Captured!

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In 1994 Philip Agre wrote an essay where he recounts two models of privacy. Historically texts about privacy are using what Agre calls the surveillance model, which is based on the idea's of "Big Brother", "the Panopticon" and "invasion of private space" (743). Agre argues that this model is not wrong and is useful in many cases, but he also stresses that alternative models will bring other but equally important aspects into the foreground (744). He warns that the exaggerated surveillance model of privacy may distract from issues that are not revealed by this model. This essay explores whether this idea is still valid now.

Agre has a clear idea about what an alternative model may be when analysing privacy matters and describes it roughly, together with problems concerning privacy that prevail from that model. He seems to construct this model from his observations while working as a computer engineer for various companies as well as from computer science literature. Later on in the essay Agre suggests that the principles described in the model could apply to other living spheres than the working environment (751). He tries to imagine what that would be like, but soon fails and dismisses the thought as unsatisfactory (752)

More than fifteen years later it seems to me that the principles in Agre's model have very much penetrated many different spheres of life. Unfortunately Agre hasn't written anything about these developments. Even worse; in many discourses his idea's have not got the attention that I would have hoped it had. This way the discussion is dominated by arguments that are for a large part based on a future dystopia written down sixty years ago that was supposed to be reality twenty six years ago. I wasn't even born in 1984 and it's no wonder that such an old text gives a twisted perspective. I hope this essay will nodge the discussion again on a different path next to the one we're following now, because the models don't exclude one another.

Before I elaborate on Agre's model I would like to go over the principles at work inside a computer. I think this needs to be clear in order to fully appreciate the model.

Computers are well known for their ones and zeros. It's important to realize that everything "inside a computer" that is, everything that is processed by a computer, exists of ones and zero's. Every number, word, sentence, image, sound or video is reduced to a collection of ones and zero's. The number of ones and zero's that are needed to represent a number or image or anything else is expressed in units such as byte, kilobyte, megabyte or gigabyte which stand for 8 to more than 8 billion ones and zero's. Through enough ones and zero's the computer can represent

an image, but it is never an image, it is always ones and zero's. The ones and zero's that make up an image could just as easily turn into numbers or text. This is exactly what sometimes happens when you open an image with the wrong program like a text editor. People usually mistake the weird combinations of reading signs that appear on such occasions for computer language. In fact what you see is a misrepresentation of ones and zero's and it's only a misrepresentation because it does not make sense to us users. The computer does not care about how we wish to represent his ones and zeros, it just complies. A programmer sometimes deliberately represents a section of ones and zeros as something different than originally designed, however these techniques are referred to as "brute force", "confusing" and "ugly" and it's advised to stay away from such practices in general (Straustrup).

Watching numbers, texts, images, sounds and videos is often entertaining, especially when you can interact with them, but it's quite far from how a programmer relates to a computer. A programmer wants to make the computer do something with input that is given to it. In order to do that it needs to be clear what the different collections of ones and zero's represent. Achieving this clarity is often more difficult than you would expect. Consider for example a date like 10-02-21. Does this stand for the 10th of February 2021 or the 21st of February 2010 (assuming the date is not from the previous century). If there is a context the correct date might be derived from this context, but computers are bad in this sort of linguistic guesswork for decades now so no computer practice is build on such systems (Agre). The practice is to inform the users about the format that you are expecting and enforcing the use of this format. Only then can a computer make calculations with dates that are given as input. So a programmer is always thinking how to represent things in ones and zeros in relation to the task and the users.

How then does the (often magical) representation of ones and zeros relate to privacy? Privacy issues occur when a computer is not computing with images and dates but with human behaviour. In order to represent activity in ones and zeros a grammar of action is used in almost all practices (Agre). A grammar of action limits the human behaviour that the computer will recognize and can compute with. Consider for instance a system for toll payment on a highway. You can enter and exit the area where a toll is charged and you can travel across segments of roads where you'll have to pay for. This already raises some privacy questions, because it's uncertain how long my digital trip will be saved in an archive and who has access to this information and on which grounds (quote who?). These questions come from the surveillance model of privacy while the capture model of privacy raises different questions like: What actions are enforced on the drivers? Can they make a u-turn and back track? Can they get lost? Can they change their mind about where to go? Or will all these actions be reduced to the action of "travelling distance" where you will be charged for? It's hard for a computer to reduce an action of

"hopelessly driving around" to zeros and ones, because to recognize a car that's driving around aimlessly you'd have to input your destination somewhere and this in itself is another form of imposing action on a user which is questionable. Do drivers have to state their destination before leaving their home? How would that work with changing ones mind?

I have to admit that this example is getting ridiculous. In real life I presume the system is kept simple and I'm not pleating for anything else. You pay for the road that you use. The point is that it is unclear which grammar is used and it's unclear why not a different grammar has been chosen. In the example of a toll road this is relatively harmless, but in a professional environment it can get almost inhuman. Workers that may only walk within designated paths may work more efficient and it's easier for computers to locate them, but it's also oppressing the workers freedom and in a way his or her private way of doing a job. Agre discusses in more detail how technical innovation can lead to the redesign of a work process which is sometimes opposed strongly by the workers who do not want to comply (Agre). In the following paragraphs I will make a translation from the capture model of privacy by Agre to two modern day matters.

Agre states that "capture is never purely technical but always sociotechnical in nature. If a capture system "works" then what is working is a larger sociopolitical structure, not just the technical system" (748). He then describes phases in the process of designing and implementing a technical system. These phases are specific to technological systems in organisations and are to a lesser extend applicable in other spheres. The senses in which "reorganisation" takes place describe the relationship between the users and the system. This relationship is very similar in capture practises outside organisations and I will illustrate this with Facebook and the file system that is used to electronically track Dutch children called Elektronisch Kinddossier (EKD).

According to Agre's model the introduction of a new technology is often the occasion for other kinds of changes to the activity. In the case of Facebook I would say that it's the first time that anybody tries to make money out of a friendship of others. The promise to stay in contact with friends even when they live abroad is enough to lure us into an environment where people earn money by displaying advertisements targeted on not only your own behaviour, but that of your friends. There are clear economic reasons why Facebook is in existence in the form that it is now.
With the EKD the changes are even bigger. Originally the plan was to digitize the file that is kept for every child for medical reasons in the Netherlands until he or she becomes nineteen. This idea from the minister hit a lot of protest, because other politicians wanted a system that did a lot more. At some point the design included nine hundred pieces of information that would reveal to what religion and

ethnic group the child belonged to. The file would also be linked with a database that the police would use if a child was arrested. They were investigating whether the police should be able to access the file when the entire design was dropped (and continued more locally in Rotterdam only).

Agre states that constructing representations leads to rearrangement of the activity that is being represented. Facebook represents relationships and getting into contact with them. One of the bigger changes in our relationships occurred before Facebook with chatting. Suddenly a sort of square was created where people that you know can be "online" or "offline". This is a whole new way of presence and it's hard to say to what extend this changes friendships, but it's clear that you can have short meetings in between your normal routine that were not possible before. This is already a restructuring of the concept of meeting. Another smaller but particular change with Facebook is that people tell about themselves through the status updates. If you follow each other it can happen that a lot has been said without it ever being said. This is a strange sensation at times when you meet this person and starting to tell what already has been told.

In the case of the EKD the practise of doctors is changing. Because a lot of information is available on screen the contact between them and the children is disturbed. Digital notes of colleagues together with nine hundred pieces of additional information becomes a third party in a meeting between two people. According to the person who has trained the doctors to work with the system there was a lot of unease to work with computers. I think this says a lot about the intrusive nature of the system in the practice. The trainer claims that everybody can't wait to start working with the system, but I wonder if you can take this unease away with training alone. I would say it also takes flying hours to really get used to it.

"Grammars of action frequently oversimplify the activities they are intended to represent." Agre
Chatting on Facebook mimics a conversation but without visual and auditive feedback from our friend. This distorts the communication significantly. We dare to say more things, but have no clue how these things are received. This can lead to unwanted interaction and easily leads to miscommunication. Even if you're pretty sure that everything came across the right way there is just no way to be sure unless you check it over channels that are less mediated by technology. In general I think people will avoid sensitive conversations and if they don't they'll sooner or later learn to avoid them. This way we adjust to the technology.

What the politicians are expecting from EKD is clearly an oversimplification. The big fear was that more small innocent children will die if the different organisation responsible for children in difficult home situation would not work together more. Part of this was that everybody involved should be able to view the EKD if they suspect that something is wrong. The doctors revolted against this

idea. In their opinion; the only reason that the information was available somewhere was because the doctors were obliged to keep it a secret. If this would no longer be the case parents would stop talking afraid for repercussions and no information would be available for anyone. Another simplification is that the politicians wanted to oblige doctors to report domestic violence. Again the doctors disagreed, because they we're able to lessen the violence gradually when the offenders could speak freely, but this would stop if doctors have to tell the police about such cases even though nobody wants to report to the police. Clearly the politicians demand were coming from a too simplistic view of the process involved.

"When the practical circumstances of an activity are instrumented, the resulting machinery rarely takes its measurements without human corporation." Agre
Facebook obviously is very dependent on its users to keep contributing and to keep sharing their personal information. The activity of getting into contact is with others is supplemented with a web form that let's you define who this person is to you (relative or friend). You are seduced to find more of your friends and share your status, photo's or video's with them.
For users of the EKD their normal activity is adjusted by the system, because they'll have to be obliged to fill in information. Managing the once envisioned nine hundred attributes will be a significant job. It's likely that at some point this information will stop representing the child correctly because a lack of updating. The consequences for the child and their family are not clear.

"The people whose activities are being captured will probably adjust their conduct based on their understanding of what will become of the data and what this entails for their own lives" Agre
The implicit norms of Facebook discourages deep conversations. It's almost obligatory to make short, snappy responses and remarks. The interface to the system is dressed up with "I like" buttons that represent only a gesture of acknowledgement without going deeper into what is being said. In reality of course a friendship does not only consists of this sort of conversation.
With the EKD implicit norms are also set by the information that was supposed to be collected. By mapping out the known risk factors for each child there is a judgement about young parents (under 20) and poor parents. It was very possible that once the preferred parentship was clear all parents would behave like good parents at least in front of the doctors. The captured behaviour by the system would then only reflect performative actions and the information would become false.

"Given this human intervention in the capture process, the process often becomes the site or more overtly political conflicts."
Facebook is interested in making money with their platform by selling targeted

advertisement. To accomplish this goal they need to capture as much information about their users as they can. Multiple systems are in place to achieve this, but one of them is that you indicate what you like and who your friends are. This says a lot about you and your friends. However one of the users interest is to get into contact with people that like what you like. This desire is opposite of Facebooks desire who wants you to pay for meeting like-minded people by buying advertisements from them. Some users who want to make announcements outside of their intimate circle and to everybody who is interested post on the note pages. These pages are mend for writing down your thoughts and not for making public announcements, but users oppose the will of the platform and in a way take political action (without realizing that probably)

In case of the EKD there is a reported case where a mother would explain to the doctor why she has hit her child. It had to do with her loosing her patient after hours of wining and provocative behaviour. The doctor however made a judgement on the woman by just listing that the woman hit her child. This certainly does not look good when others read this. By doing this the doctor also goes against the politics that the system was supposed to uphold and represent.

"The newly introduced systems might bring new institutional dynamics"
In a way this is happening on Facebook in the form of debates about the policies of Facebook. It's uncertain how much the users can influence the policy, but it's clear that there are institutional dynamics that are closely related to the system itself.

The politics of the EKD were played hard by the politicians who wanted to enforce the system and the institutions who refused to work with it. One institution labelled the policy absurd, Stalinist and megalomaniac. In response the policy makers cut all local subsidies that the institution would get. I would say this is absolutely not in the interest of the children where the EKD was meant for in the first place.

By looking at two contemporary computer systems with the capture model of Agri as reference I conclude that these systems clearly have a technosociological dimension. A part of this dimension is that gathered data about persons should be kept save and should not be misused in any way. However there are more sides to this technosocial aspect of a system and these should not suffer from a lack of public attention and debate, because they don't yet have strong literate icons attached to them.

Problematic relationship representation

No difference in strong and weak ties
Forced "I Like" interaction
Unfair preference system
Incomplete - announcements, protests, poetry in notities
Status
Shaping how teenagers are interacting with one another.

It's typical that a platform like Facebook, which comes from a college background is associated with drunk pictures that get revealed to people who are not supposed to see those pictures.

Users are often forced to comply to this grammar or they can't use the system. In many cases the last option is not really an option (dude X).

It's important that the job get's done. How it get's done is a private matter.

I WANT TO BE FAMOUS

There are many sides to privacy.

It's hard to built on your reputation. You can spend years and years in building up
trust from your peers, but then something goes wrong (which may or may not have
been your fault) and the reputation is gone. Then slowly you'll have to start
proving that you're trustworthy. This is why people are careful with their
reputations.

With internet this reputation is in jeopardy according to Daniel Solove. He starts
to celebrate how internet is an improvement on traditional publishing media,
because everybody can participate. He goes on that indeed a lot of people are
participating with blogs or social networking sites. A lot of people share their
personal information through these platforms. For instance almost 40% list their
phone number (Solove, 27).

It's his proposal to work with the notion of confidentiality. Whoever breaks
confidentiallity may be hold responsible for it in Brittain and Solove want's
similar legislation in the United States.