

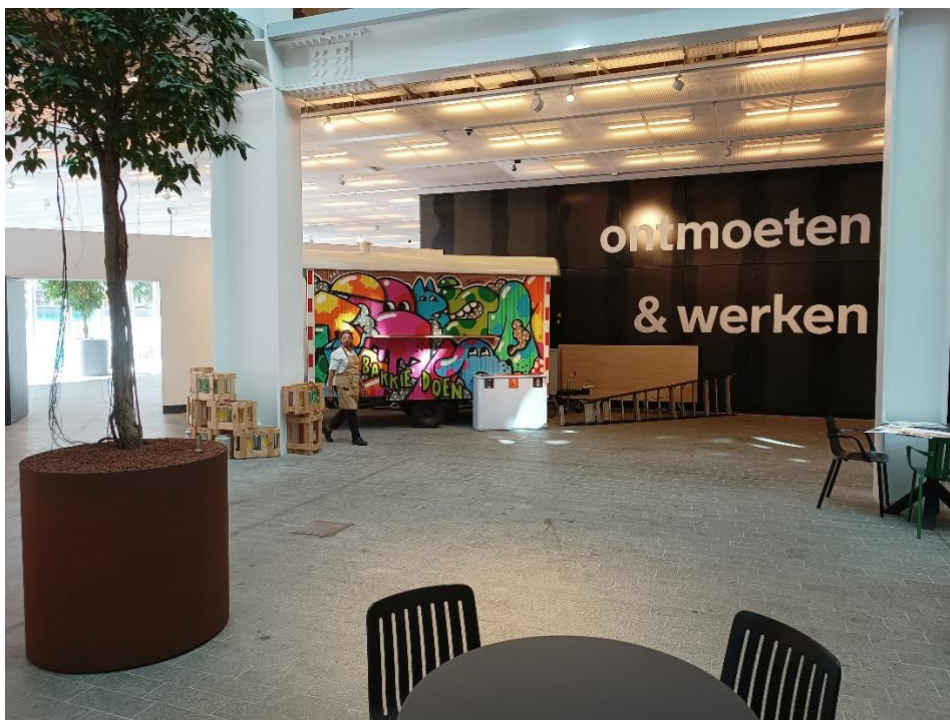
ThingsCon Salon on *doing ethics* September 6th 2023 – Mike de Kreek

Ethics in smart city technology is not a set of fixed values you assess at one specific point in time in a tech's lifecycle and then forget about it. In the project [Human Values for Smarter Cities](#), researchers, designers, civil servants and citizens (from The Hague, Rotterdam and Amsterdam) look for ways ethics can be interwoven in the articulation, making, deployment and adjustment of smart city technologies. Just like Marc Steen, we try to see ethics

“as a process, as a verb, as doing ethics. Ideally, we organize collaborative and iterative processes that make room for ethical reflection, inquiry, and deliberation and that involve thinking, feeling, and action: your head, your heart, and your hands.”
([Steen, 2023, p. 8](#)).

Coming from an arts-based research background, for me the *head* stands for rational, the *heart* for emotional and the *hands* for physical engagement. Mutually fuelling each other, the combination of these forms of engagement invoke a much broader scope of our intelligence than just our rational one.

What can we do to do ethics with respect to ‘smart city tech’?



On 6 September 2023 the Human Values for Smarter Cities project teamed up with Iskander Smit from [ThingsCon](#) to organise a [ThingsCon Salon](#) on doing ethics organised at [VONK Rotterdam](#), the innovation centre of the municipality of Rotterdam. It was a great opportunity to explore how doing ethics manifests itself in practice.

Doing ethics in a prototype machine vision development game

In [Laura de Groot's machine vision development game](#), we dove into the acceptability of the performance of an application detecting heavy objects, like containers on weak quay walls without a permit. We divided the group participants in five subgroups of stakeholders like citizens, building contractors, civil servants checking the detections, etc.



Playing the game forced the various stakeholders to discuss the consequences of various percentages of falsely recognizing something as a container (false positives) and falsely recognizing an actual container as not being one (false negatives). Obviously, the idea of what an acceptable performance should be, varied across the stakeholders. In a later phase of the game they could change these percentages, including the true positives, in an attempt to arrive at a collectively acceptable performance. This involved making and discussing various trade-offs.

Although the concepts in the game were quite abstract, we concluded that this game could engage citizens in understanding more about the workings of a machine vision technology, develop an opinion and be part of a discussion about its performance. I believe, this could ultimately lead to ideas about changing the performance or mitigating the unintended consequences of an existing application.

At the same time, it was interesting to see that playing the game caused a lot of questions about 'recognizing heavy objects on vulnerable canal walls with machine vision': "It looks like it is a solution looking for a problem". Suggestions were being made about approaching the container companies to find out whether they ask building contractors whether a permit is present for placing a container in a certain spot. These observations led us to another conclusion: that discussing the acceptability of the performance of a machine vision algorithm as a future solution for a certain problem could help to collaboratively revisit and scrutinize the very early stages of problem definition and identifying solutions.

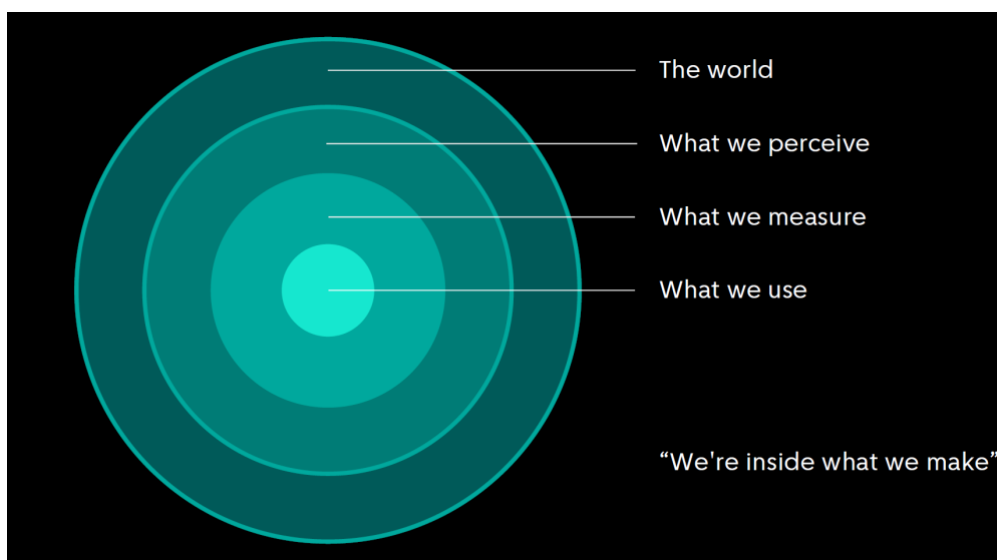
"It looks like it is a solution looking for a problem"

Looking at Steen's doing ethics, we see that playing the game facilitates collaborative and iterative processes with a small group in which inquiry, reflection and deliberation are alternated. I think that the physical actions needed to move things around on the game table and acting from the perspective of a stakeholder force the participants to combine thinking, feeling and action.

Doing ethics related to the "ethical leaflet" in Amsterdam

From Douwes Schmidt's presentation, a couple of elements stuck in my memory. By explaining how "raw data" is an oxymoron, he arrived at Donna Haraway's "Technology is not neutral technology. We're inside what we make and it's inside of us". From what we can perceive from everything present in the world, we make decisions about what we measure and, ultimately, what measurements, we use in our technologies. In these decisions we try to be morally just: "when the rights, interests and wishes of all stakeholders are considered". This fits well with the code of conduct of civil servants, especially with the part "I will make an independent judgement about the moral implications of my conduct." Douwe adds to this that "ethical decisions are always temporarily: rinse and repeat", since the decisions might not have been perfect and situations in society continuously change.

"vulnerability is your greatest power as a municipality"



That is where the idea of an ethical leaflet comes in, based on the steps of a moral deliberation and the Tada principles. Just like a medical leaflet it describes unintended side effects of a technology, but also ways to mitigate these. It is in its final stage of development based on its use in various projects in the City of Amsterdam and contains a working canvas with seven steps. The underlying approach's starting point is the question: Why are we doing *this*? The emphasis on 'we' and 'this' stresses the importance of why the municipality is doing this and why exactly this and not something else. An important next part is to collectively make trade-offs between unintended consequences and intended effects of a city technology. A group of individuals might potentially be harmed by the technology in spite

of the contribution it makes to the public interest. If mitigation strategies for these unintended consequences are not acceptable enough, a return to earlier steps in the approach is required or the realization of the technology should be called off. If a sense of acceptability is arrived at, the ethical leaflet can be made and communicated: “vulnerability is your greatest power as a municipality”.

“Ethical decisions are always temporarily: rinse and repeat.”

Comparing Douwe’s presentation to Steen’s description of doing ethics, it clearly shows a collaborative and iterative process in development of an ethical leaflet, although I am not sure whether citizens are involved as one of the stakeholders. Since the leaflet workshops take a considerable amount of time, there certainly is continuous reflection, inquiry and deliberation among the participants. Looking from a distance, to me it looks like rational, emotional and physical engagement are facilitated with the canvas and various steps it entails. With respect to emotional engagement, I think it is very interesting that, according to Douwe, the participating civil servants can remain close to their own intrinsic values, because they are explicitly asked to identify for which groups or situations things can go wrong. This implies that they don’t have to negotiate with or suppress their intrinsic values: “You are not going to bargain with your own motives with which you got out of bed.”

Doing ethics in social design by Ink

Anna Noyons triggered some deeper ethical layers with her story of becoming a social designer and developing Ink as a strategic design agency for social challenges. During her career she realized more and more that designers are shapers of peoples’ lives, which is an enormous responsibility. Social design is a relatively new field where designers use their creative and strategic abilities and apply them to societal challenges. The central question for Anna has become how people can become the best version of themselves. Or from a designer perspective like Ink: “How might we guide people to be the best version of themselves?” and following up on this: “How do we design interventions, products and services that facilitate this?”

“People are not rational beings, we are strongly guided by our context. But we create that context!”

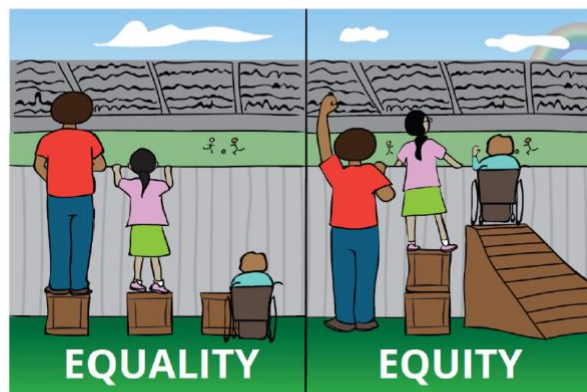
These questions are built upon the underlying worldview that people are good, a standpoint that opposes to the [Veneer theory](#) according to which our morality is only a thin veneer hiding our normally selfish and brutal behaviour. This positive worldview is incorporated in the [online community Peerby](#), co-founded by Anna, in which neighbours are invited to borrow or rent things from each other. Peerby is a service that facilitates people to tap into the idea that it is “Good to share” for various reasons, among which a number of social developments goals, like responsible consumption and production. She relates this example to *nudging approaches* “that try to improve people’s decisions by changing the ways options are presented to them, rather than changing the options themselves or incentivizing or coercing people.”

“Design is not only about the direct, individual effects, but also about the long term collective effects”

Anna’s states that “design is not only about the direct, individual effects, but also about the long term collective effects”. I thought her example of the microwave was interesting in this respect, because it illustrates how family relations could change with the possibility of eating dinner individually at other moments than collectively right after cooking. This article [“The Entry of Males and Machines in the Kitchen - A Social History of the Microwave Oven in Finland”](#) gives some evidence for this, but it also points its finger to the television being guilty for changing family relations over time. However, her message was clear: we should not only be asking how individuals and groups might directly be harmed by or profit from new urban technology, but also ask what the long term unexpected side effects could be.

(Our Vision)

Equity is designed or doesn't happen at all



(link)

The picture Anna showed about the difference between equality and equity, for me, really triggered how ‘ongoing’ and difficult doing ethics really is. For years, I have been interested in how the quest for equality in the field of social services often results in many people in hopeless situations not being helped. If equality is strictly followed to the *letter*, it is hard for social professionals to organize well-founded, tailor-made individual support within the professional space for making judgements and decisions. This strictness is necessary up to a certain degree, because it prevents arbitrary decisions, but pushed too far, it leads to the development of work-around-methods like the [‘Break-through method’](#) adopted in many municipalities. This method facilitates professionals in a human scale approach more in the *spirit* of equality, aiming for an increase in social equity in society.

Anna’s presentation resonates with collaborative ethical inquiry in Steens description, but even more with Gerd Kortuem’s thinking about doing ethics:

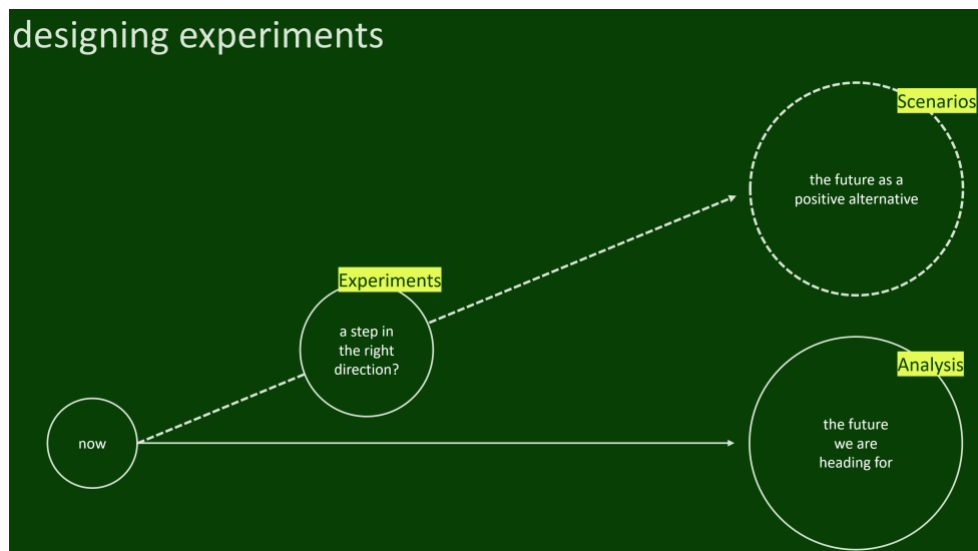
“mov[ing] beyond seeing ethics as a technical design aspect that can be “solved” and (...) seeing AI ethics as an ongoing, never-ending process that reflects changes in society” ([Kortuem, 2019, p. 78](#)).

This observation made me revisit the [Guidance Ethics Approach](#) as developed by the Platform voor de informatiesamenleving. This approach does not place ethics outside of technology, as an external 'assessor'. Instead it emphasizes a normative guidance of technology in society and of society in dealing with technology. This form of ethics doesn't primarily focus on determining the ethical acceptability of a technology, but rather examines whether and under what circumstances a technology becomes responsibly integrated into society. As such the Guidance Ethics Approach can also be used as a steering wheel when a technology already has seen the daylight, irrespective of how well the long term consequences were scrutinized before its deployment.

Doing ethics according to the panel

In the closing panel we further elaborated on a couple of topics that were introduced earlier relate to doing ethics. Tessa Steenkamp states that there are hardly any participatory processes, design language or actionable skills to change things collectively in the more invisible digitally driven changes in our cities. She calls for setting up speculative design experiments that put us on the path of an alternative future encompassing the coming together of the physical and the digital instead of the future we are now heading for.

Anna adds that much is designed with knowledge from policymakers and not so much with citizen knowledge. Are we honestly open for new insights, new criteria or new paradigms – is the option for not doing it or for it to become something else? Unlearning stuff that is in the way for making different decisions and develop different kinds of participation “have to put methods in in the way of any process”. Douwe acknowledges this by asking how we are going to bring these ideas into the practice of civil servants. We conclude with the insights that we all need to train our “ethical muscles”.



Takeaways

In this ThingsCon Salon, we have found concrete approaches in practice that relate to the content of the two quotes of Steen and Kortuem, according to whom doing ethics is:

1. organizing collaborative and iterative processes;
2. making room for ethical reflection, inquiry, and deliberation;
3. involving thinking, feeling, and action in these processes;
4. moving beyond seeing ethics as a technical design aspect that can be “solved”;
5. seeing AI ethics as an ongoing, never-ending process reflecting changes in society.

Based on what was shared and discussed, my additional take aways are that doing ethics is also:

1. being open to revisiting the problem and solution;
2. looking at deployed technologies and guide ethics for possible adjustments;
3. realizing what worldview is behind your thinking ;
4. scrutinizing whether discretionary space of practitioners is under pressure;
5. being vulnerable as a municipality;
6. helping civil servants to keep practicing their discretionary space;
7. training your ethical muscle;
8. speculating and anticipating on the long term impacts on society.

In the Human Values for Smarter Cities we will further analyse how doing ethics manifests itself in the life cycles of urban technologies.
