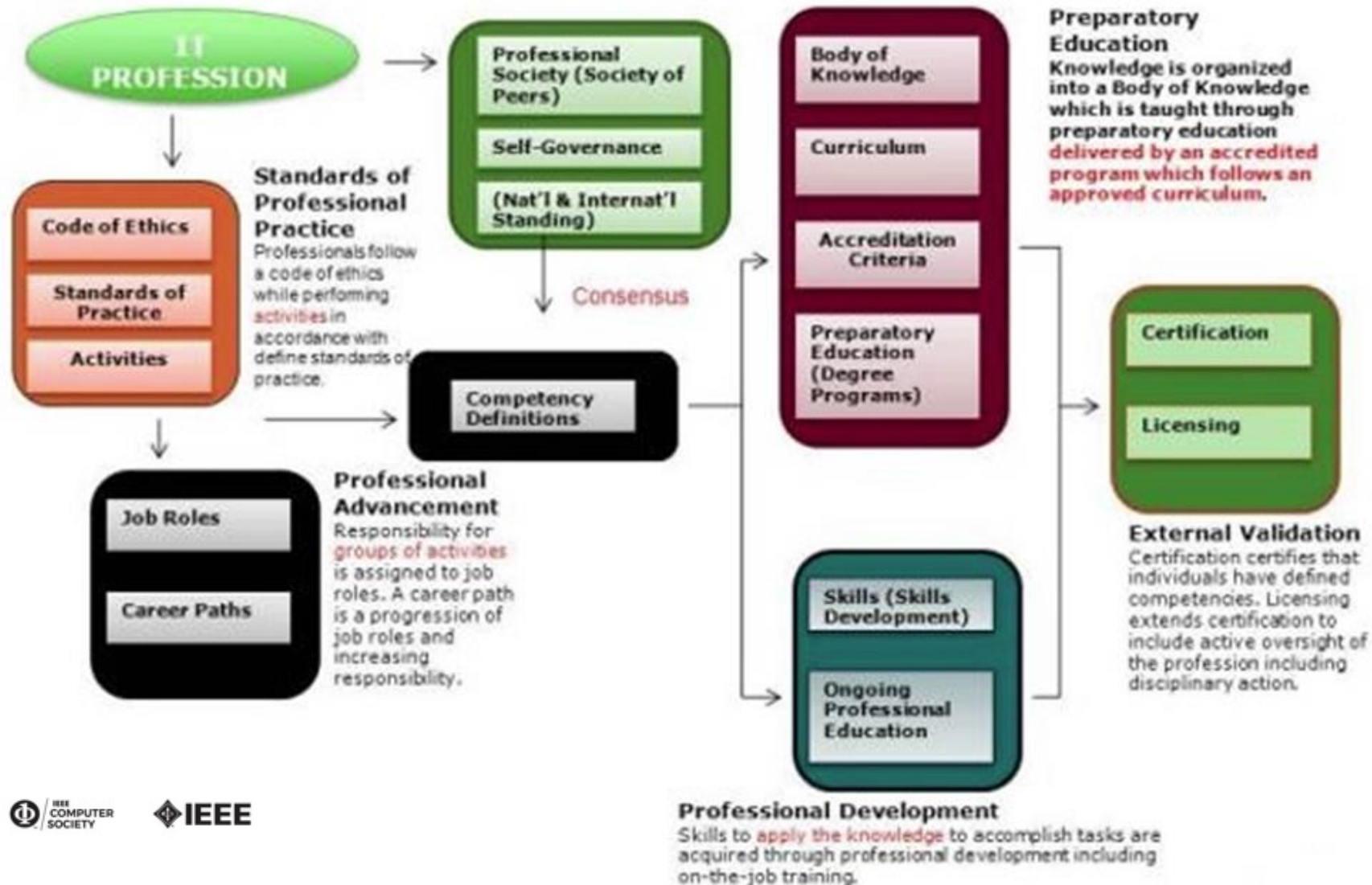
Resource: the ethical codes reader

<https://ethics.mooc.ca/files/Ethics 4a - Codes.pdf>

What you can do (exercises for the future)

- Find additional ethical codes
- Add them to the reader

Ethical Codes



Approaches to Ethics

Resource: bases for values and principles

<https://ethics.mooc.ca/cgi-bin/page.cgi?presentation=32>

Question: on what do we base our own ethics?

Approaches to Ethics

Four major approaches to ethics:

- Development of ethical virtues
- Seek good and avoid harmful consequences
- Follow ethical principles and duties
- Abide by a social contract

Approaches to Ethics

Exercise:

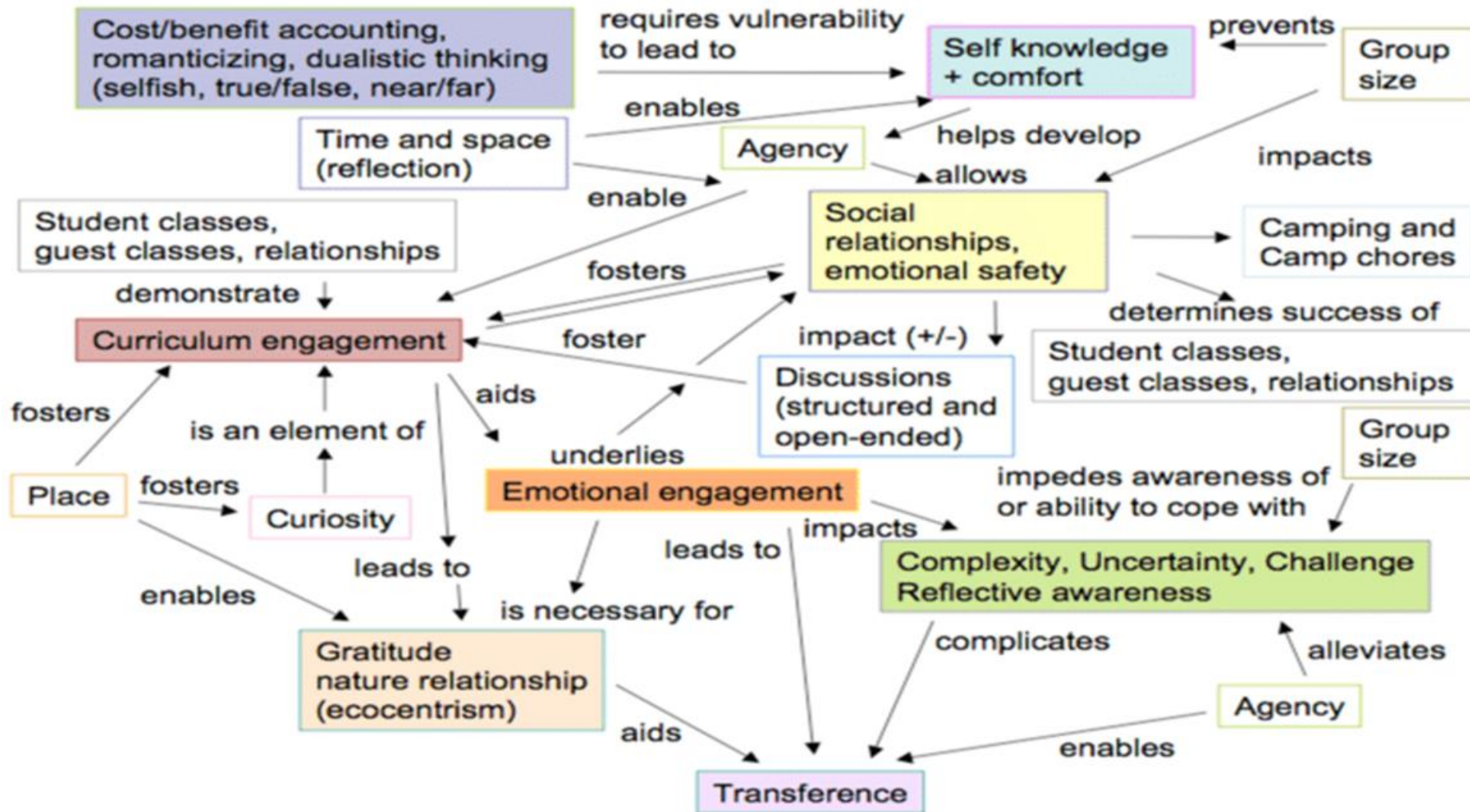
- Break into four groups
- Each group answers one of these questions
 1. What are the individual virtues
 2. What things are good or harmful
 3. What rules ought we to follow? Why?
 4. What things have we agreed to in society?

Approaches to Ethics

Resource: presentations on erthical theories

- Virtue: <https://ethics.mooc.ca/cgi-bin/page.cgi?presentation=35>
- Consequentialism: <https://ethics.mooc.ca/cgi-bin/page.cgi?presentation=38>
- Deontology: <https://ethics.mooc.ca/cgi-bin/page.cgi?presentation=36>
- Social Contract: <https://ethics.mooc.ca/cgi-bin/page.cgi?presentation=40>

Approaches to Ethics



The Duty of Care

Care:

- As the foundation for a legal principle
- As a naturally occurring sentiment or instinct
- As based in something *other* than reason or argumentation

Resource:

- Introduction to the Duty of Care
<https://www.downes.ca/post/74527>

The Duty of Care

Practices and principles of care have been explored in the domains of:

- critical psychology (Noddings 1984)
- political theory (Tronto 1993)
- justice (Engster 2009)
- citizenship (Kershaw 2005; Sevenhuijsen 1998)
- migration and labor studies (Boris and Rhacel 2010)
- care in business ethics and economics (Gatzia 2011)
- scientific choices for development (Nair 2001)
- health work and sciences (Latimer 2000; Mol 2008)
- disability studies and activism (Sánchez Criado, Rodríguez- Giralt, and Mencaroni, 2016)
- accountability procedures (Jerak-Zuiderent 2015)
- food politics (Abbots, Lavis, and Attala 2015)
- animal rights (Donovan and Adams 2010)
- farming practices (Singleton and Law 2013)
- grassroots activism (Barbagallo and Federici 2012)
- social and health work, and policy (Hankivsky 2004)
- knowledge and science (Muller 2012; Suzuki 2015)
- politics in technoscience (Martin, Myers, and Viseu 2015)
- ecology (Curtin 1993)
- Human-nonhuman relations (Haraway 2011).

María Puig de la Bellacasa (2017) Matters of Care.

[https://syllabus.pirate.care/library/Maria%20Puig%20de%20La%20Bellacasa/Matters%20of%20Care%20\(171\)/Matters%20of%20Care%20-%20Maria%20Puig%20de%20La%20Bellacasa.pdf](https://syllabus.pirate.care/library/Maria%20Puig%20de%20La%20Bellacasa/Matters%20of%20Care%20(171)/Matters%20of%20Care%20-%20Maria%20Puig%20de%20La%20Bellacasa.pdf)

The Duty of Care

Exercise: break into four groups

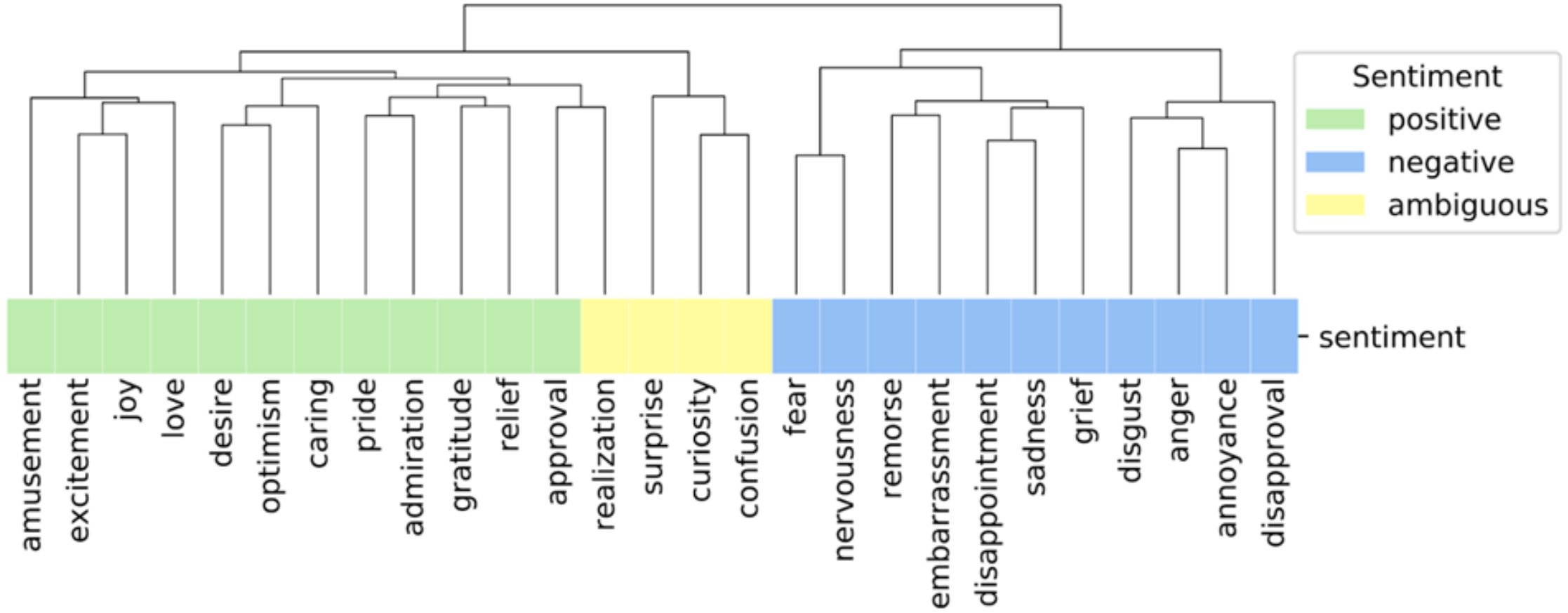
1. Consider the question of the *origin* of care – what are the possible explanations?
2. Consider some of the *dimensions* or *elements* of care (e.g. justice, compassion, inclusion)
3. Consider some of the *feelings* or *sentiments* associated with care (e.g. pride, gratitude)
4. Consider what a *pedagogy of care* would look like

The Duty of Care

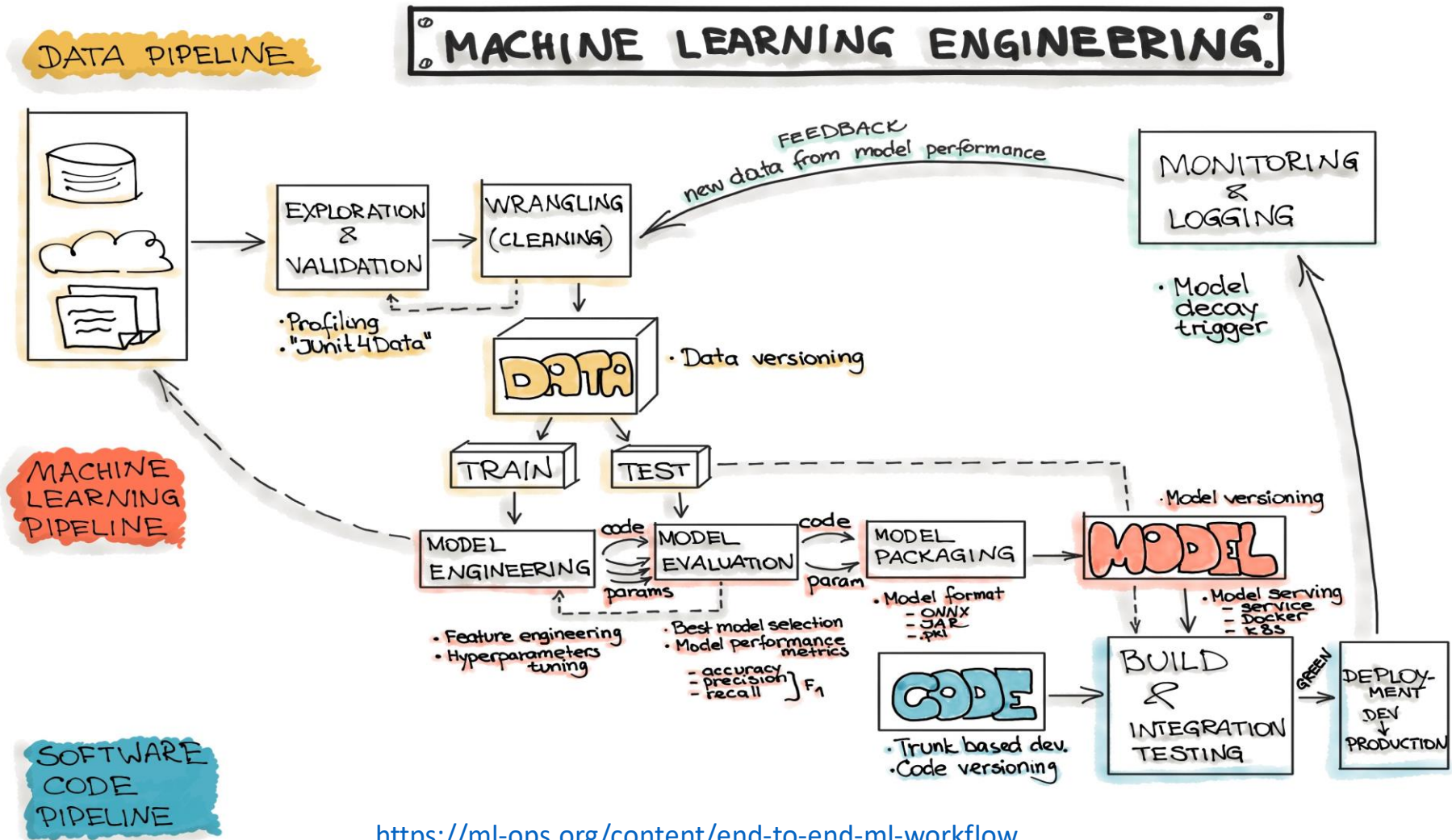
Care as an Ethical Principle:

- Part One - <https://ethics.mooc.ca/cgi-bin/page.cgi?presentation=47>
- Part Two - <https://ethics.mooc.ca/cgi-bin/page.cgi?presentation=48>

The Duty of Care



The Decisions We Make



The Decisions We Make

Exercise: the analytics workflow – Part One

- Divide into groups to perform the following:
 1. Needs analyses and surveys
 2. Data collection and processing
 3. Algorithm selection and prioritization
 4. Training and development of models
 5. Deployment in application
 6. Evaluation and testing

Some resources: <https://ethics.mooc.ca/cgi-bin/page.cgi?module=11>

The Decisions We Make

Exercise: the analytics workflow – Part Two

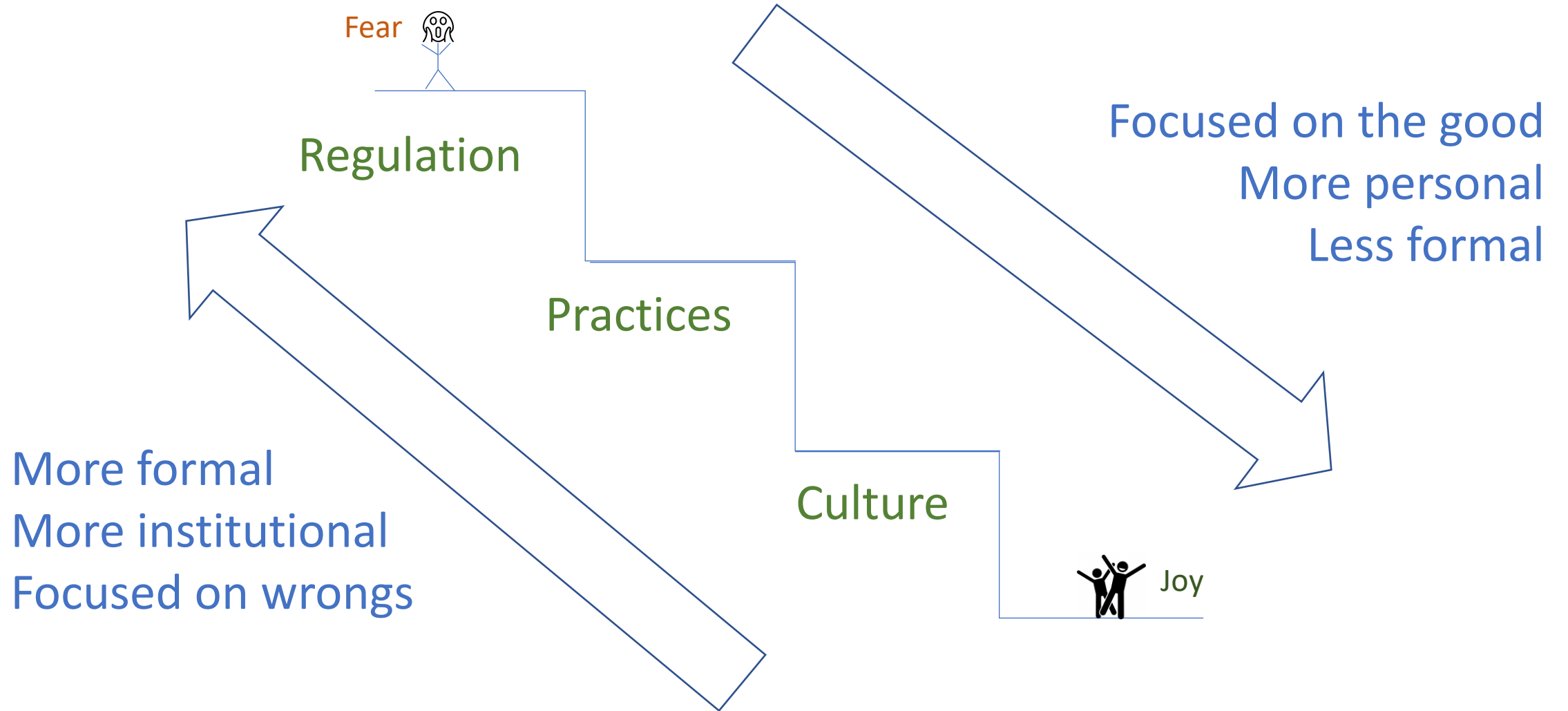
- Perform the workflow by interacting with the previous and following groups:
 - To the *previous* group, describe what you will need to obtain from them to perform your task
 - To the *following* group, when they ask, describe the practical and ethical limitations you face

The Decisions We Make

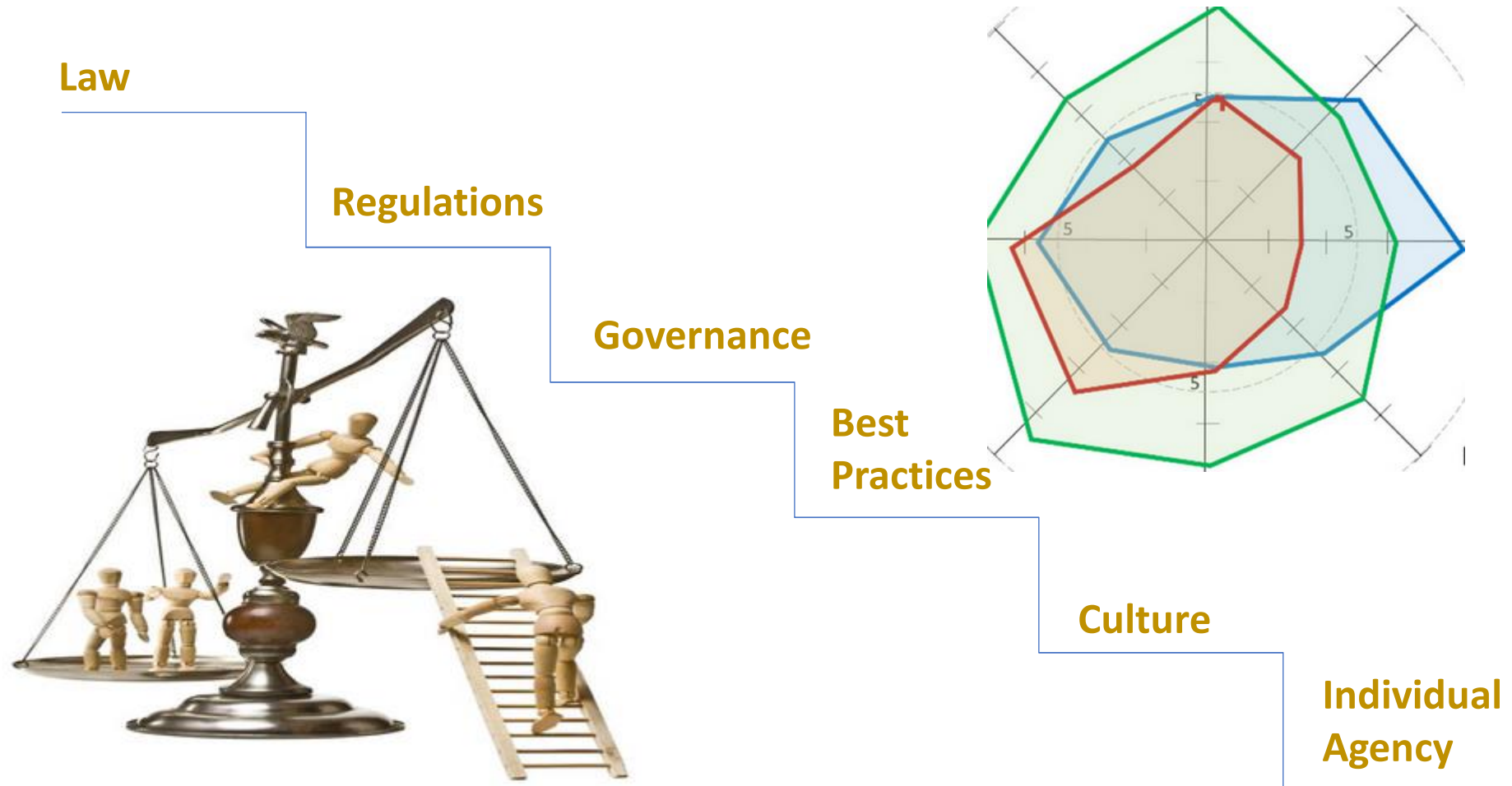
Bonus Question:

- What would count as an *explanation* of an AI process or operation?
 - What are explanations generally?
 - Theories? Models? Ontologies? Causes?
 - What makes a good explanation?
 - Simplicity? Parsimony? Predictive?
- What is the role of *interpretation*?

Ethical Practices



Ethical Practices



Ethical Practices

Exercise:

- For each step on the staircase:
 - What belongs within this domain? (e.g. what is properly a question of law? Of culture?)
 - How can we influence the relevant domain? (e.g., how do we change law? How do we change culture?)

Ethical Practices

An Ethics of Harmony

- Conviviality
- Ambiguity and small things
- An ethics of openness
- Connectedness and diversity
- Critical pedagogy
- Respect, kindness and empathy
- A pedagogy of harmony