Introduction to Ethics in Design
Introduction to Ethics in Design

• Why ethics?
• Definition
• Moral theories and traditions
• Ethical approaches
• Formal ethics
• Applied ethics
• Implications for design
Why ethics?

The design of technology is - in fact - doing ethics, by other means.

Animation: Explaining Technological mediation, Peter Paul Verbeek
https://www.youtube.com/watch?v=FVhrLwBNbvU
Why ethics?

Design impacts morality, will and agency. Designers must take an ethical stance. Designers are accountable. There are norms other than regulations to be followed. Technology is not neutral.

(Tromp et al., 2011)

Morality - what should I do?
Will - what do I want to do?
Agency - what can I do?
Definition of ethics

Merriam-Webster defines ‘ethic’ as

“…the discipline dealing with what is good and bad, and with moral duty and obligation”.

While overarching definitions, such as this one, provide a starting point, it does not tell you how to be and act as a responsible designer.
Discuss

• What is ethics?
• Give one example of ethical conduct
• Give one example of non-ethical conduct
Moral theories and traditions

• Consequentialism:
  • Focuses on the consequences of an act to determine if the act is moral or immoral

• Deontology:
  • Focuses on the act. Certain acts are intrinsically right or wrong.

• Virtue Ethics:
  • Focuses on the character of the agent. A virtuous agent will act morally.

https://sevenpillarsinstitute.org/ethics-101/moral-traditions/
Ethical approaches

- **Utilitarian approach (Consequentialism)**
  - Emphasize the outcome over the process and seeks the greatest good for the greatest number of people

- **Virtue based approach (Virtue ethics)**
  - Pursues sound moral traits, e.g. generosity, goodness, kindness, and sympathy. More important to be an overall good person than to singling out a particular action.

- **Rights-based approach (Deontology)**
  - Focuses on the participants moral rights, such as privacy.
Utilitarian approach (consequentialism)

Bentham & Mill

• Emphasizes the outcome over the process and seeks the greatest good for the greatest number of people

To analyze an issue using the utilitarian approach, we:

• first identify the various courses of action available to us.
• Second, we ask who will be affected by each action and what benefits or harms will be derived from each.
• And third, we choose the action that will produce the greatest benefits and the least harm.

The ethical action is the one that provides the greatest good for the greatest number.
Virtue based approach (virtue ethics)

- Pursues sound moral traits, e.g. generosity, goodness, kindness, and sympathy. More important to be an overall good person than to singling out a particular action.

The virtue approach to ethics assumes that there are certain ideals toward which we should strive, which provide for the full development of our humanity. These ideals are discovered through thoughtful reflection on what kind of people we have the potential to become.

Virtues are attitudes or character traits that enable us to be and to act in ways that develop our highest potential. They enable us to pursue the ideals we have adopted. Honesty, courage, compassion, generosity, fidelity, integrity, fairness, self-control, and prudence are all examples of virtues.

Virtues are like habits; that is, once acquired, they become characteristic of a person. Moreover, a person who has developed virtues will be naturally disposed to act in ways consistent with moral principles. The virtuous person is the ethical person.

In dealing with an ethical problem using the virtue approach, we might ask, What kind of person should I be? What will promote the development of character within myself and my community?
Rights-based approach (deontology)

(derived from the Greek word for duty, deon) - Immanuel Kant -

• Focuses on the participants’ moral rights, such as privacy.

An approach focused on the individual's right to choose for herself or himself. According to the philosophy, what makes human beings different from mere things is that people have dignity based on their ability to choose freely what they will do with their lives, and they have a fundamental moral right to have these choices respected. People are not objects to be manipulated; it is a violation of human dignity to use people in ways they do not freely choose.

In deciding whether an action is moral or immoral using this approach, we must ask, Does the action respect the moral rights of everyone? Actions are wrong to the extent that they violate the rights of individuals; the more serious the violation, the more wrongful the action.
Discuss: Case study dilemma

Sentio Ergo Sum

https://www.scu.edu/ethics/focus-areas/technology-ethics/resources/technology-ethics-cases/
Sentio Ergo Sum – case study

A company called Cogito sells AI software to companies that use it to gauge the emotional content of voice interactions between their employees and customers. For example, the insurance company MetLife uses Cogito: the software monitors phone conversations when call-center agents interact with people over the phone, and places notification icons on the agents’ screens to alert them about the mood of their conversation partners, as well as about their own patterns. As Wired reported in 2018, a “cartoon cup is a helpful nudge to sit up straight and speak like the engaged helper MetLife wants [the agent] to be. The voice-analysis algorithms also track customer reactions. When call agents see a heart icon, they know the software has detected a [caller’s] heightened emotional state, either positive or negative.”

The software analyzes other elements, too; it lets agents know, for example, “if they start speaking more quickly, a caller is silent for a long time, or the caller and agent talk over each other.”

While callers are notified when calls are being monitored and recorded, there is no additional disclosure explaining this layer of analysis of their voices, tone, or conversation patterns.

In June 2019, in a New York Times article, reporter Kevin Roose notes that at MetLife the Cogito software serves as “a kind of adjunct manager, always watching [agents]. At the end of every call, … notifications are tallied and added to a statistics dashboard that [the agent’s] supervisor can review. If [the agent] hides the Cognito window by minimizing it, the program notifies his supervisor.”

The stated goal of software programs like Cogito is to make workers more effective by providing “live behavioral guidance to improve the quality of every interaction.” According to Roose, several MetLife employees he spoke to “said they liked getting pop-up notifications during their calls, although some said they had struggled to figure out how to get the ‘empathy’ notification to stop appearing.”

The New York Times article cites the head of global operations at MetLife, who states that the software “changes people’s behavior without them knowing about it. … It becomes a more human interaction.”

MetLife representatives have noted that customer satisfaction has increased by 13% since their call centers first began to use the AI program.
Sentio Ergo Sum - Discuss in class

● Who are the stakeholders involved in this case?

● What ethical issues do you spot in this scenario?

● How might these issues be perceived through the ethical prisms of utilitarianism (consequentialism), rights (deontology), or virtue based approach?
Guiding ethical principles

- **Respect for other people** – treating all people as autonomous individuals

- **Beneficence and nonmaleficence** – maximizing possible benefits and minimizing harm

- **Justice** – distributing the benefits and any unavoidable harm as fairly as possible
Formal ethics

Ethics includes the normative or **formal aspects** of ethics determined by laws, norms and guidelines, but also **applied ethics** that includes how we can think ethically about specific issues.

(Spiel et al., 2018; Frauenberger, 2016)
Formal ethics – examples

- Safety and risk assessment
- Issues of consent
- Consent for video and photo
- Selection of participants
- Withdraw
- Data storage
- Inducements
- Privacy

(Markopoulos; Read; MacFarlane Stuart; and Höysniemi, 2008).
Formal ethics: Consent forms

https://www.who.int/groups/research-ethics-review-committee/guidelines-on-submitting-research-proposals-for-ethics-review/templates-for-informed-consent-forms
Formal ethics: Laws

Most countries have laws that regulate:

- health and safety
- child protection
- human rights
- data protection legislation.

These laws vary from country to country.

Example: GDPR (General Data Protection Regulation)
https://www.eugdpr.org/

It is your responsibility to know what laws apply in your country!
Formal ethics – Ethical standards

Ethical standards include:

- Rights – right to justice, privacy, childhood, etc.
- Reasonable obligations or responsibilities – to refrain from rape, murder, stealing, fraud, etc.
- Virtues or character – honesty, patience, self-control, respect, fairness, etc.

Example: UN Rights of Persons with Disabilities (CRPD)

Formal ethics – Professional code of ethics

Defines basic rules or principles that define “good” or “right” behaviour for professionals in a specific area.

Example – ACM code of ethics:

https://www.acm.org/code-of-ethics
Applied ethics

**Micro-ethics** understood as the ethics of what happens in concrete interactions between individuals in the design process.

The **In-Action Ethics** framework, calls for ethical processes to be responsive to issues as they arise in design, inclusive of stakeholders and reflective as an activity.

The aim is to argue for continuous, critical reflection, so that ethical considerations become folded into the practice, rather than being a tick-box exercise.

(Spiel et al. 2018; Frauenberger, 2016)
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 1. Synopsis of ethical challenges identified in archetypal third-paradigm HCI research.</strong></td>
<td></td>
</tr>
<tr>
<td>Explorative research</td>
<td>Processes are unpredictable and outcomes, even methods potentially, unknown in advance. Ethical dilemmas emerge from the work, requiring a responses that go beyond the protocols developed (OutsideTheBox, Benford et al., 2015; Munteanu et al., 2015; Williamson and Prosser, 2002)</td>
</tr>
<tr>
<td>Context</td>
<td>The context in which research is conducted (e.g., funding bodies, research cultures, socio-historical background, participants etc.) fundamentally shapes the ethical approach needed and requires situated judgements (Give &amp; Take, Benford et al., 2015; Munteanu et al., 2015; Williamson and Prosser, 2002)</td>
</tr>
<tr>
<td>Packaging</td>
<td>Ethics is confined to a designated workpackage which fosters the notion that it is something that the majority of the project does not need to concern themselves with and can safely be left to the ‘expert’ (Give &amp; Take).</td>
</tr>
<tr>
<td>Protecting Participants</td>
<td>Protecting participants cannot always be fully guaranteed. Informed consent clearly has limitations when the directions the process may take and the outcomes are partially unknown (Benford et al., 2015; Munteanu et al., 2015; Williamson and Prosser, 2002)</td>
</tr>
<tr>
<td>Methodology and Ethos</td>
<td>Approaches and methods carry their own ethos, but many formal ethics processes are ignorant of which methodology they are applied to (Robertson and Wagner, 2012).</td>
</tr>
<tr>
<td>Values and provocation</td>
<td>As critical design (Bardzell and Bardzell, 2013) and HCI’s intersection with art (Benford et al., 2015) shows, projects may not necessarily embrace ‘good’ values, but provoke and offer critique (see also Grimpe et al., 2014, ‘the positive disruptive potential of critical design’)</td>
</tr>
<tr>
<td>Stakeholder ethics</td>
<td>Involving stakeholders into a design process may require to deal with radically different ethical positions, unknown in advance (OutsideTheBox, Benford et al., 2015, discusses ongoing negotiation of ethics).</td>
</tr>
<tr>
<td>Outcomes and Expectations</td>
<td>Success is defined differently by different stakeholders (Morton, 1999; Sanders and Westerlund, 2011) and a basic understanding of these differences is required to ethically manage expectations (OutsideTheBox, Munteanu et al., 2015).</td>
</tr>
<tr>
<td>Closeness</td>
<td>The notion of researchers being objective and removed entities is increasingly rejected (Sengers et al., 2005). Their increasing involvement as individuals, however, also raises ethical issues around confidentiality (Williamson and Prosser, 2002) and power structures (Bratteteig and Wagner, 2012).</td>
</tr>
<tr>
<td>Risks to researchers</td>
<td>A consequence of the ever deeper entanglement of researchers and participants is that they too are at risk and managing this risk is an ethical responsibility (Munteanu et al., 2015).</td>
</tr>
<tr>
<td>Exits</td>
<td>The rapport researchers and designers build with participants in becoming deeper involved, also may evolve into ethical dilemmas when exiting the scene after a project has finished (compare Gary Mardsen quoted in Vines et al., 2013).</td>
</tr>
<tr>
<td>Shared Power</td>
<td>Sharing power and scope for decisions with participants (Robertson and Wagner, 2012), also means sharing responsibility. When participants ‘(co)-own’ outcomes (compare Bødker et al., 1987), the boundaries of ethical accountability are blurred and fluid.</td>
</tr>
<tr>
<td>Voluntary involvement or withdrawal</td>
<td>HCI’s turn to the wild also means that involvement is not always voluntary (e.g., bystanders Benford et al., 2015) or as part of a school study (OutsideTheBox, Munteanu et al., 2015). Benford et al. (2015) makes a similar point about withdrawal, which is not always possible in the middle of participatory processes.</td>
</tr>
<tr>
<td>Unplanned data collection</td>
<td>Often data are collected in unintended ways (Munteanu et al., 2015) or information is obtained that requires immediate deviation of the protocol (as in the Ivy4Ev project in Benford et al., 2015). Formal ethics sometimes draws attention to this, but the unpredictable nature of the kind of data collected makes anticipating responses difficult.</td>
</tr>
</tbody>
</table>
Reflect upon

- What are the formal and informal ethical challenges of your design and design process?
Implications for design – Materializing Morality

Technologies have "intentions," they are not neutral instruments but play an active role in the relationship between humans and their world.

Video: Moralizing Technology and the ethics of things | Peter-Paul Verbeek | TEDxTwenteU, 17min
https://www.youtube.com/watch?v=S8a1DascnZg
Implication for design – Technological artifacts can influence human behavior

Technologies are able to evoke certain kinds of behavior:

- a speed bump can invite drivers to drive slowly because of its ability to damage a car's shock absorbers,
- a car can demand from a driver that he or she wear the safety belt by refusing to start if the belt is not used.

Scripts are the products of “inscriptions” by designers:

- Designers anticipate how users will interact with the product they are designing and, implicitly or explicitly, build prescriptions for use into the materiality of the product.
- Designers delegate specific responsibilities to artifacts, (make sure nobody drives too fast), which is delegated to a speed bump.
Implications for design – Examples of how to change people's behavior by design

Persuasive design

Design With Intent Toolkit
Cards to provoke designers to think about possible ways to influence behavior

(Fogg, 2000)

(http://designwithintent.co.uk/)
Reflect upon

- How is your design intentional?
- How are your designs products of "inscriptions" by you as designers?
Designer ethos

“We define ethos, as discussed above, as a moral commitment or stance, a moral attitude that underlies a particular practice. In contrast to formal ethics and related guidelines, we understand ethos as something that is intrinsic and embodied. It exists because people enact it and it tacitly informs their actions in precisely the same way as tacit knowledge does in Schön (1983). Being reflective about one’s ethos means to acknowledge how it shapes actions and that all actions also shape it in return. Enacting ethos means ‘doing the right thing’ and is a guiding principle that is built and maintained by using and reflecting on it. It intimately informs decisions and judgements while it evolves and grows with each new challenge.”

(Frauenberger et al., 2016)
Why ethics?

Design impacts morality, will and agency. Designers must take an ethical stance. Designers are accountable. There are norms other than regulations to be followed. Technology is not neutral.

(Morality – what should I do?
Will – what do I want to do?
Agency – what can I do?)

(Tromp et al., 2011)
References


Frauenberger, Christopher; Rauhala, Marjo; and Fitzpatrick, Geraldine (2016). In-Action Ethics. Interacting with Computers, 29(2), 220–236.
