

VERSION v.0.1.0

<u>Q2: Bads and blames</u>	<u>1</u>
<u>Intro</u>	<u>2</u>
<u>Test cases</u>	<u>2</u>
<u>Data hoarder</u>	<u>3</u>
<u>Argument tweeter</u>	<u>3</u>
<u>Internet isolation</u>	<u>4</u>
<u>People Ratings Agencies</u>	<u>4</u>
<u>Harms of informational privacy violation</u>	<u>5</u>
<u>Methodology</u>	<u>5</u>
<u>The problem with starting from privacy</u>	<u>5</u>
<u>Focus on harmful violations of privacy</u>	<u>6</u>
<u>The concept of harm</u>	<u>6</u>
<u>Harm principle</u>	<u>6</u>
<u>Definition of harm</u>	<u>7</u>
<u>Setback of interest</u>	<u>7</u>
<u>Interests</u>	<u>8</u>
<u>Well-being</u>	<u>8</u>
<u>Setbacks</u>	<u>9</u>
<u>Death</u>	<u>10</u>
<u>Other problems</u>	<u>10</u>
<u>Wrongfulness</u>	<u>11</u>
<u>Odd cases</u>	<u>12</u>
<u>Harmless rights violations</u>	<u>12</u>
<u>Hurting without harming</u>	<u>13</u>
<u>Informational harms -- setbacks</u>	<u>??</u>
<u>Exploiting weaknesses</u>	<u>15</u>
<u>Stalking and worse</u>	<u>16</u>
<u>Threats to autonomy</u>	<u>20</u>
<u>Relationships</u>	<u>20</u>

<u>Democracy</u>	<u>21</u>
The panoptic sort	??
Identity theft	??
<u>Informational harms -- rights violations</u>	<u>21</u>
<u>What kind of rights?</u>	<u>22</u>
<u>Non privacy rights</u>	<u>22</u>
<u>Right to protected sphere</u>	<u>22</u>
<u>Accounts of right to protected sphere</u>	<u>23</u>
<u>Negative Liberty account</u>	<u>24</u>
<u>Positive liberty</u>	<u>25</u>
<u>Negative liberty</u>	<u>26</u>
<u>Right to protected sphere</u>	<u>26</u>
Objections	??
<u>Republican account</u>	<u>27</u>
<u>Right to protected sphere</u>	<u>29</u>
<u>Objections</u>	<u>29</u>
Relational account	??
Right to protected sphere	??
Objections	??
Can machines violate privacy?	??
No. Understanding matters	??
Application of 3 approaches	??

## 1 Intro

We've discussed when an ethical company may profit from the use of personal data.

Let's now turn to when things go wrong and take up a different question:

(Q2) How should we assign blame when people are harmed by algorithmic uses of personal data?

This discussion will require us to first get the hang of how people could be harmed in this way and then discuss how our ideas of blame and responsibility may need revision in light of new technology.

## **2 Test cases**

As we work through discussions of harm and blame, it will help to keep in mind some made up cases in which things go wrong with personal data.

Your mileage may vary. Some of these may seem fairly innocuous. Some may seem creepy but not necessarily harmful. Others may seem straight-up despicable. Take a minute as you go through them to try to put your finger on what is wrong about the ones that seem wrong. More importantly, pay attention to tweaks to the details that flip your reaction from ‘meh’ to ‘oh hell no’. Those are exactly the things we’re going to try to uncover in understanding how uses of personal data can harm.

### **2.1 Data hoarder**

*Data hoarder:* Red is a data hoarder. She has an intense and obsessive desire to possess data. However, she doesn’t actually care about the contents of the data. She just likes to know that she possesses it. Suppose — contrary to the real world — that she keeps her data in a perfectly secure database which only she can access. She doesn’t look in the database; she just cares about having data, not doing anything with it. Indeed, we know that she’ll never use it in any way which affects people’s choices.

### **2.2 Argument tweeter**

*Argument Tweeter:* A new app which runs on the various ‘smart’ devices in your home — your Alexa, iPhone, et cetera — detects any time there is an argument in its vicinity. The recording is immediately tweeted out.

#### Variations

There’s nothing identifiable about the clip

The twitter account is unpopular, no one ever hears the clip

Instead of being tweeted, it is stored in a database

Sex rather than arguments

Instead of tweeting them out it stores the audio files in a database [non-identifiably tagged; identifiably tagged]

It creates a hash (irreversibly encryption) of the audio files and blinks out the resulting hashes in morse code on an LED in the middle of the desert.

#### Note

This raises issues of when the actual violation of privacy occurs. Is it when the clips are accessed? Or when they are collected.

What if it was set up in a way that you know your argumentative style will never be picked up

## **2.3 Internet isolation**

*Internet Isolation:* Suppose you, like many people, connect with your friends and family via the social media platform SnapFace. Due to an unforeseen confluence of parameters, the site's algorithm stops showing your posts to others. You don't know this. But you do notice a slide in likes / comments down to zero. At first it doesn't bother you. But, as time goes on and no one responds to even your best material —your most clever observations, your cutest outfits, the most adorable kitten/puppy/baby pictures— the perceived isolation and shunning start eating at you. You become socially anxious and depressed ..

## **2.4 People Ratings Agencies**

*People Ratings:* Panopticon LLC creates a web of partnerships and data-sharing agreements with every major data-collection company. Through these connections, Panopticon LLC has access to nearly everything each American has ever said or done online, as well as in the vicinity of a camera, and every purchase they've made.

Here are just a few of the revolutionary services they provide:

*Predictive Policing:* Panopticon offers a service to law enforcement which allows seamless access to the identities of every person within a few blocks of the scene of a crime. This list of people is served up along with a proprietary rating of the likelihood that each person would create a crime.

*Employee Screening:* Panopticon offers a service to employers with custom ratings of prospective employees in terms of who is likely to be insubordinate, who will not complain about menial work, and other work-related dispositions.

*Date Screening:* Through a new partnership with Tinder, Grinder, Bumble, and all the other major online dating apps, Panopticon offers ratings of prospective partners on everything from conscientiousness, cleanliness, likelihood of cheating, expected number of dates-before-sex, financial status, and other metrics. By offering users the ability to provide post-date/post-breakup ratings, it also provides ratings on kinkiness and sexual performance. [I'll stop here; this is creepy enough]

If these services do not seem problematic to you, feel free to add new details until they strike you as worrisome. All set? Good. Keep that in mind in what follows.

### **3 Harms of informational privacy violation**

#### **3.1 Methodology**

Thus far I've tried to avoid discussing things in terms of privacy. But thinking through our cases, that's no longer going to be avoidable. When we ask what's going wrong in these cases, the irresistible answer is that people's privacy is being violated.

Hopefully at the point in class you're expecting us to dive into getting clear about what privacy is before applying the concept. If so, yay! This is usually a great strategy. Too many confusions and pointless disagreements arise when people think they're arguing about the same thing but are actually talking about different things.

##### **3.1.1 The problem with starting from privacy**

But I'm not sure that starting by clarifying the concept of privacy is the best approach here. That's in part because the issues we're dealing with are likely to some extent genuinely new. Thus existing accounts of privacy may or may not be up to the job of dealing with them.<sup>1</sup>

More importantly, our task here is a bit different from what we've done elsewhere. Previously, we dealt with cases where we weren't really sure what's right and wrong. Think back to Holley. We spent a lot of time trying to come up with some principle that could help us determine when it's okay for a salesperson not to divulge information. A lot of the cases we discussed left a lot of room for reasonable disagreement about what's right and wrong.

The way I've constructed our task here is different. We're starting with cases which nearly everyone will agree involve unacceptable activities. If the cases I've come up with don't elicit those intuitions for you, I'd bet that we could tweak them until you'd agree that they involve something wrong. I wouldn't have made that bet in the borderline sales cases from before.

Thus if we're talking about cases which we agree involve something wrong and a concept of privacy can't capture the wrongness, that's a strike against the account of

---

1. Obviously, to really establish that we'd need to work through all of the existing accounts and carefully consider their strengths and weaknesses for dealing with our concerns. That's a Ph.D. dissertation; we're not going to do that here.

privacy. It doesn't show us how to understand what's wrong in all the cases. Put a different way, no account of privacy is likely to change our minds about the wrongness of these cases. That's why I want to avoid talking directly about the concept of privacy—it's not likely to help us in this task.

### **3.1.2 Focus on harmful violations of privacy**

What's the alternative? Notice that sometimes we don't care very much when privacy is violated. Think of someone accidentally walking in on you in a store changing room; not great, but usually not a huge deal. But we do care a lot when people suffer harms from their privacy is violated.

Thus the alternative is to start by thinking about how to explain how privacy violations can be harms. Approaching in this way, will also give us some resources to draw on. In particular, we can frame the discussion in terms of a well-worked out concept of harm.

If this approach still seems suspect, here's another analogy. Legal scholars sometimes discuss what are called *harmless trespasses*. If you own some land and I take a shortcut across it, leaving no trace, I have still violated your legal right to control who enters your property. But I think most people would agree that prosecuting someone for a harmless trespass should normally be at the very bottom of a prosecutors' priorities. We think the prosecutor should focus first on trespasses that involve harms (e.g., where I chop down your trees and knock down your fence dragging them away).

## **3.2 The concept of harm**

We are going to start with the pretty clear intuition that people are harmed in our cases. This allows us to get some leverage on our problems since harm is a much better worked out concept, at least in some areas of philosophy.

I'm thus going to draw on an influential account of harm from philosophy of law that comes from work by Judy Thompson and Joel Feinberg. Like every view it has problems, some of which I'll mention as we go, but we need not focus on those here.

A bit of warning in advance, I'm going to go into a lot of detail about the concept of harm in what follows. We will need those details when we turn to applying it concept. But don't worry if you don't follow all of them on the first read of this. They are more here for reference so that you can refer back to them when you need them.

### 3.2.1 Harm principle

To begin, I'm going to stipulate that, on our use, harms and acts which cause harm are always grounds for public action or complaint. If you've ever heard of the 'harm principle' which comes up in discussions of criminal law, that's what's in the background here. The harm principle says something like:

(HP) An activity may be criminalized only if it causes harm to others

For those of you who have heard of the harm principle, that's probably because of the fact that this is a necessary condition. If we accept HP, it follows that actions which do not harm other people cannot be criminalized. Thus, at least in spirit, it comes up often in discussions of drug policy, prostitution, and any given internet list of dumb laws.<sup>2</sup>

Thus our starting point is that, by definition, all harms are bad; it is always wrong to harm others. If this seems trivial to you, just wait. As we will see, it will mean that some things which look like harms actually are not — in some cases, you can kill someone without harming them.

### 3.2.2 Definition of harm

With that background in place, what is the relevant notion of harm? For the view loosely based on Thompson and Feinberg, I will say that

(H)  $x$  is a harm if and only iff  $x$  is a wrongful setback of interest.

That means there are two parts to a harm. There has to be (1) a setback of interest and (2) it has to be done in a wrongful way. This give us a framework for understanding when a harm is present. We first identify the setback. Then we ask whether it was wrong. If we can do both, there was a harm. If we can do one but not the other, there is no harm.

But before we can do that, we need to get clear on what counts as a setback of interest and the relevant notion of wrongfulness.

#### 3.2.2.1 Setback of interest

Let's start with the notion of a setback of interest. Obviously, we first need to know what interests are.

---

2. Note that this doesn't automatically show that any of these things shouldn't be illegal. Drug use often negatively affects those around the user; prostitution is often bad for the prostitutes. It just reframes the question to whether these are harms in the relevant sense and gives us a means of answering that question.

### **3.2.2.1.1 Interests**

An interest in this sense is anything you have a stake in. If you invest in a company, you now have an interest in it. There are a bunch of ways of thinking about this, but I'm just going to say that:

(I) S has an interest in x only if changes in x can affect S's well-being.

Notice I didn't say something like 'the changes can affect you in a negative/positive way'. That's because of the harm principle lurking in the background. Remember, if something turns out to be a harm, we are allowed to criminalize it (or at least morally condemn it). If I give you a cookie, that positively affects you. If the temperature of the room is a bit colder than you'd like, that negatively affects you. But if we say that the room being a bit chilly is a harm, given the harm principle, that means we may be okay with using the full might of the criminal law to enforce HVAC settings.

#### **3.2.2.1.1.1 Well-being**

Well-being is usually something which is more spread out over time. It's the sort of thing we have in mind when we talk about living a happy life. A happy life doesn't mean that you were happy at every single moment. If it did, your happiness hangs by a thin thread; one stubbed toe and your life is ruined. The tricky thing with thinking in terms of well-being is to pick the right time interval for assessing it.

You don't want it to be too long. You don't want it to be assessed over your entire life — the sort of thing you consider on your deathbed in old age when you think back over your entire life and wonder whether it was worth anything.<sup>3</sup> That's because lots of important events will get lost. That breakup in college was really painful and tough; that first promotion was amazing. But from the perspective of your entire life, these probably won't even register.

It also better not be so short that having an unusually bad cup of coffee from the student center on Tuesday morning damages your well-being. The idea is that when we think about how things are going for us, all the minor good and minor bad should normally drop out.

Thus for our purposes, I'm going to stipulate (without argument) that the right time-frame for assessing well-being is about a week:

---

3. [ToDo] Discuss ancient Greek philosopher's line "say of no man that he's happy until he's dead" to illustrate this?



(WB) x affects S's well-being only if x affects the quality of S's week

That is, things affect your well being when they affect the quality of your week. Imagine that on Friday you grab a drink with a friend who you haven't seen since last Friday. When you ask 'how have you been?' You are expecting to hear about the great date they had, the exam that they aced, the major fight they got into at work. If they start going on about how the cup of coffee they had Tuesday morning was terrible, you'd be pretty surprised or confused.<sup>4</sup> That sort of thing just usually isn't a big enough deal to actually affect how good or bad their week was; it doesn't usually affect their well-being.

Before moving on, let's summarize how we've made progress on our definition of harm. Now that we have a grip on how to assess well-being, we can rewrite (I) as

(I') S has an interest in x only if changes in x can affect the quality of S's week.

Therefore, we can also rewrite our definition of harm

(H') x is a harm if and only if x is a wrongful setback of the quality of a person's week.

Hopefully it seems like we're getting closer to something that we can actually apply to real cases.

### **3.2.2.1.2 Setbacks**

We now know that the relevant interests are things which can affect the quality of your week. Now we need to talk about when an interest is set back. I know. I can see your eyes rolling already. Do philosophers really have to (over)analyze everything? Yes. It's what we do. This is actually interesting, I promise....

I'll start with the definition I'm headed towards, then tell you why we need it:

(S) x is a setback of S's interests if and only if S is worse off than she was or would've been if x hadn't occurred.

Why not just say 'worse off than she was'? That covers most cases. You steal my bike, I am worse off than I was before you stole it.

The answer is death. That's right, death.

---

4. Assuming that your friend is not a serious coffee snob. I had a good friend in graduate school who took his coffee super seriously (he taught me how to roast green coffee beans). I could imagine one bad coffee really sticking in his craw so much that it would still be on his mind several days later.

Ok, not just death. There are other cases. If I steal your winning lottery ticket and replace it with a loser before you realize it is a winner, you are no worse off than before I stole it. Adding the counterfactual condition 'or would've been' allows us to still say the theft was a harm.

If you'd like to join me for a brief, though relevant, tangent about death and its relevance for the counterfactual, read on, otherwise, you can skip ahead.

### **3.2.2.1.2.1 Death**

We are now to one of my absolute favorite puzzles in all of philosophy: How can your death be bad for you?

This goes all the way back to Epicures in ancient Greece, who used this to argue that it is irrational to fear death. But I'm getting ahead of myself. Here's the puzzle, paraphrasing Epicures

Where I am, death is not; where death is, I am not.

Do you see it? Let's walk through the puzzle. When you are dead, you stop existing. There is no more you.<sup>5</sup> If you still exist, you are only mostly dead (send your friends to Miracle Max, ASAP!<sup>6</sup>). So, when you are dead, there is no one there for death to be bad for. Therefore, death cannot be bad for the person who dies.

Reactions to this puzzle differ. Epicures thought it was liberating —you have no reason to fear death. Others, myself included, see it as posing a problem to be solved. You might take a middle ground and say something like, yeah, it's irrational to fear death itself, but perfectly rational to fear dying. However, I think Nagel was right when he wrote in a footnote that "I think I should not fear dying if it weren't followed by death"<sup>7</sup>

### **3.2.2.1.2.2 Other problems**

There are other problems for this whole picture of setbacks of interest. Seana Shiffrin, for example, gives the example of a rich asshole whose hobby is going around and

---

5. NB, if you are religious and believe in an afterlife or if you are a big fan of Pharrell (<http://nooneeverreallydies.com/>), then in this sense, you believe that no one ever really dies. You would agree with Epicures that it is irrational to fear death; it might of course be rational to fear what happens after death.

6. Then have fun storming the castle.

7. [reference] In the very unlikely chance that you were wondering what my favorite footnote in all of philosophy is, now you know.

dropping bricks of gold on people's toes and then running off. She calls this jerkwad Richie Rich.

If you've never broken a toe, consider yourself lucky. I've had more than my share (thanks, judo). It is a particular kind of misery. You can still basically walk and do stuff. But you live in constant fear bumping into furniture, stepping wrong on stairs, having an ant crawl over your sock, et cetera. It sucks.<sup>8</sup>

However, at least for me, the misery of a smashed toe would be substantially offset by the \$500k which came in the form of the shiny new 400oz gold bar resting on my foot. My going rate for allowing you to smash a (non-big) toe is, conveniently, about \$250k.

Thus if Richie Rich drops the bar on my toe, I am not worse off than I was. The bar is worth more than my smashed-toe-rate. And I'm also not worse off than I would've been if he had dropped the bar on someone else's toe. Sure I could walk without wincing. But I'd much rather limp with a half a million. So, on this picture, there would be no setback of interests and therefore no harm.

Fixing our account of setbacks of interest in response to Shiffrin's attacks is very difficult. Trust me, I've tried. So, let's just note that it has difficulties which need fixing and keep moving.

### **3.2.2.2 Wrongfulness**

The second component of harm is that it has to be wrongful. That makes sense when we remember that we are starting from the assumption that every harm is something that we can punish or coercively prevent people from inflicting.

There are many ways to make sense of the wrongfulness criteria. For the most part, any major moral theory can be slotted in here. However, we are going to follow Thomson and Feinberg in understanding the wrongfulness component as a rights violation. Therefore, a harm is a rights violation which makes the victim worse off than they were or would've been. More carefully, we can again rewrite our definition:

(H'') x is a harm if and only if x is a rights violation which makes the quality of a person's week worse than it was or would've been.

---

8. The terror of coughing /sneezing when you have broken ribs during cold season is far worse. Just FYI

### **3.2.2.3 Method**

Now that we have a solid definition of harm, we can work through the cases we are concerned with to try to determine when people are actually harmed.

Remember, on our notion of harm, there can be bad things which happen to people which do not count as harms. There's both a minimal threshold of severity covering the setback of interests and the requirement that we be able to locate a right that's violated. Therefore for each alleged harm from informational privacy violation, we will ask what interests are setback and which right is violated.

Thus, spelt out in ridiculous detail, here's our method (for negative answers, we stop):

- 1) Find a seemingly problematic uses of personal information.
- 2) Determine how this use may negatively affect people (i.e., determine what interests may be affected).
- 3) If a use could negatively affect people, determine whether it could affect the quality of a person's week (i.e., determine whether it is a an interest in our sense)
- 4) If a use could affect the quality of a week, check whether it actually does make people worse off than they were or would've been.
- 5) If we do have a setback of interests in our sense, consider what right might be violated in the setback.
- 6) If there is a rights violation in the setback, we've found a harm. The company needs to knock it off; we are justified in stopping companies from doing it.

### **3.2.2.4 Odd cases**

It's worth emphasizing that, on our definition, to have a harm there has to be both the setback and the rights violation. If you only have one but not the other, there is no harm in the relevant sense.

In many cases this is straightforward. If you steal my bike, I am worse off than I were before (now I have to drive; I have to buy a new bike). The theft violated my property right to control what happens to and with my stuff. Thus you've harmed me. Easy peasy.

However, in some cases, applying this concept of harm leads to some counterintuitive results. Let's work through a couple of cases; doing so will let us see how the view works in action.

### **3.2.2.4.1 Harmless rights violations**

Suppose you are sitting at a coffee shop and have just finished reading a newspaper.<sup>9</sup> When your back is turned, I sneak up and steal your newspaper. Is this a harm?

Well, it seems like I violated one of your property rights. You bought the newspaper. Sure, you were intending to toss it in the recycling or leave it for the next patron. But I took it before you did that. So, it looks like what I did was wrongful.

Are you worse off than you were or would've been? Probably not. In fact, I might of just saved you a trip all the way to the recycling bin, so you might be better off. Of course, we might think up ways in which your well-being was affected — perhaps you now constantly feel unsafe or your confidence in humanity has been shaken to the core. But at the very least, only some people are going to respond that way. And for most people these won't be setbacks that rise to the level of affecting your well-being. Therefore, it looks like there was no harm.

### **3.2.2.4.2 Hurting without harming (self-defense)**

Suppose that Scarlet kills Violet in genuine self-defense. Does Scarlet harm Violet?

Before we can get to that, I need to clarify what I mean by genuine self-defense since the self-defense defense has been horrifically perverted by legislation in places like Florida.<sup>10</sup> Genuine self-defense means that the defender faced a lethal threat (they were being attacked by someone trying to kill them), the means were proportional (you can't shoot someone threatening to punch you), and they had no escape (if you can retreat you must<sup>11</sup>).

---

9. Newspapers were these things that everyone used to read. Kind of like the internet but on paper. Just bear with me.....

10. There are plenty of legitimate arguments we can have over exactly what should count as self-defense. My philosophy of law class spends literally half the semester working through them; and I don't want to pretend I know what the answers are. However, I will say the subjective perceptions of the killer cannot be determinative in anything like a just society. (IIRC, the NRA and other backers of 'stand your ground' laws agree and characterize the Florida law/cases as mistakes)

11. Some jurisdictions carve out the 'castle doctrine' such that you have no duty to retreat if you are attacked in your own home.

Okay, back to our case. Does Scarlet harm Violet? In the regular English sense of the word 'harm', it's obvious. She kills her. How could that not be a harm? But remember, the question is whether she harms her in our sense; whether she wrongfully setback some of Violets' interests. Let's work through it.

Does Scarlet setback Violet's interests? Yep. Which ones? Plausibly all of them (ignoring the complication around death mentioned above). It's sometimes useful to summarize this by saying that Scarlet hurts Violet.

Does Scarlet violate one or more of Violet's rights? If so, which ones? This gets complicated and there are several possibilities. I'll just mention two ways this can go. You can skip this if you're not interested.

If the relevant right is a right to life, then it looks like there has been a rights violation. However, that means there has been a harm. Given the harm principle, that means we would be justified in punishing people who kill in genuine self-defense.<sup>12</sup> Violet teams up with the state to force Scarlet to choose between dying and going to jail. That does not seem plausible.

One common response is to invoke what's called the forfeiture theory. When someone unjustly tries to kill another person, they (temporarily) give up their right to life during the attack. Thus the attacker does not have a right to life that could be violated. Therefore, when Scarlet kills Violet, there's no harm.

There are several problems with the forfeiture theory. It creates complications with third-party assistance (whether the attacker forfeits their right overall or just to the victim affects how we deal with cases where a third person mistakenly thinks someone is being attacked and kills the attacker on their behalf). It also leads to a weird picture of rights. Remember that rights are supposed to be absolute prohibitions on people doing things to you. To see this, consider a wrinkle in how self-defense works:<sup>13</sup> Suppose that when Scarlet pulls out a gun, Violet stops trying to attack. But Scarlet is all pissed off and intends to kill Violet anyway, now Violet can kill Scarlet in genuine self-defense. If we are thinking about what's going on in terms the forfeiture theory of rights, it all looks weird: first Violet has no absolute protection against being killed (which Scarlet

---

12. Actually, this doesn't have to be true. There are other kinds of defenses under the criminal law that could get her off the hook. But that's too far afield.

13. Yes, there actually have been cases like this.

has), then Scarlet's right disappears and Violet's reappears. Absolute no longer means absolute.

An alternative is just to be more careful about what the relevant right actually is. You could say that a 'right to life' is just a convenient shorthand. What we really have is a right not to be killed unjustly. If the relevant right is a right to not be killed unjustly, then we ask when is it justifiable to kill. The answer will include what I said above in describing genuine self-defense. In other words, on this version of the right, self-defense is one of the built in exceptions to the prohibition on killing. Thus on this picture too, there will no rights violation when Scarlet kills Violet and therefore no harm.

### **3.3.1 Exploiting weaknesses**

We all have bad habits and psychological weaknesses. Sometimes, we try really hard to hide them from others. The fact that these habits and vulnerabilities may be present in personal data about us or inferred from such data creates a significant opportunity for others to exploit them in ways which may significantly set back our interests.

Barocas and Nissenbaum point to some dimensions of this in discussing the way that targeted advertising online

might not only lock individuals into past habitual choices from which they would like to escape, but may open them to manipulation and illegitimate control by others. If someone can identify your weaknesses and vulnerabilities by closely monitoring past behaviors and dispositions, that person may be able to shape your choices, actions, transactions, and purchasing decisions in ways that do not accord with principles and purposes to which you are committed. Even if you succeed, in your deliberate actions, to stay true to these purposes and principles, others may have their own reasons for targeting your weaknesses, prejudices, or vulnerabilities, and, thereby undermining your autonomy. {Barocas:2009ws}

Now, it will matter how significant these weaknesses are and what behaviors they can get you to do. Remember, for something to be a harm, the setback has to affect your well-being. Take a minor bad habits like spending more time than you'd like on sites dedicated to celebrity gossip. If an online advertiser cunningly lures you back to such sites, that does set back your interests. But if it's just a few more minutes a day, the setback may not rise to the appropriate level for it to genuinely count as a harm.

That said, we should be sensitive to cumulative effects. We can imagine cases in which each manipulative advertiser succeeds in stealing a few minutes a week from you. On its own, not enough for a harm. But together, you are wasting a couple of hours

a week on sites which you don't really want to be visiting. That would potentially be a harm. (If you were stuck for 2 hours at the DMV last week, your friend asking you about your week would not be surprised to hear about it).

[ToDo] We might also be concerned about ads which manipulate by targeting emotions.<sup>14</sup>

### **3.3.2 Location**

The list of interests potentially threatened by public availability of information about your location is likely long.

In some very extreme cases, the interests at stake can be the most important: life, security of person, freedom from fear. It should not be a surprise that the easy availability of personal location data enables stalking and other execrable behavior. The actress Rebecca Schaeffer was murdered in 1989 by a killer who got her address from the DMV.<sup>15</sup> Home addresses can be fairly easy to find online. Homes have doors and locks. Your current location is far more sensitive information.

The good news is that, for an individual, it is very difficult to find someone else's current location if they do not want to to be found. But the knowledge companies have of your current location is a different story.

Sometimes, if we know the purposes for which a company is tracking location, it is easy to identify the interests at stake. Suppose you have 7 good friends who each have a birthday party at a bar one night, but all in the same week. If you knew your employer or life insurance company would see that you've gone to a bar every night, you might hesitate to celebrate with your friends (even if you don't drink). Presumably, your interest in spending time with your friends is threatened here, as well as your interest in keeping your job, and your interest in being able to care for your family if you die. Those all seem pretty significant.

---

14. <https://www.adweek.com/digital/why-media-buyers-are-mixed-on-publishers-selling-ads-based-on-emotion/>

15. See *Margan v. Niles*, 250 F. Supp. 2d 63, 68 (N.D.N.Y. 2003). Passage of the Driver's Privacy Protection Act (DPPA), 18 U.S.C. §§ 2721–2725 (2000), followed shortly thereafter in 1994. *Margan*, 250 F. Supp. 2d at 68–69.

[Refs from Nissenbaum]



It's thus worth spending a bit of time on the details of how and when our current location can be tracked by companies. In what follows, I will mostly just describe how some of this works. Thus I want you to think through exactly what ways a kind of tracking might threaten a person's interests in each case. When you locate an interest, then try to think about whether it would affect well-being (i.e., the quality of someone's week). I started this section with some obvious harms. Your harm-antennae are probably raised and very sensitive right now. Thus let me remind you that there are lots of setbacks of interests which don't affect well-being.

Harm-antennae adjusted? Let's talk about how companies find your location and what they might do with it.

For companies, the difficulty of finding your location if you do not want to be found varies. There probably aren't too many companies who can access any given person's current location; probably only your cell-carrier is able to this in real time.<sup>16</sup> Though historical data about a person's movements is normally just as good; we are far more creatures of habit than we realize.

How do they get it? There is a bit of facial recognition floating around out there, but it's not usually a big source of location data. Your credit card company knows what you've bought and where. This also usually isn't a big source of data.

Usually, it's our devices.

### **3.3.2.1 Car**

Your car's current location is probably in the database (or can be inferred from what's in there) of a vendor which provides Automated License Plate Readers to police and repo-men.<sup>17</sup>

---

16. There have been reports of cell-phone carriers selling location data to bounty hunters; the backlash led to the companies vowing to tighten up their systems.  
[https://www.vice.com/en\\_us/article/nepxbz/i-gave-a-bounty-hunter-300-dollars-located-phone-microbilt-zumigo-tmobile](https://www.vice.com/en_us/article/nepxbz/i-gave-a-bounty-hunter-300-dollars-located-phone-microbilt-zumigo-tmobile)  
<https://www.theverge.com/2019/2/6/18214667/att-t-mobile-sprint-location-tracking-data-bounty-hunters>

17. <https://www.eff.org/pages/automated-license-plate-readers-alpr>

Interestingly, many cars leak their location in unexpected ways. The wheels on modern cars report tire pressure via uniquely identifiable bluetooth signals. This matters since researchers have identified bluetooth signal harvesting devices on roads.<sup>18</sup> Here's the abstract from Grant Bugher's presentation 'Detecting Bluetooth Surveillance Systems' at DefCon22

Departments of Transportation around the United States have deployed "little white boxes" -- Bluetooth detectors used to monitor traffic speeds and activity. While they're supposedly anonymous, they detect a nearly-unique ID from every car, phone, and PC that passes by. In this presentation, I explore the documentation on these surveillance systems and their capabilities, then build a Bluetooth detector, analyzer, and spoofer with less than \$200 of open-source hardware and software. Finally, I turn my own surveillance system on the DOT's and try to detect and map the detectors.<sup>19</sup>

### **3.3.2.2 Phone**

Let's start with your cell phone itself. Obviously, your cell carrier always knows where your phone is located, otherwise it wouldn't be able to direct calls/texts to you. As long as 3 towers can get your phone's signal, your location can be pretty exactly determined.

If your phone pairs with public wifi signals, your movements can be tracked with a great deal of precision, likely even your position inside a store, by whoever is operating the service.

#### **3.3.2.2.1 Apps**

The apps you install on your phone are a different story. While phone makers have gotten much stricter about requiring the user to explicitly authorize an app to access their location, there are still a lot of ways apps reveal your location to companies.

Actually, before reading on, get out your phone and update your settings to make sure that whenever possible you only give apps permission to access your location while you are using the app.

Settings updated? Okay. Keep reading, you'll thank me.

---

18. [https://link.springer.com/chapter/10.1007/978-3-662-45317-9\\_3](https://link.springer.com/chapter/10.1007/978-3-662-45317-9_3)

[https://www.schneier.com/blog/archives/2008/04/tracking\\_vehicle.html](https://www.schneier.com/blog/archives/2008/04/tracking_vehicle.html)

19. <https://www.youtube.com/watch?v=85uwy0ACJJw>

[ToDo]

Summary of location tracking apps

<https://www.vox.com/the-goods/2018/12/11/18136361/location-tracking-data-ad-targeting-facebook-google-amazon>

New York Times feature: “Your apps know where you were last night, and they’re not keeping it secret”

<https://www.nytimes.com/interactive/2018/12/10/business/location-data-privacy-apps.html>

- ‘Spouseware’

- Strava run data gives away locations of US military bases

<https://www.theguardian.com/world/2018/jan/28/fitness-tracking-app-gives-away-location-of-secret-us-army-bases>

### 3.3.2.3 Social media

Many of us frequently divulge our current location through social media posts. And, even when we do not directly post to tell the world that we are at the Starbucks on Reseda right now, we often reveal locations accidentally. Many phones and cameras automatically tag the picture with the GPS coordinates at which it was taken. Some platforms like Facebook now remove much of this metadata when photos are uploaded. But this is not universally the case.

Given tools like Google’s reverse image search, it is fairly trivial to figure out where a picture was taken.<sup>20</sup> You upload or provide a link to the image and the service finds other pictures likely taken in the same location. Check those out and you’ll likely find someone who has included metadata or helpfully explained where it was taken.

---

20. [https://support.google.com/websearch/answer/1325808?p=ws\\_images\\_searchbyimagetooltip&visit\\_id=637096219113096997-2863741639&rd=1](https://support.google.com/websearch/answer/1325808?p=ws_images_searchbyimagetooltip&visit_id=637096219113096997-2863741639&rd=1)

Indeed, innocuous things like Google Street View (at least now that they blur out people<sup>21</sup>, dogs, and cows<sup>22</sup>) can be used in determining location. Recently, a Japanese actress was attacked after a stalker found her location by examining high resolution pictures she posted on social media. The resolution was good enough that he used the reflections in her pupils and Google Street View to find where she lived.<sup>23</sup>

### **3.3.3 Threats to autonomy**

At this point in class, you're (hopefully) sensitive to concerns about autonomy. Thus the role privacy plays in providing the conditions for autonomy leaps fairly quickly to mind. Indeed, this connection lurks in the background for several other ways invasions of privacy can set back your interests.

Nissenbaum helpfully summarizes some of these connections

freedom from scrutiny and zones of "relative insularity" are necessary conditions for formulating goals, values, conceptions of self, and principles of action because they provide venues in which people are free to experiment, act, and decide without giving account to others or being fearful of retribution. Uninhibited by what others might say, how they will react, and how they will judge, unhindered by the constraints and expectations of tradition and convention, people are freer to formulate for themselves the reasons behind significant life choices, preferences, and commitments..... autonomy touches many dimensions of peoples' lives, including tastes, behaviors, beliefs, preferences, moral commitments, associations, decisions, and choices that define who we are. [From nissenbaum 2004 p.130] a

Thus invasions of privacy can set back a person's interests in being autonomous. Those are deeply important interests indeed since they underpin all sorts of other things which are important. Mess with my autonomy, you mess with my week. Thus this looks like a basis for potential harms.

### **3.3.4 Relationships**

---

21. <https://www.cnet.com/news/google-begins-blurring-faces-in-street-view/>

22. <https://slate.com/technology/2016/09/google-street-view-respects-cows-privacy-and-blurs-its-face.html>

<https://www.express.co.uk/travel/articles/1085416/google-maps-street-view-identity-dog-blur-funny-photo>

23. <https://www.usatoday.com/story/news/world/2019/10/11/japan-man-arrested-stalking-pop-star-using-photos-eyes-pupils/3942667002/>

One theme throughout our discussion of personal data concerns how the information we share with others is deeply intertwined with our relationship to them. Nissenbaum summarizes some of these connections

Information is a key factor in the relationships we have and form with others.... controlling who has access to personal information about ourselves is a necessary condition for friendship, intimacy, and trust....[D]istinctive relationships, for example individual to spouse, boss, friend, colleague, priest, teacher, therapist, hairdresser, and so on, are partially defined by distinctive patterns of information [From nissenbaum 2004 p.130]

Thus our interests in maintaining the integrity of our relationships may be set back by violations of privacy.

We will come back to this later when we discuss which rights are violated since on some accounts our privacy rights are founded in our ability to form and maintain relationships.

### **3.3.5 Democracy**

Insofar as democracy is valuable and people have interests tied up with living in a political system which is based in and responsive to the needs of its citizens, invasions of privacy can set back these interests. Nissenbaum summarizes some of these concerns

privacy is essential to nourishing and promoting the values of a liberal, democratic, political, and social order by arguing that the vitality of democracy depends not...on the concrete protection against public scrutiny of certain spheres of decision-making, including but not limited to the voting booth. Privacy is a necessary condition for construction of... "social personae," which serves not only to alleviate complex role demands on individuals, but to facilitate a smoother transactional space for the many routine interactions that contribute to social welfare. Similar arguments...[defend] robust protections of medical information on grounds that individuals would then be more likely both to seek medical care and agree to participate in medical research. In turn, this would improve overall public health as well as social welfare [From nissenbaum 2004 p.132]

### **3.4 Informational harms -- rights violations**

From this it seems that there are uses of personal information which potentially threaten a wide range of people's interests: life, health, employment, property, freedom from embarrassment, autonomy, equal treatment, and many others. In many of these

cases, we can imagine the setback being significant enough that it would make sense for someone to bring it up in response to the question “How was your week?” Therefore, it looks like there are at least some cases in which the use of people’s personal information leads to setbacks of interest in the sense used by our understanding of harm.

We don’t yet know whether these cases involve harms. For that, we need to know what rights are violated.

### **3.4.1 Which rights?**

To determine what rights could be at stake, let’s arbitrarily distinguish between rights which are specific to privacy and rights that apply to other phenomena.

#### **3.4.1.1 Non privacy rights**

The rights violated might not have anything to do directly with informational privacy. Many of the rights threatened by ordinary crimes might be at stake in our cases.

As we’ve seen, personal data is used to enable stalking, intimidation, or other crimes. Those cases pretty clearly threaten a person’s right to not be killed unjustly along with other rights to the security of person.

When your personal data is used to fraudulently or coercively take away your money or your property, this looks like a straightforward violation of your property rights. For example, if I pay you off so you won’t reveal my Netflix history to my pretentious art-film-snob friends<sup>24</sup>, you have violated my property right to the blackmail money.

#### **3.4.1.2 Right to protected sphere**

In some cases, we won’t be able to find one of these commonplace rights violations. For example, widespread surveillance of internet traffic probably won’t violate any of your property rights or threaten your personal security.<sup>25</sup> Thus we will need to look for rights which have to do directly with privacy.

---

24. Actually, go right ahead. They already know me.

25. Note this assertion depends on who you are. If you are a member of a group which the government has a history of targeting, such harms may be more likely. Still, it seems likely that the probability that any specific person in the group will be negatively affected by the surveillance is low.

If the idea of privacy rights strikes you as implausible, you're in good company. Some writers such as Judy Thompson maintain that all alleged privacy rights are derivative from more familiar rights. That is, when you look closely at an alleged right to privacy, you just find clusters of rights to life, security, property, et cetera.<sup>26</sup>

However, it's worth noting that in American law we do recognize legal privacy rights on their own. Under the common law, there is commonly (hah!) held to be a right to informational privacy. This is sometimes referred to as tort privacy. There is a tort of privacy invasion which applies when the defendant has intruded 'into [plaintiff's] private affairs' or '[p]ublic disclosure of embarrassing private facts about the plaintiff.'<sup>27</sup>

There is a ton of controversy over the details of such rights and over what they cover. We will talk about what 3 families of view which attempt to explain privacy rights and what they cover in what follows.

### **3.4.2 Accounts of right to protected sphere**

Let's set aside the difficult of identifying the precise rights at stake. Pretty much any view is going to suppose a protected sphere of information covered by a right to privacy.

Before we jump in, we can simplify things a bit by noting that they all entail the existence of a protected sphere of information. We see this all the way back in the famous paper which kicked off the discussion of privacy. Warren and Brandeis were explicitly concerned with protecting information about the 'private life, habits, acts, and relations of an individual'<sup>28</sup> This means that people have a right to determine how and when information within that sphere is communicated to others.<sup>29</sup> That is,

(PSI) If  $x$  is information within  $S$ 's protected sphere,  $S$  has the moral right to determine :

(a) who knows about  $x$ ; and,

(b) how, when, and where information about  $x$  is shared

---

26. {Thomson:1975dt}. For criticisms see {Inness:1992wq}, {Scanlon:hv}

27. William L. Prosser, Privacy, 48 CAL. L. REV. 383, 389 (1960).

28. {Warren:1890ct} 216.

29. Muller, p.14

Therefore, if someone not authorized by S (intentionally) learns of x they violate her rights. Same thing if they transmit x to others. I will sometimes call this trespassing the sphere. When such trespasses setback interests, there will be a harm.

We can make some progress by considering how to justify the necessity of such a sphere. We will explore 3 competing accounts: accounts based in liberal concerns about non-interference, accounts based in republican concerns about non-domination, and accounts that expand beyond the individual to consider concerns around relationships.

### **3.4.2.1 Negative Liberty account**

Negative liberty accounts of the right to a protected sphere of information will be concerned with the role protecting certain information plays in being free.

Why is this called ‘negative liberty’? The distinction between between negative and positive conceptions of liberty goes back to a famous paper by Isaiah Berlin. Very roughly, if we ask ‘When is a person free?’, on the negative liberty account we get the answer: When others do not interfere with her choices. On the positive liberty account, we get: When she is good. Here’s what he says about negative liberty

I am normally said to be free to the degree to which no man or body of men interferes with my activity. Political liberty in this sense is simply the area within which a man can act unobstructed by others. If I am prevented by others from doing what I could otherwise do, I am to that degree unfree; and if this area is contracted by other men beyond a certain minimum, I can be described as being coerced, or, it may be, enslaved. Coercion is not, however, a term that covers every form of inability. If I say that I am unable to jump more than ten feet in the air, or cannot read because I am blind...it would be eccentric to say that I am to that degree enslaved or coerced. Coercion implies the deliberate interference of other human beings within the area in which I could otherwise act. You lack political liberty or freedom only if you are prevented from attaining a goal by other human beings (Berlin, 1969: 122).

I will sometimes refer to this account as the liberal account. This is a standard category of view in political philosophy.<sup>30</sup> It is not necessarily ‘liberal’ as the term gets used in American political discourse. Where there are connections between this sort of liberal political philosophy, they exist because some members of the American Democratic party are attracted to these views; not the other way around.

---

30. <https://plato.stanford.edu/entries/liberalism/>



Let's spell out this picture in more detail and see how it fits with the idea of a protected sphere of information. Since the negative liberty picture likely strikes most American readers as obvious, we'll start with positive liberty to make it easier to see what the negative liberty picture implies.

### **3.4.2.1.1 Positive liberty**

On the positive liberty account, the idea of freedom is perfectionist<sup>31</sup>. To be truly free, you need to have certain kinds of personal development and probably certain beliefs.

One place, indeed the original place for Berlin, this can be found is a broadly Marxist picture. For Marx, in a capitalist society workers are told by all sorts of social forces that the owners of the factory are supposed to be the owners and they are supposed to be just a cog; their labor belongs to those who pay for it. The Marxist thought is that you have to be freed from this false conception of the world before you can be truly free. Something like this is built into the positive liberty conception.

Alternatively, suppose you grow up in a society with a heavy caste system, the lives open to you are circumscribed —you can be a tanner, a plumber, or a butcher, those are your only choices. You can choose freely among them; no one will make you be a butcher when you want to be a plumber. But on this sort of picture you aren't truly free unless you recognize that the society has trapped you into those choices. There are other careers that you could've pursued —actor, lawyer, fishmonger— but for the caste system.

Berlin believes we should reject any system which relies on positive liberty

It is one thing to say that I may be coerced for my own good which I am too blind to see: this may, on occasion, be for my benefit ... . [But] it is another to say that if it is my good, then I am not being coerced, for I have willed it, whether I know this or not, and am free (or 'truly' free) even when my poor earthly body and foolish mind bitterly reject it, and struggle against those who seek however benevolently to impose it ... . (1969, 134)

---

31. Perfectionism in ethics is concerned with things like achievement and excellence. For example, on other views, an athlete setting a world record might be praiseworthy because it makes fans excited. But the perfectionist will claim that achieving someone no one else ever has is in itself valuable.

That said, I mention this mainly for completeness and to illustrate the negative account. We won't talk much about positive liberty in relation to privacy. Though it should be clear that there's not going to be much presumption in favor of privacy, for those who haven't been properly situated / trained and don't have the conditions of positive liberty.

#### **3.4.2.1.2 Negative liberty**

The negative liberty view doesn't require anything of the individual's beliefs or self-conception. It just requires that others don't prevent her from doing things that she wants to do.

To be clear, this isn't saying that all restrictions on action are wrong. Normally, a negative liberty approach will get fleshed out to specify that some interferences, e.g., restrictions that prevent people from murdering children do not diminish freedom. Thus a fuller characterization of freedom on this view might be something like:

You are free when you are able to live the sort of life that seems worth living to you compatible with equal liberty for all.

Thus any interference with your ability to do this is morally problematic.

#### **3.4.2.1.3 Right to protected sphere**

Thinking about privacy from the negative liberty perspective puts an emphasis on the ability to exclude others from access to certain kinds of information because such access interferes with your ability to live the life you want. To be free, you must be able to, among other things,

- Keep other people from interfering with your choices
- Preserve available options for your choices
- Choose in accordance with your genuine preferences
- Retain control over how you present yourself to others
- Control much others know about our private lives

In short, any time your ability to make choices on the basis of what you genuinely care about is restricted, you are less free. Assuming that it is always better to be more rather than less free, that means such interferences are worse for you (though obviously things come in degrees).

The interference doesn't have to be completely obvious, like someone blocking the door you want to enter. Indeed, the interference can turn heavily on your own self-censorship. If you know that all of your internet browsing history will be publicly available, you probably will not use the internet the way you would if others weren't

watching. You might not watch the frivolous videos that help you relax after work. You might not google for embarrassing health information. You might not use the internet to help you explore your sexual identity. All of these would be significant interferences with your ability to live the kind of life you want to live, though no one else actively and intentionally prevented you from doing these.

For understanding how this view differs from the others, let me emphasize that the focus here is on actual non-interference. If people could interfere with your choices but do not, there's no problem for your liberty. Again, if your knowledge of their ability to interfere inhibits you from acting, you're still having your liberty restricted on this view.

Consider our example of the [Data hoarder](#). Given the assumption that the database is perfectly secure and that she will never have the urge to look at your data within it, her collecting the data doesn't seem to interfere with your choices. Thus the emphasis on actual interference for the negative liberty account seems to lack the resources to say that her collecting and storing all your information actually trespasses into your protected sphere of information. It's only if she looks, that your right to a protected sphere of information would be violated.

### **3.4.2.2 Republican account**

Where the negative liberty view focuses on the danger interference with one's choices poses for autonomy, the republican view focuses on the existence of certain power relations.<sup>32</sup>

As Pettit, one of the main modern proponents writes:

The contrary of the *liber*, or free, person in Roman, republican usage was the *servus*, or slave, and up to at least the beginning of the last century, the dominant connotation of freedom, emphasized in the long republican tradition, was not having to live in servitude to another: not being subject to the arbitrary power of another. (Pettit, 1996: 576)

For the republican, the mere existence of a domination relationship is objectionable. Where the negative liberty view has trouble explaining what is problematic in cases where no actual interference is likely, the republican can complain that as long as the option exists, it is unacceptable because people are not on an equal footing.

---

32. <https://plato.stanford.edu/entries/republicanism/>

Two quick notes about the name. First, this view often gets referred to as neo-republicanism. That's because O.G. Republicanism has some unfavorable associations. From the Stanford Encyclopedia of Philosophy entry on republicanism

One reason many people remain skeptical has to do with the fact that the classical republican writings often express views that are decidedly elitist, patriarchal, and militaristic. How could the basis for an appealing contemporary political program be found in such writings (Goldsmith 2000; Maddox 2002; Goodin 2003; McCormick 2003)?

Since we haven't talked about the classical views, I assume it won't confuse folks if I save letters by leaving off the 'neo-'.

Second, this is not 'republican' in the sense of the American Republican party. There may be some ideological connections, but where they exist, it's because some members of the Republican party are attracted to this position in political philosophy, not the other way around.

Indeed, my sense is that American political alignments cut across liberal and republican political philosophies. You can find threads of liberal political philosophy deeply woven into the commitments of some American Republicans and threads of republican political philosophy deeply woven into the commitments of some American Democrats.

#### **3.4.2.2.1 Domination**

Let's understand domination as:

A is dominated by B if B has the option of interfering with A's choices, regardless of whether the option is taken or not

Thus for the republican, A is free when no one dominates her.

It might help to say how freedom from domination contrasts with the non-interference on the liberal view. From the SEP:

[On] the non-interference view of liberty....we are committed to saying that the slaves of our well-meaning master enjoy *greater* freedom than the slaves of an abusive master down the road. Of course, the former slaves are better off in some respect than the latter, but do we really want to say that they are *more free*? For another, consider the slave who, over time, comes to understand his master's psychological dispositions better and better. Taking advantage of this improved insight, he manages to keep on his master's good side, and is consequently interfered with less and less. Thus, on the non-interference view of liberty, we are committed to saying that his freedom is increasing over time. Again, while it

is clear that the slave's greater psychological insight improves his well-being in some respect, do we really want to say that it increases his *freedom* specifically?

This provides in some ways a more pure conception of freedom — where the negative liberty view is concerned with actual interference, this view gives grounds for complaint whenever it is possible that someone interferes with her choices.

#### **3.4.2.2.2 Right to protected sphere**

The fact that a government or company holding personal information is in position to use it in ways which might harm people means that the government or company dominates them.

Thus it looks like the republican has more resources to complain about violations of privacy independent of their effects, which, we saw, was the weakness of the liberal emphasis on actual interference. Indeed, a serious strength of this picture is that concerns about invasion of protected sphere of information need not track probability of interference.

Thus we can see that on the republican account, the right to a protected sphere of information is grounded in concerns about preventing the existence of domination relationships. Information will fall within the protected sphere if the possession or use of information would impose a domination relationship.

#### **3.4.2.2.3 Objections**

While the republican view is able to better handle the cases where we are concerned in the absence of interference, it does not escape the problems entirely.

##### **3.4.2.2.3.1 Is collection always domination?**

One complication for the republican view is that in many cases individual collections of your information don't put a company / person in a position to dominate you.

That may be sometimes true, as when it concerns something that might embarrass you. But the challenge posed by machine learning is that in the aggregate, patterns can be extracted from pieces of seemingly innocuous data. Those patterns may establish a domination relationship.

What should the republican say about this? Is it that the individual collections do not violate privacy —trespass the protected sphere— only the aggregation of the data?

More generally, the high-power notion of freedom held by the republican poses the danger of going too far.<sup>33</sup> How could we tell what information potentially creates a dominance relationship? Presumably, the republican doesn't think all information collection trespasses the protected sphere. That would entail believing that it is okay to prevent virtually all uses of information technology —not just computers, dusty old pen and paper records would count too.<sup>34</sup>

#### **3.4.2.2.3.2 Intrinsic wrongness of privacy invasion**

The republican conception of domination doesn't completely escape the concerns [Data hoarder](#) posed for the liberal. If it really is true that our hoarder will never, ever, ever use the data, and no one else can access it, can we really say that she is in a position of domination? It still seems like the probability of use is still playing a decisive role in determining the wrongness.

The republican might point out that as long as it is possible for her to change her mind, she still dominates those whose data she possess. But what if she designs the database software such that it is impossible to ever read the data?<sup>35</sup> In that case, the republican joins the liberal in being unable to explain what's wrong with the collection of data.

---

33. Here's an analogy that may help explain what I mean by the notion being dangerously high-powered: I acquired from my dad the destructive impulse to use a power tool whenever possible. I have ruined countless projects and hours of work by pulling out the grinder when I should've used a file.

34. There are anarchists who reject all social institutions which can possibly exert power over others. This is a view that goes back to Bakunin (<https://plato.stanford.edu/entries/anarchism/>), among others. Let's just acknowledge that this is a possible view and set it aside. 'Burn all modern society down' is an answer to every political question; it isn't specific to the issues we're trying to sort out.

35. Databases normally support 4 operations: CRUD —create, read, update, delete. My suggestion is that her's would only do CUD. That's probably technologically impossible (updating and deleting require the ability to locate a record), so really we'd be imagining a database in which you can only put stuff in.