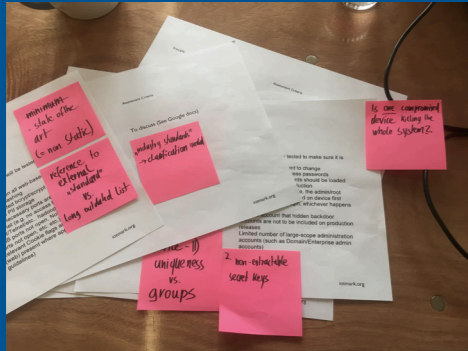


Ethical Things: Designing Ethical Technologies

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Why study ethical things?



From smart watches to connected doorbells; smart thermostats to air pollution sensors, 'connected' devices are now part of our everyday lives. As they populate our homes, work spaces and cities, they also become important mediators of how we see and sense the world. While this connectedness make important promises for the future, especially in terms of efficiency, usability and life-satisfaction; they also hint at a dystopian future of complete surveillance and control. Recent privacy and data breaches of major technology companies give us tell-tale signs of how things can go wrong, so do recent surges of sexism and racism implied by artificial intelligence technologies.

HOW to study ethical things?

We define **ethics as values in action with responsibilities for power**. Such a positioning entails that we study reasoning, design, communication, knowledge-sharing and decision-making in development of technologies.



Technological decision-making is multi-dimensional; it involves taking technological, legal, ethical, business and policy-decisions. In order to address the multi-dimensionality, we utilise several methodologies: ethnographic, social network analysis, legal and policy analysis.

HOW to design ethical things?



Ethical technological design requires prioritisation. Take the smart fridge camera. A fridge camera aims to give you detailed information about the contents of your fridge, and can do so through establishing a complex network infrastructure (e.g. Bluetooth, WiFi, etc.) that transfers data between connected devices (e.g. smart phones, watches, tablets, etc.) and the cloud, sensors and cameras that record the data. Hence, designing ethical things require developers to make decisions about which values matter and to what extent.

For instance, while Bluetooth connectivity can be more private and secure, it has identified problems with stability. In contrast, Wi-Fi provides simultaneous access via all Wi-Fi enabled devices and instant connectivity, but might expose your network to security and privacy risks, especially when the fridge cam has been poorly developed. The materials and minerals used to develop the fridge cam are also important. IoT devices are rarely recyclable due to complexity of the materials involved in their production, and carry the risk of adding to the world's growing e-waste problem.

HOW do things become ethical?

We make two arguments:

- 1) Values of those designing technologies get built into the things as they are imbued by their visions and beliefs.
- 2) Technical properties of things themselves, e.g. screens, cables, data and so on, enable or hinder ethical development. In other words, technologies are not neutral, they come with their own ethical possibilities.



WORLD (Dis)Orders and Technologies

Technology has become an indispensable part of our lives. Any world (dis)order we would like to analyse or envision should consider the role of technology or more generally 'things'. This question becomes particularly pertinent, considering that public debates and political campaigns are becoming increasingly technified, population censuses being held via Big Data or upgrading humans through sensor-led technologies becoming a reality. We are at a moment to make it possible for the future world order to be ethical, and we are studying how this can be done.

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