

Data Management

Ethical Theory and Frameworks

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Overview

- Ethical Theories
- Data Ethics
- Practical ethical Assessment Framework
- Assignment 1

Data Ethics

- *“Data is an asset but is it also a risk” (Hasselbach and Tranberg, 2017)*

Ethics

- At its simplest, ethics is a system of moral principles. They affect how people make decisions and lead their lives.
- Ethics is concerned with what is good for individuals and society and is also described as moral philosophy.
- The term is derived from the Greek word *ethos* which can mean custom, habit, character or disposition.

Ethics

- Ethics is concerned with describing or defining the 'good' and understanding how do we decide what is 'good'.

(O'Keefe and O'Brien, 2018)

Deontological ethics

- The word deontological is derived from the Greek word deon, meaning 'duty'. It is concerned with right action – in other words, with doing the right thing simply because it is the right thing to do. Deontological theories focus on whether ethical decisions per se are right or wrong, regardless of the consequences or intentions of those ethical decisions. (SOAS, 2015).

Deontological ethics

- This reasoning is founded on the desirability of principle (usually duties or rights) to act in a given situation. The two main non-consequentialist theories are **ethics of duties** and **ethics of rights and justice**. Both of these are rooted in assumptions about universal rights and wrongs and responsibilities.
- (SOAS, 2015)

Deontological ethics

- This means that people who promote these types of ethical principles usually believe that they should be applied to everyone, everywhere in the world. If a child in one country has a right to an education, then this means that all children, everyone in the world, should have a right to an education
- (SOAS, 2015)

The Universal Declaration of Human Rights

- Article 2: The Universal Declaration of Human Rights
'Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Furthermore, no distinction shall be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether it be independent, trust, non-self-governing or under any other limitation of sovereignty.'

Deontological ethics - Duties

- Most people believe that all human beings have some duties to other human beings.
- The foundation of theories of duties is the theory developed by the German philosopher, Immanuel Kant (1724–1804). Rather than relying on religion to tell us what our duties are, Kant believed that we can rely on our powers of reason to do so. (SOAS, 2015)

Kant – Categorical Imperative



Act only on that maxim
by which you can at the
same time will that it
should become a
universal law

So act as to treat humanity both
in your own person and in the
person of every other, always at
the same time
Never simply as a means

(Johnson, 2016)

Deontological ethics -Rights

- A right is a justified claim against another person's behaviour.
- So rights and duties are related in that the rights of one person imply the duty of someone else to uphold that right.
- According to Kant we have a duty to treat every person as an end, and not as a means to our ends, because every person is autonomous and rational, and has intrinsic worth (SOAS, 2015)

The Universal Declaration of Human Rights

- Article 18
- “Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his [sic] religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.
- Article 19
- “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.”

Critique of Deontological ethics

- Deontological ethical frameworks primarily focus on ethics in the intent behind action or the 'rightness of an act' rather than the outcomes of an act.
- But ethical intent is only part of the equation. It is also extremely important to consider the consequences of an action or designed process, whether the consequences (or outcomes) in question are intended or unintended.

(O' Keefe and O'Brien)

Consequentialist theories

- Consequentialist theories are those that base moral judgements on the outcomes of a decision or an action. If the outcomes of an action are considered to be positive, or to give rise to benefits, then that action is held to be morally right.
- Conversely, if the outcome causes harm, then the action is held to be morally wrong. The judgement of right or wrong depends on the consequences of the decision or action. The two main consequentialist theories considered here are egoism and utilitarianism.
- (SOAS, 2015)

Utilitarianism

- The modern form of the consequentialist theory of utilitarianism derives from 19th century British philosophers such as Jeremy Bentham and John Stuart Mill,
- Rather than maximise individual welfare, utilitarianism focuses on collective welfare and it identifies goodness with the greatest amount of good for the greatest number of people: the 'greatest happiness principle'.
- So maximising benefits for the greatest number of people involves net assessments of benefit: utility is the net result of benefits and 'disbenefits' – or costs. Utility has entered modern economics as a key quantitative concept. The concept of trade-offs is specifically embraced and social and environmental cost–benefit analyses are explicit utilitarian tools for assessing the goodness of an action.
- A simple balance sheet of costs and benefits can be drawn up to assess the overall utility of a decision.

(SOAS, 2015)

Critique of Utilitarianism

- if the outcomes of an action are what counts, a consequentialist framework would allow clearly unethical or immoral acts up to and including murder, if the benefit was great enough.
- Another problem with utilitarianism as an ethical framework is that the argument of 'maximizing benefit and minimizing harm' doesn't necessarily mean that benefit and harm are evenly spread. What if the 'maximized benefit' benefits only a few?
- (O'Keefe and O'Brien, 2018)

Consequentialist ethics vs Deontological ethics

- Consequentialist ethics judge an action as right or wrong on the basis of the outcome of an action.
- Deontological ethics hold that that action itself is right or wrong, regardless of the outcome.
- (SOAS, 2015)

Egoism

- Egoism is the theory that one's self is, or should be, the motivation for all of our actions. In its strongest form, it argues that individuals only ever act in their own self-interest. Even where they appear to be acting in others' interests, descriptive egoism explains that the person is really motivated by their own self-interest disguised by arguments (rationalisations) of 'doing one's duty' or 'helping others'.
- In fact, our motivation behind doing 'good deeds' may be to make ourselves feel good; to make ourselves look good in the eyes of others; or because we believe that, by helping others, others will help us. Even if we donate money to charity anonymously, we may still only really do this because it makes us feel good about ourselves.
- The theory of egoism is at the heart of capitalist arguments that a corporation's sole responsibility is to its shareholders.

(SOAS, 2015)

Virtue Ethics

- In Western philosophy, the ancient Greek philosophers Plato and Aristotle are seen as the founders of virtue ethics.
- approaches ethics through the lens of self-improvement, virtues being desirable or 'good' character attributes.

(O'Keefe and O'Brien, 2018)

Virtue Ethics

- The aim of virtue ethics is to embody or live in harmony with the moral virtues valued by a culture or society.
- An ethical person acts in a way that makes them a better person.
- According to Aristotle, acting in accordance with virtue results in a well-lived life, 'Eudaimonia', or 'happiness'.
- (O'Keefe and O'Brien, 2018)

Critique of Virtue Ethics

- One criticism of virtue ethics is that our values and understandings of 'virtues' are culturally bound.
- Different cultures have different focuses on what they consider to be moral goods or virtuous conduct.
- Which 'virtues' are valued over others may be different in different times, cultures and subcultures, so a focus on virtue ethics in a global context may need to engage with the relativist aspect of what is considered 'virtuous'.
- (O'Keefe and O'Brien, 2018)

Virtue Ethics

- These cultural differences obviously exist between different countries and ethnic cultures.
- However, they can equally arise in the context of the cultural frame of an industry or social subculture.
- For example, the virtue perspective of a technology-focused person might differ from that of a more human rights-focused individual.
- (O'Keefe and O'Brien, 2018)

Which ethical theory?

- Perhaps you believe that individuals only ever act in their own self-interest (egoism)
- You believe it sensible to take a decision that has the best possible outcome for all concerned (utilitarianism).
- Or you may believe that there are some universal rights which all humans have (deontology).
- Or perhaps you do things each day because you think it makes you a good person and not because of any duty or consequences that this action might have (virtue ethics).
- (SOAS, 2015)

Monism vs. Relativism

- Some philosophers argue that it is possible to make objective decisions about our ethics and that identifying one, valid ethical theory should be the main task of philosophers. This position is called **ethical monism**.
- Others philosophers, in contrast, believe that it is impossible to make such objective ethical judgements and that any decision about which particular ethical approach is 'right' is nothing more than a personal preference, and will depend on people's individual feelings, their cultural and religious background, etc. This position is called **ethical relativism**.
- (SOAS, 2015)

Ethical Pluralism

- Ethical pluralism is the acceptance that there may be more than one correct moral framework that we can use. However, it differs from relativism in that it does not accept that all frameworks are equal – morality, according to a pluralist, does not simply come down to personal preference. It is possible to make rational judgements between various frameworks and to judge some to be better than others.

The future of ethics

- Generally, in Western countries, at least, there are trends away from absolutism and towards flexibility and subjectivity, perhaps towards a more modern – or post-modern – personalised, individualist, and situational ethics.
- Alternative cultural paradigms are likely to contribute new insights that may not replace the evolutionary pathway of philosophy started by the ancient Greeks around 2500 years ago, but are likely to influence the patterns of behaviour within international institutions, organisations, and business throughout this century.”
- (SOAS, 2015)

So what does this have to do with technology?

- Watch this video on ethics and the design of autonomous systems
- [https://www.ted.com/talks/eleanor nelsen would you sacrifice one person to save five?language=en](https://www.ted.com/talks/eleanor_nelsen_would_you_sacrifice_one_person_to_save_five?language=en)

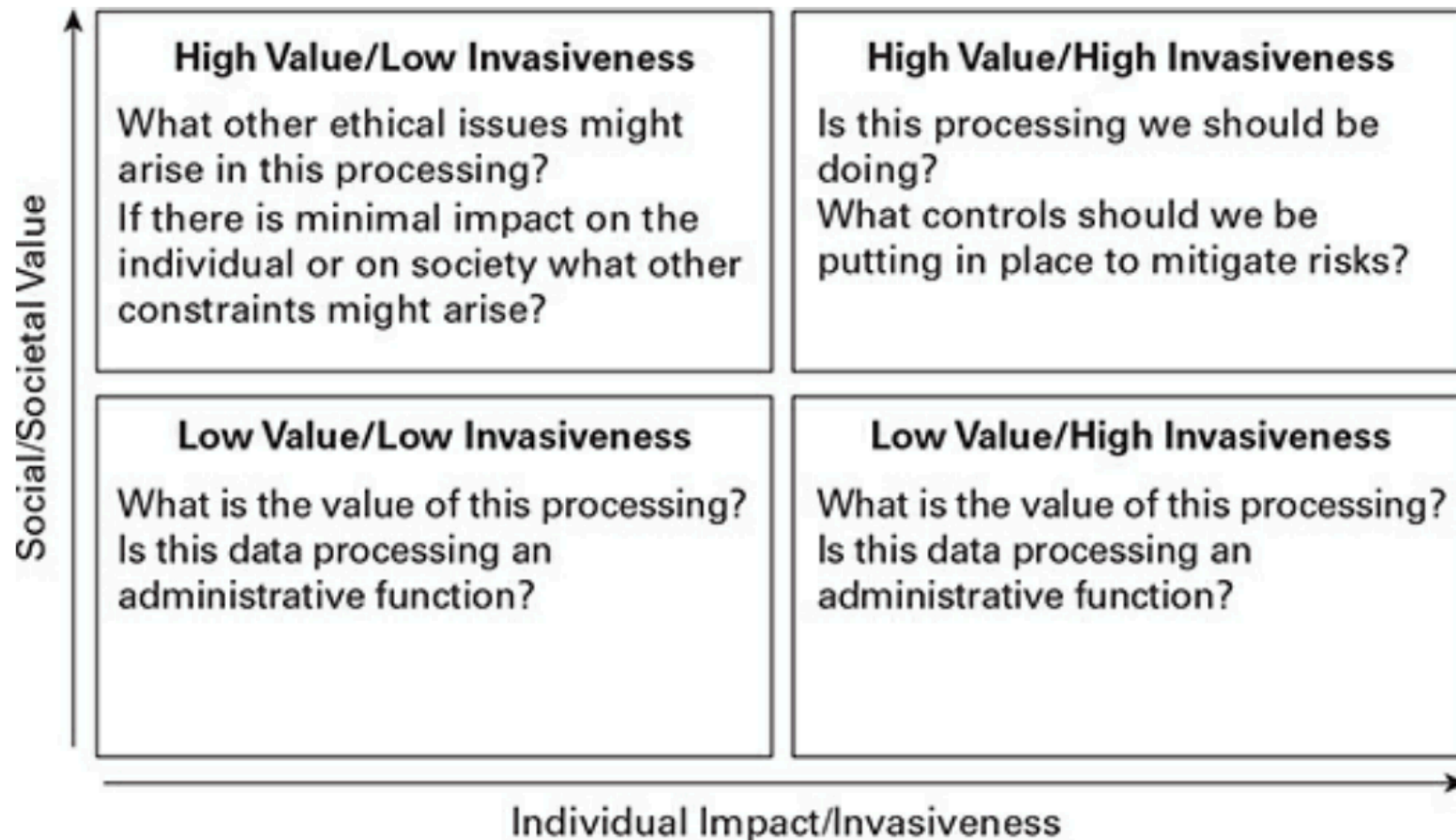
Questions

- Had you heard of “the trolley problem before”?
- In the examples of autonomous vehicles or military drones who do you think should make these ethical decisions in the design of these systems?

Ethical Dilemmas in Data management

- Societal value versus individual rights
- If processing is significantly invasive or harmful to the rights or freedoms of individuals, but delivers an equally significant social benefit, it may well be that there is a valid ethical trade-off to be made. If, however, the processing is invasive to the individual but of limited value to society then the trade-off is less compelling. Also, even in scenarios where the trade-off is skewed against the individual, organizations might be able to take some action to redress that balance through education, communication or other mechanisms.

Social vs Individual



First Principles Ethical Test

- Does the outcome of your design/algorithm/process outcome contribute positively to 'the good', or positive preservation of human rights?
- (O'Keefe and O'Byrne, 2018)

First Principles Ethical Test

What is the outcome?

1. Does it preserve or enhance human dignity?
 2. Does it preserve the autonomy of the human?
 3. Is the processing necessary and proportionate?
 4. Does it uphold the common good?
- does the outcome violate any of these four points?

Case Study: Health Identifier

- A public-health-services body is planning to implement universal health identifiers for all individuals who use the health services. They foresee many benefits to the implementation, including increased accuracy in prescriptions, a 'single view of patient', and possible cost savings through increased efficiency:
- (O'Keefe and O'Brien, 2018)

Does it uphold the common good?

- It could be argued that the identifier will increase accuracy in reporting and statistics, providing necessary information to identify which services are needed most and increase the ability to provide needed services to the public. This will have to be balanced against the privacy aspects and the proportionality and necessity of processing.

Does it preserve human dignity?

- Does it enhance human dignity? A properly implemented individual health identifier has the potential to preserve and enhance human dignity; accurate identification of patient and procedure required for the patient can mean the difference between an oral exam and a rectal exam. Reducing the chances of procedural error in delivering medical treatment would not just preserve but enhance the dignity and well-being of the individual.
- (O'Keefe and O'Brien, 2018)

Does it preserve the autonomy of the human?

- The question of autonomy raises issues of free and informed consent, which are extremely important for ethical medical practice. The existence of a health identifier might not necessarily adversely affect the autonomy of the patient, but people may object to having their medical information combined in a way that provides an overarching view of what is often extremely sensitive information. Control measures will have to be in place to ensure that information management is centred on the individual and ensures their autonomy as active 'choosers' is preserved. Great care will need to be taken to ensure that the design and implementation of the health identifier preserves the individuals' privacy and their rights to autonomous action as 'choosers'.
- (O'Keefe and O'Brien, 2018)

Is it necessary and proportionate?

- If the organization wishes mandatory use of health identifiers across the board, this processing of personal data will have to be justified as necessary and proportionate.

(O'Keefe and O'Brien, 2018)

Activity

- Scenario : use of analytics to create a granular profile for targeted messaging
- An organization uses algorithmic analysis of the patterns of social media 'likes' to create granular profiles of anonymized users, identifying information such as age, gender, ethnicity, socioeconomic status and sexual orientation. These profiles are to be used to provide targeted messaging for marketing or political purposes to identified users who match the granular profile:

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Credits



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