

# Privacy as Informational Commodity

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## Abstract

Many attempts to define privacy have been made since the publication of the seminal paper by Warren and Brandeis (Warren & Brandeis, 1890). Early definitions and theories of privacy had little to do with the concept of information and, when they did, only in an informal sense. With the advent of information technology, the question of a precise and universally acceptable definition of privacy became an urgent issue as legal and business problems regarding privacy started to accrue. In this paper, we propose a definition of privacy that is simple, yet strongly tied with the concepts of information and property. We show that privacy thus defined is not only useful in the context of the infosphere, but can also be successfully applied in its more traditional role as the ‘right to be let alone’.

## 1. Introduction

Many attempts to define privacy have been made since the publication of the seminal paper by Warren and Brandeis (Warren & Brandeis, 1890). Early definitions or theories of privacy had little to do with the concept of information and, when they did, only in an informal sense. With the advent of information technology, the question of precise and universally acceptable definition of privacy became an urgent issue as legal and business problems regarding privacy started accruing. The problem is compounded by the fact that the traditional concept of privacy which covered only intimate and sensitive information left out many other aspects of our life represented today in a digital form. This tension led some researchers to coin a new phrase, *informational privacy* (Scanlan, 2001) (Floridi, *The Ontological Interpretation of Informational Privacy*, 2005), (Shoemaker, 2010), presumably distinct and to be treated differently than the traditional object (or objects) of privacy. I do not believe that one can or should draw a distinction between the two types of privacy; any theory of privacy should account for both types with equal force. With this goal in mind, I propose a definition of privacy that is simple, yet strongly tied with the concepts of information and property. I show that privacy thus defined is not only useful in the context of the infosphere, but can also be successfully applied in its more traditional role as the ‘right to be let alone’.

Let us start with a simple example showing how the domain of privacy evolved over the last thousand years. The intent of this exercise is to point out two aspects of privacy - trust and reciprocity - that seem to have been overlooked in recent discussions on the subject. Consider a medieval village somewhere in Europe. Typically, there would only be five to 30 families living in it, likely related by blood. Most of the everyday activities – including the ones considered private today – would be done

in the open. When you passed by someone's house you might have seen their underwear hanging on the clothesline, heard a couple arguing in the open, spotted someone relieving oneself by the barn or, if the windows were open, even overhear people having sex inside the house. It was almost impossible to do anything that would not be observed directly or be discovered soon after the fact by other people living in the village. But the audience of this openness was restricted to the inhabitants of the village; outsiders were barred from this privilege. Why make a difference between insiders and outsiders? Why is it that "small communities had a high degree of intra-community transparency ... but a low degree of inter-community transparency" (Floridi, *The Ontological Interpretation of Informational Privacy*, 2005, p. 193)? The key to the answer to this question is the size of the community. Humans can maintain stable social relationship with only a limited number of people (the famous Dunbar's number is 150). Cohesion of the group requires rather intimate relationship among its members (Rachels, 1975) and this can be achieved by low level of privacy. Of course, mutual transparency requires trust: we don't want private information to be released beyond the borders of the village. But trust is easy to enforce in a small community.

Fast forward to the 21<sup>st</sup> century. Few of us live in small communities. (Even those communities are quite different from traditional villages). We have no reason to trust other people or expect reciprocity in sharing our private information. Since trust is gone, we cannot be sure that our private information will not be released further by people we entrust with it. Since reciprocity is gone, releasing private information which I will argue is a valuable asset would be giving it away for free. While the disappearance of small communities led to the problem of the *protection* of privacy (indeed, the first legal cases related to privacy were brought to courts in mid-19<sup>th</sup> century), its *object* or *content* remained unaddressed. It is only recently that we have begun to worry about protecting information such as our financial situation, our address, or even our car's license plate number. The question of why information technology extended so much the domain of information we consider to be private and worth protecting is a fascinating topic in its own right (Scanlan, 2001), but beyond the scope of this paper. The issue for us is how to extend the traditional concept of privacy with this new content.

I conjecture that the only way to cover the traditional and the modern content of privacy is via the concept of information. This private information is protected because it has value and should be treated as (almost) any other personal property. To put it in a succinct way, *privacy is an exclusive right to private information about oneself*. There are several aspects of this definition that require further explanation.

First, by the 'right' I mean 'the ownership right'; that is, the information about oneself is owned by him or her in the same sense as he or she may own any other personal property. This constraint is crucial as now we can describe any breach of privacy, that is, obtaining information about someone without his or her permission, simply as theft.

Second, this right is exclusive in the sense that it is not transferrable. If I provide you with private information about myself (by trade or sale), you do not automatically acquire ownership of this information. This is different than selling or giving away any type of physical property: by selling you a car, I give up any claims to that car. Not so with private information. Providing someone with private information is similar to selling a license to intellectual property (such as software or industrial

know-how). You may use this information, but you cannot – without my explicit permission – distribute this information any further.<sup>1</sup>

Last, although the definition may seem circular ('privacy' defined in terms of 'private'), it allows for flexibility in what 'private' means. The domain of privacy differs widely among people and across cultures and time. But as we have already observed in our village example, the level of privacy protection for a given person is not uniform across all recipients. Privacy is a ternary relation between a person, the protected information, and the observer (which can be the same person playing different social roles). This is an important point as it makes hopeless any attempt at providing a clear distinction between private and public domain (Nissenbaum, 1998).

## 2. Information as Object of Privacy

The ownership based interpretation of privacy has been proposed before. Thomson (Thomson, 1975) suggested that the right to privacy be based on a cluster of other rights of which the most important is the property right. If someone looks at your pornographic picture you hide in your safe, then he is violating your ownership rights to the picture. If someone uses an X-ray device to look at you through the walls of your home, then he is violating your ownership right to your body. Scanlon (Scanlon, 1975) and Rachels (Rachels, 1975) criticized this theory pointing out that privacy based on ownership of physical *objects* is unsustainable (looking at your property does not really violate any property rights). To fix the problem, Parent (Parent, 1983, pp. 269-270) suggested: "Privacy is the condition of not having undocumented personal knowledge about one possessed by others ... [personal knowledge to] be understood to consist of *facts* about a person which most individuals in a given society at a given time do not want widely known about themselves". Under this account of privacy, if you own a pornographic picture and your intention is that this information be private, not only can't I look at the picture, but I should not even know that you do own the picture. But Parent's definition still falls short of completeness as it fails to explain *failed* attempts at acquiring private information. If someone peeks through my bathroom window in order to catch a glimpse of my naked body, but fails to do so, she violates my privacy. Yet according to Parent, no knowledge has been acquired, hence no violation took place. Under our account of privacy, private information is just another property. A failed attempt at acquiring private information is then equivalent to "breaking and entering". This seems to agree with the intuition that failed attempt is not as bad as a successful violation of privacy, just as breaking and entering is not as bad as actual theft.

There is, however, an argument against ownership based interpretation of privacy that seems to apply to our theory as well. Consider again a woman peeking into my bathroom, but assume this time that this is my physician, Sarah (Johnson, 1989). Sarah knows my body quite well, so she is not acquiring any new information when she peers in my window. Yet she clearly violates my privacy.

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<sup>1</sup> This type of ownership has been used by Amazon to sell e-books for Kindle. When one purchases an e-book, one does not own its content. A customer holds it in "perpetual lease" without a right to resale or distribute.

There are two ways we can respond to this argument: one, by denying the identity of acquired information in the two cases, and another, by denying the identity of Sarah in each of the two cases.

Recall the principle of exclusive ownership in our definition of privacy. I own the information about my body. When I reveal this information to Sarah in her office, all I am giving her is an image of my body. Correspondingly, all she retains from this act is her memory or mental representation of my body in her mind. That image gradually fades away. Next time she examines me in her office that image is refreshed, that is, something new is added to the information she retained. This is even more pronounced in her act of peeking into my bathroom. One would be surprised to find Sarah looking for the same things she saw in her office. When Sarah watches me in my bathroom, she clearly wants to see a different aspect of my body or to see it in a different environment. She wants *new* information.

The second counterargument to Johnson's example questions Sarah's *right* to watch me in my bathroom. Suppose for the sake of the argument that Sarah gets no new information from watching me in the bathroom. But who is watching me in the bathroom? I gave Sarah the right to watch me naked in her office in her role as a physician. If it was Sarah-the-physician who peered in my window (let's say Sarah is an unconventional doctor who prefers to watch her patients in a natural environment), I would not consider this act a breach of privacy. I would find it awkward and unusual, but the only complaint I could offer was that I was not forewarned by Sarah about her unconventional practice. However, it is Sarah-the-woman who is watching me and she has never received my permission – tacit or not – to do so. Indeed, Sarah does acquire *new* information because of the *new* role she plays at my bathroom window.

### 3. Economic Value of Privacy

The fact that privacy has value is indisputable. In most of the literature on privacy, however, that value is placed in the realm of ethics. It has been argued that privacy is an indispensable part of human integrity (Reiman, 1976), dignity (Bloustein, 1964), and liberty (De Bruin, 2010) or a necessary element of intimate social relationships (Rachels, 1975). Notwithstanding ethical aspects of privacy, one cannot miss, however, an economic element of it: privacy can be traded, sold, and stolen. Privacy has an economic, often pecuniary, value. Indeed, it is the economic value of privacy – although not referred to as such – that is dominant in recent discussions of privacy. We worry that by giving away too much information – or by having it stolen – we are deprived of some good, not necessarily moral. Let us look at this aspect of privacy.

Since ancient times people have devoted substantial resources to protect their privacy. “The poor might have to huddle together in cities for need's sake, and the frontiersman cling to his neighbor for the sake of protection. But in each civilization, as it advanced, those who could afford it chose the luxury of a withdrawing place. Egyptians planned vine-hung gardens, the Greeks had their porticos and seaside villas, the Romans put enclosures around their patios. . . . Privacy was considered as worth striving for as hallmarked silver or linen sheets for one's bed” (McGinley, 1959, p. 56) . Thus achieved level of privacy is an indication of social status. Even today, in the armed forces the enlisted men will share an accommodation whereas the officers will enjoy privacy of separate rooms or houses.

Privacy is an object of exchange. “It is bought and sold in hospitals, transportation facilities, hotels, theaters, and, most conspicuously, in public restrooms where a dime will purchase a toilet, and a quarter, a toilet, sink and mirror.” (Schwartz, 1968, p. 743). Not only do we buy privacy, we also trade it: for other goods and for money. When we have heart to heart with a friend we don’t just give away personal information: we expect something in return. We often get similar personal information about our friend or some other goods from him/her: compassion, encouragement, sympathy, etc. When we give away personal information to a physician, we get health care in return, when we give away information about our income, marital status, expenditures to a bank clerk, we get a loan. Since privacy has value, it can be stolen just like any other property. When a recording or transmitting device is installed in our home for the purpose of covert collection of private information, it is a simple case of theft.

Even gossip has a simple interpretation under our theory of privacy. We condemn gossip not only because it is a breach of trust, but also – or perhaps primarily – because it is theft. According to our definition of privacy, when I reveal private information to someone, it is with the intention that this information is not to be disseminated. If, however, this information is conveyed to other people, it is my property that is in fact sold to them or traded with them.<sup>2</sup> On the receiving end, gossip may seem mysterious. Why are we interested in private information about other people, often people we don’t even personally know? Posner suggests (Posner, 1984, p. 335) that “Gossip columns recount the personal lives of wealthy and successful people whose tastes and habits often models – that is, yields information – to the ordinary person making consumption, career, and other decisions. ... Gossip columns open people’s eyes to opportunities and dangers; they are genuinely informative.” Even if Posner’s diagnosis is not convincing, there is no denying the fact that we are interested in private life of others. We must find something of value in watching ‘reality shows’ (as in *The Truman Show*), where people expose the most intimate details of their private lives. And, by the way, they sell these private details for money.

What, then, is the intrinsic value of private information? Interestingly, it seems that in absolute terms this value is negative. We hide and protect private information because it can be damaging to us. At the most basic level, we avoid exposing nakedness, bodily functions, and sex to avoid humiliation and indignity due to social conventions. But this is just the tip of an iceberg. We try to keep private almost anything that can be used against us. Sterility can destroy marriage chances for a prospective husband; alcoholism can destroy career chances for a prospective employee. But so can, respectively, bad breath and tendency to sleep late. Concealment or misrepresentation of such information is a good strategy in social competition. The other side of the coin, prying, is quite obvious in antagonistic relationships. Military or industrial spying is an understandable (even if “illegal”) way of getting an advantage over a competitor. Getting the goods on a co-worker is the easiest, however despicable, way of advancing one’s career.

The demand for private information is readily understandable where the existence of a relationship, business or personal, creates opportunities for gain by the demander. These opportunities obviously

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<sup>2</sup> The most typical payoff that a gossip gets in exchange for this information is other people’s attention. Fortunately, this is not a sufficient price for theft for the most of us.

exist in the case of information sought by the tax collector, fiancé, partner, creditor, competitor, and so on. Less obviously, much of the casual prying into the private lives of friends and colleagues that is so common a feature of social life is motivated by rational considerations of self-interest. “Prying enables one to form a more accurate picture of a friend or colleague, and the knowledge gained is useful in one’s social or professional dealings with that friend or colleague” (Posner, 1984, p. 334). A professor hiring a new PhD student relies more on a verbal recommendation from a colleague, than on a letter from a prestigious institution. The former can provide him with useful (read: private) information - however subliminally conveyed - that the latter is legally forbidden to relate. Collecting information on potential partners is routine in business world. When a company A intends to do business with company B, it attempts to get as much information (secret or not) about company B as possible. Indeed, it would be considered imprudent if it failed to do so.

Just as with any other commodity, value and price of privacy are not identical. The price of privacy of Catherine Middleton is clearly higher than mine as tabloids are willing to spend a lot of money to get a picture of her (but not mine) at a private moment. I would hesitate to say, however, that her privacy has a higher value than mine. On the other hand, value of privacy can be compared along certain dimensions. For example, value of privacy for a newborn it is negligible and then it steadily grows until adulthood. Schwartz (Schwartz, 1968, p. 749) describes it somewhat metaphorically: “During infancy the door to self is generally fully open; it closes perhaps halfway as a recognition of self development during childhood, it shuts but is left ajar at pre-puberty, and closes entirely – and perhaps even locks – at the pubertal and adolescent stages”. More importantly, the perceived value of privacy goes up as the number and social distance of potential recipients increases. When we release private information of apparently negligible value – such as address and phone number – to people we know, we do so willingly, because we trust them and can count on their reciprocity. When we post this information on the web to anonymous everyone, we don’t control how it is going to be used and we get nothing in return. We are essentially giving it away for free.

## 4. Conclusions

It is beyond the scope of this paper to discuss all advantages of the proposed theory of privacy. The key elements can be summarized in the following three points:

1. Privacy is about information. To protect privacy is to restrict access to information about oneself. To breach privacy is to obtain information about someone against his or her will. To relinquish privacy is to release information about oneself. We showed that the typical arguments against information based theory of privacy (e.g. Johnson’s) can be successfully answered.
2. The exclusive right to one’s private information explains why violating contextual integrity (that is, shifting information from one context to another without the subject’s permission) is as much a breach of privacy as direct breach of intimate realm. I own the information about myself at all times; my personal details submitted to a bank belong to me and cannot be sold by the bank to telemarketers without my explicit permission.
3. Private information has economic value. That value is relative to a context in which the information is used or released. Only public information has zero value. The domain of

public information seems to shrink with the number and social distance (called 'informational gap' in (Floridi, Four Challenges for a Theory of Informational Privacy, 2006) from its recipients. Once we attach economic value to privacy (however vulgar it may sound), it becomes much easier to decide who, when, and how can use one's private information (Laudon, 1996).

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