

## **On the need for a right to cognitive privacy** *by Kyle Slominski*

The idea of a right to privacy for the individual is one that has deep-seated roots in the annals of American history, originally hinted at in the fourth amendment of the United States Constitution and more formally articulated in the 1890 *Harvard Law Review* article “The Right to Privacy” by Warren and Brandeis. The idea has long been the subject of much debate; however, given the advent of new and increasingly more powerful neuroimaging technologies, I believe a new element must be added to the discussion – the idea of the right to cognitive privacy. There are myriad reasons why I believe either a reconceptualization of certain rights or a recognition of new rights are needed in this domain. My aim with this paper is to briefly address the importance of privacy and autonomy in and of themselves, the potential misuse of neuroimaging data by those not properly trained in a field which remains in relative infancy, and explore the increasing risk to human rights posed by the constantly developing and improving field of neuroimaging.

Few people would disagree that an individual’s mind is the most intimate and private aspect of a person. A physical body can be subjugated and manipulated in innumerable ways, made to seemingly bend to the will of any number of coercive factors. A dictator may demand that their subjects all appear in a town square and sing their praises; however, they have no way of knowing that person genuinely believes what they are saying. As John Bagnell Bury famously opined, “A man can never be hindered from thinking whatever he chooses so long as he conceals (Bury, 1913, p. 1).” If we were to adopt a Cartesian worldview, affirming the principles of the well-known *Cogito*, then it is fair to posit that the mind is the very thing that lets us know we even exist. In light of these qualities of the mind, is it not safe to assume that it deserves some special protections? Privacy laws exist with regards to a great number of categories – medical information, credit score history, and assorted other relatively mundane classes dealing with personally identifiable information. However, I believe that these laws simply failed to anticipate the emergence of neuroscientific advances. If my financial information deserves special protections so as to avoid ethical issues, certainly my mind does as well. The right to believe what one wishes, to have whatever internal thoughts or attitudes they desire free from any external coercion – this is a paramount right, one which is essential for respecting the autonomy of a person and which needs to be recognized as such by the legal system. To prevent a person from independent thinking in their most private of spaces is to strip all authenticity away from that person.

The concept of the Panopticon, a system in which prison inmates “were aware of being placed under constant surveillance through their own observation of a centrally located observation tower (Barker, 1998, p. 59)” was originally put forth by Jeremy Bentham and later discussed in more detail by Michel Foucault. In this type of system, merely the probability of being observed leads to feelings of subjection and altered behaviour. While one may argue that this is appropriate in a disciplinary setting, we begin to encounter problems when this “see without being seen” dynamic enters public life. It is increasingly common to see video surveillance cameras lining public streets. These serve as a Panopticon of sorts, coercing people into behaving a certain way in the presence of unverifiable monitoring (Barker, 1998, pp. 60-61). While I believe that this is troubling enough on its own, there is a debate beyond the scope of this paper to be had that on public property a degree of governmental monitoring is to be expected. However, what if these cameras aimed at the public also allow for a view into private

residences? Should one be expected to remain cognizant of monitoring every time they approach their own window, and restrain their behaviour or act in a disingenuous fashion for fear of being observed? Certainly one should be free to act as they wish within the boundaries of the law in the ostensible privacy of their own home; anything less would constitute a gross violation of freedom and natural rights.

Now, let us imagine that in the coming years neuroimaging advances enough to where portable machines that can scan the brain of everyone with a certain radius are developed. For purposes of discussion, we can assume that these devices result in a coherent and accurate tracking of the mind. What if these began appearing on every street corner, rather than simply video monitoring devices? If simply being watched can cause one to alter their behaviour, what would the effects of knowing your every potential thought is subject to scrutiny be? This leads to several difficult issues. Is it even possible for one to control their own thoughts? If I were to implore you right now to think of absolutely anything except a white elephant, are you able to prevent an image of a white elephant from appearing in your head? Moreover, if law enforcement were to use neuroimaging to identify brains of those who fall outside the norm, we run into the thorny issue of deciding what constitutes normality. No two brains are exactly alike, and we would need to seemingly arbitrarily decide what range of deviance from a statistical average is allowable (Canli & Amin, 2002, pp. 414-415). Having completed this task, we run into the issue of whether or not it is acceptable to act upon someone who merely has the potential to commit a crime based on their immutable neuroanatomy, regardless of whether or not they've actually done anything wrong. Is pre-emptive action ever justified simply because of a neuronal firing sequence or imagining of an act when no actual action has been taken? The very act of this type of monitoring causes the potential creation of a new class of person – the much maligned “thought criminal.” What right could a person have to know the intimate thoughts and secrets of another? The mind is thought of as the last bastion of privacy – even under constant supervision, one could always take solace in their own thoughts. Imagine an alternate history where the Nazi party of Holocaust era Germany had access to incredibly accurate neuroimaging methods. If they were to visit the house of someone they suspected was harbouring a Jewish family, that person would not even be able to lie and say they were doing no such thing. I firmly believe that people have a right to mental privacy, lest we fall into the realm of tyranny often depicted in dystopian novels

Potential dystopian futures reached with perfect neuroimaging technology aside, there exist a slew of practical modern day ethical issues. I believe there is a great deal of ignorance regarding both the capabilities and interpretation of neuroimaging data among laypeople. As it stands, “compiling and interpreting brain-imaging data requires highly specialized skills in neuropsychology, physics, and statistics (Wolpe, Foster, & Langleben, 2005, p. 42).” Despite this, the CEO of a given company may read a popular science article in a newspaper about the magic of fMRI technology, and decide that fMRI scans should be a prerequisite for employment. Having fallen prey to the phenomenon of neurorealism (Racine, Bar-Ilan, & Illes, 2005, p. 162), they may mistakenly believe that this will provide a fool proof way to screen for potential negative qualities, such as a predilection towards theft, laziness, dishonesty, et cetera. While this is likely to lead to poor or misinformed hiring decisions on its own, it also leads to other deleterious consequences. In its current state, many of the results provided by neuroimaging may not accurately be showing what they purport to. In light of this, it seems questionable to deny someone employment based on what the untrained person suspects is neural evidence of lying, or uncooperative behaviour. Moreover, what if the person performing the imaging were to detect something which was grounds for

medical concern? Are they obligated to inform the applicant, even though they have no formal medical training? If they opt to inform of the potential medical risk and are mistaken, they may be liable for any emotional stress or financial strain placed on the subject when they seek medical attention. If they opt not to divulge the information and the subject later suffers medical consequences, they may be held responsible for that person's condition. These issues could be altogether alleviated with the recognition that private thoughts and cognition are protected data, not subject to monitoring for the sake of convenience. It would be considered altogether unreasonable for someone to demand access to the e-mail accounts or recorded phone conversation of a potential hire, and even this would be less grievous an offense than demanding to see the inner most workings of their mind.

It is overwhelmingly clear using our simple human reason and rationality that a natural right to cognitive privacy exists, commensurate with those other undeniable rights which allow us to lead an authentic and autonomic life of freedom. What we must now pursue is a legal recognition of this right. Current protections regarding privacy have become archaic in light of the technological progress we have made and will continue to make, and will only become more so unless they are revisited from a fresh and modern perspective. Numerous special conditions as well as overwhelming importance make cognitive privacy an issue unique from that in privacy as a whole, and it is imperative that we address it appropriately.

### **References**

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