Ethics

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Lesson 25/11

1 Ethic, Moral and Value judgment

1.1 What is ethic

- The study of human actions. A philosophical area of why and how humans behave.
- Parallel question :

Epistemology (What is true/false?)

Ethics (What is right/wrong?)

- Is it common to everybody? Is it an absolute concept?
- It may change over time! For example: Voting rights for women. The answer (ethical judgment) on the question if it is right for them to vote changed.
- Help us express value judgment!

1.2 Collective vs. Individual level

Taking the previous example (Voting rights for women), the ethical judgment of the people changed collectively. In this sense this is a collective process/agreement.

What happens when you scale this concept down to an individual level? It take the name of moral. Moral is the downscale to a subjective and individual level of ethics. The moral is an instantiation of ethics. You have a collective ethic and an individual moral.

1.3 Why do you think the women right debate started exactly in that time?

There is a level through the society changed, and the role of the women in the society changed too, so it made sense that the contest achieved by the role of women so similar to the one of the men, that they wanted similar rights. Before they didn't work for example! They were just doing houseworks.

It was clear that their role became much similar to the one of the men, that became a a matter of equality.

Let's consider another example, why is abortion a topic now? Because in the past women didn't had the possibility to choose to abort or not. But more, women couldn't have a painless abortion through a pill!

Technology enabled and arose new ethical debates!

1.4 What is a value judgment and why ethic help us to take it? Why we mention it in innovation?

It helps us to decide if our action is right or wrong assigning a value. Think about our first definition of innovation: the way ability to change the truth value of a statement (usually to make economic value but we can apply to social value too, we will see today).

Ethics is something that allow us to formulate this value judgment, and to state weather we see something as valuable or not.

Something may be extremely valuable in terms of economic, but if it is ethically unacceptable noone will ever want to do it, so it may not generate value.

Any more reasons to consider ethics in a course of innovation?

Innovation is disruptive, and it may bring changes to ethical judgment and values!

[Example: Uber] It was close to destroy the entire taxi category, as people start selling their taxi-licenses when it first came out. The licenses had no value anymore! Was it right or wrong?

[Example: Innovation in warfare]: is it right or wrong?

If you have an innovative idea, you have to consider ethical aspects! Your customers may refuse to buy your product due to their own judgment.

In business ethic may help to maintain your reputation (we'll see later corporate social responsability).

2 Computer Ethics

We have seen ethical judgement on products (physical artifacts, abortion pills, guns, ...) and actions (voting right, ...).

But, in the realm of ICT we have a third point, the steal/misuse of information.

The realm of created a third class of ethical problems, related to information!

2.1 Why it is particularly problematic Ethics of Computers?

- People hardly realize how much power information have!
- People don't know how those information can be used!
- There is an element of digital divide (not all people have access to the technology)
- The idea of fake news (without the tech help to spread information, it remains a gossip)
- Is hard to quantify & qualify, there is a matter of amount and attach value/judgment to information.

2.2 Examples of ethical problems in ICT

• Privacy in whatsapp: Is it fair that somebody else can see what i am writing?

What is the answer? Is neither yes or no, it is something in the middle. What answers did you see? Now whatsapp implemented encryption, but even if they can't read you message, they know who you are talking to and when, and they keep metadata(they can still use metadatas and get value from them, without knowing exactly what you are writing).

Each answer open the door to many implication difficult to solve!

• Copyright: Recognition of original work from people.

Last year the parliament discussed about a "link tax" to apply when someone use a link provided by your page and the shifting of the "responsabilities for copyright-protected material" (check YouTube campaign of last year).

- When somebody from a specific culture public something that is not accepted in other cultures, it may create discomfort.
- Self driving cars should drive on public streets? What happens if you can't prevent to kill someone between a girl and an old lady? Should we allow the car to take potentially life threatening decisions?

This is a close debate again, still, we are already allowing some machines to take decisions on our actions!

• Considering internet access as a human right is a problem? Should we give access to it to everyone?

Some people might not be ready socially besides the structures!

• The government have the right to hide (ban) information on the internet? Or just a cathegory?

(from the book - banning gamers from an RPG)

• Having the technical skills to colonize planets is it enough to allow me to do it?

2.3 What are the elements that can make innovation "good" or "bad"?

- It depends on the ethical problems it address. If there are any.
- Is necessary to make sure to not do damages. If i do any, we have to prevent the escalation of them.

2.4 Is technology neutral?

Neutral means that it is nor good or bad, it just depends on the people that use it. It's an open discussion.

[Neutral]: The machine itself can't take ethical decisions, the human does!

[Not neutral]: Technology is created with an intent, which is good or bad, is hard to find a neutral technology.

Technology might have side effects which differs from the developer intent. For example the factories automation are done to help people to work, but might some people get fired (technological unemployment, those years is critical overall on AI).

During the years the topic of technological unemployment have been discussed a lot and have been found out that even if the new technologies delete some old works, it creates new ones.

For example, the transition from farming work to industry work. The technologies mechanized farming and 90 % of population was working in farms, so it became a problem. But the technologies made factories open, so new working places have been created.

Some people think that technological unemployment is a reality, because today's most works are still machine tasks (algorithmic works).

Once we will be able to replace all those works with machines then we will have a problem.

Some others think that once we replaced all those works, new works may come out by their own, we can't know.

2.5 Do you thing that machines can be emotional?

How do you define if someone have emotions or not? For example, how you define an angry, tired, happy person?

- By our perception!
- So, can machines be emotional? No, because emotions are irrational!
- When you are emotional you are not using common sense.
- Machines can't be emotional, they can just take decisions on data they have working on statistics. Emotion is not a statistical analysis.
- The programmer can embed some emotional perceptions of him in his program.
- An emotion is an uncontrolled and unconscious reaction to stimuli. A machine is always controlled so can't be emotional.
- We can insert the uncertainty introduced by irrationality in a machine to make it emotional.
- If we can model a human brain fully, and we can reproduce it, we can create an emotional machine sufficiently complex.
- But, randomness does not exist in a computer!

(The professor recommend notekeepers to write all what have been said, if people want to develop a deeper study and try to proof wrong all the previous points)

2.6 Technology neutrality

There is a lot of semantics (how words are defined), let's try to focus on a few points:

Definition, "The way of acting rationally": follows the best rules of reasoning to take decisions we know at the moment (now).

The fact that a machine may act rationally is already not valid (his moment does not depends on time, can't be updated). So the machine act in an irrational way, therefore emotional, according to you.

Thought is evolving, and when we have a clash between two opposing thoughts, purely rational behaviours is an illusion.

[Example]: In Actor Network Theory, every object have a function and his function reflect the intention of the person who designed it (Designer intent).

Machines are not any different. They embed the intention of the people who design it. Noone will ever say "i want to develop a neutral technology". You do guns to kill people, and you do social networks to connect people.

The way a developer design an object and the way user is intentioned to use that object, creates ethical problems.

2.7 Roboethics

From Fiorella Operto (president of School of robotics).

A key problem in robo - ethics domain starts from the idea that there is a pipeline of thought (from Kant to ISO). Philosophy influence society and politics, politics influences policy, and policy creates standards, standards influence on how you design objects. There is a clear pipeline going from philosophy to engineering. The problem is that this pipeline takes time, if we go from Kant to ISO, by the moment which we have standards philosophy will be somewhere else.

And artifacts will be created on a common sense that is no more common! And we have a clash! And needing to explore ethics!

NB. Those classes are a starting point! We could do a single course on all those topics! Try to go deeper!

3 Complex systems trust

3.1 Do we have a choice on trust the man or trust the machine?

When you trust a machine you are trusting the machine developer? If we today chose to not trust a machine, can we do it?

- Machines are too complicated to have a full understand on what the machine is doing, even the developer can't. So in a certain way, we are trusting the machine.
- When the machine is too complex we can add a level of human supervision. After the decision of the machine we can validate or deny that decision.
- There can be a bottleneck to the technological evolution, and we will stop there.
- There are form of proofing on what is the behaviour of the machine, deleting the uncertainty related to the trust issues.

But there are situation complex enough to be tot able to provide a proof.

• And more, we don't need a fully understand of how a system works to use it.

Not everyone that uses a phone know 100 % how it works.

• An abstraction can be done, changing from machines to complex systems: Can be trusted a complex system?

Most of our studies are in social-technical systems.

We talked in previous lessons about a written of Bruno Latour, "Science in action", in the introduction there is this idea of nesting black boxes, and opening the black box.

Latour explains it talking about the discovery of the double helix in the DNA. When the debate on the fact that the DNA was a single or double helix, both research groups (single and double) worked on the work done before them to proof their idea.

They opened the black box on the single or double issue, but they were not able to open other nested black box inside.

How deep can we go in the system of black boxes before gave up?

3.2 How much we need to go in a deeper system before we can trust it?

This is an opened question for a number of reasons. The first one if that for system that are too complex we can't get sense of them at all.

[Example: Washing machine]: At a certain point we need to stop to explain how it works, because we would reach a point where we need to explain how electrical induction works, and so on, is never ending, is a series of black boxes. At a certain point we have to give to someone the system as a black box, and tell them it can wash.

3.3 How do we navigate the complex system of world ethics?

- We have to accept that this is changing, and be ready to adapt.
- We have some rules to apply when we want to adapt! Law, policy, politic...

[Policy def.]: Set of rules to manage how a behaviour/process should be done.

It differ from algorithms because algorithms define instructions and a sequence, a policy is a higher level tool, is a guideline!

[Politics def.]: Is a process that creates a dialogue in the society and enables it to work effectively.

Politics defines what policy you create/delete and how you implement them. Is the process that defines policies.

4 Social innovation

From EU, paper provided, 2011.

4.1 Social innovation examples

What does this mean? How innovation map to the social part? An innovation that change the common sense in the society!

- Facebook: Changed the interaction between people. Before Facebook, it was not recommended to share your identity on the internet, now is an everyday thing.
- Seawatch: In the moment in which the governments finance those operations, is it a social innovation?
- Public transport: Take the good in the hands of the few (car) and bring it to everybody.
- Food delivery: Services translation on the internet lower the time people spend facing other people.
- Universal basic income: It changed the way people approach life.
- Digitalization in general: Giving people the access to internet to communicate with whoever they want. Every citizen can talk to the higher state charges.

In the article, there are 3 views that address ideas of social innovation.

• Narrow view: A social innovation is an innovation that affect a socially vulnerable portion of population and tries to improve their lives.

There is a positive element! Examples:

- Bill gates foundation that distributes clear water
- Platforms of found rising
- Building accessible infrastructures for disables
- Societal challenges: Challenges that affect everybody (vulnerable and privileged)

Examples:

- Vaccinations
- Climate change
- Colonization of other planets
- Access to internet!
- Online learning
- Nuclear fusion (address challenge of energy)

Address macroscale problems!

• Systemic transformations: Empower the population to address societal problems (both micro and macro)

Examples:

- Universal basic income
- Voting rights
- Women emancipation
- Awareness campaigns

5 Corporate Social Responsibility

5.1 What is CSR?

- Things done to benefit the population instead the company that organize it (examples: beneficence marathons)
- Something companies dues to support their community
- A part of the incomes of the company they are forced to use for the social.

5.2 Definition of CSR

Code of conduct of corporations (may be mandatory or not) that make the company be more socially accepted (follows society ethic).

Is a trending growing year by year, companies want to be seen they behave well. They are becoming mandatory.