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# How Privacy Killed Katz: A Tale of Cognitive Freedom and the Property of Personhood as Fourth Amendment Norm

Christian M. Halliburton

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## HOW PRIVACY KILLED *KATZ*: A TALE OF COGNITIVE FREEDOM AND THE PROPERTY OF PERSONHOOD AS FOURTH AMENDMENT NORM

*Christian M. Halliburton\**

[F]reedom of thought . . . is the matrix, the indispensable condition, of nearly every other form of freedom. With rare aberrations a pervasive recognition of that truth can be traced in our history, political and legal.<sup>1</sup>

[I]f there is any principle of the Constitution that more imperatively calls for attachment than any other it is the principle of free thought—not free thought for those who agree with us but freedom for the thought that we hate.<sup>2</sup>

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1. *Palko v. Connecticut*, 302 U.S. 319, 326-27 (1937).

2. *United States v. Schwimmer*, 279 U.S. 644, 654-55 (1929) (Holmes, J., dissenting).

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## I. INTRODUCTION

With each passing day, new technologies push the horizons of official government investigative and surveillance activity deeper and deeper into the mind and consciousness of the surveilled subject. While law enforcement agencies have always relied on observing the behavior and activity of suspicious targets, and there has been little judicial ink spent preserving the confidentiality of such observable activity, the law has been slow to respond to rapid increases in the capacity or scope of official observation that the advance of technologically sophisticated surveillance techniques helped facilitate. The sampling of techniques at the center of this Article allow the operators to analyze, with a very high degree of accuracy, the cognitive activity occurring within the human brain, certain types of substantive information that may be stored there, and even the likely decision-making processes the brain has engaged in or will in the future engage. Because these techniques allow access to the cerebral and neurological landscape of the subject, from an individual's emotional and ethical profile to her memories and intentions, I have chosen to label this class of information-gathering methods as cognitive camera technology (CCT) for convenience.<sup>3</sup>

The universe of CCTs and potential for new uses is expanding. One of the most basic (if a brain monitoring device can ever be such) CCTs uses the brain as a data source in order to make lie detection determinations.<sup>4</sup> One early version of a CCT, a proprietary technique

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3. Christian M. Halliburton, *Letting Katz Out of the Bag: Cognitive Freedom and Fourth Amendment Fidelity*, 59 HASTINGS L.J. 309, 310 (2007). That initial article, on which the present effort builds, provides a solution-based perspective on the need to revisit and reformulate current conceptions of the Fourth Amendment's purpose and primary instrumental orientation in order to adequately protect individual privacy rights in the age of advancing brain and CCT technologies, while simultaneously maintaining constitutional harmony with our shared social, religious, and political beliefs regarding privacy.

4. *See id.* at 319-20 (explaining that lie detection devices are now better able to register deception due to recent technological developments). Charles Keckler has also touted the benefits involved in using new brain imaging technology to detect brain processes that were at one time immeasurable—particularly the subtle activity involved in deception. *See* Charles N. W. Keckler, *Cross-Examining the Brain: A Legal Analysis of Neural Imaging for Credibility Impeachment*, 57 HASTINGS L.J. 509, 510 (2006). Keckler explains:

It is the recent technological changes in brain imaging, particularly the visualization of the brain while it is actively working—so called “functional imaging”—that have allowed cognitive neuroscience the potential to identify relatively subtle processes such

called Brain Fingerprinting, has been used in a smattering of court cases,<sup>5</sup> and has been subjected to only limited testing by the scientific community,<sup>6</sup> but it continues to hold much promise as the technique is refined. One of those refinements has extended Brain Fingerprinting's utility into the realm of knowledge confirmation—beyond detecting dishonesty, Brain Fingerprinting can in some instances detect the presence of relevant knowledge or information in the mind of the subject without relying on that subject's communicative or verbal response.<sup>7</sup>

Moreover, Brain Fingerprinting is no longer alone in the market for CCT development, and the era of commercial consumption of cognitive surveillance services is at hand.<sup>8</sup> For example, the Cephos Corporation—whose company slogan reads “*When Truth Matters*”<sup>9</sup>—is currently marketing a “truth verification brain imaging service [which] provides independent validation that you are telling the truth.”<sup>10</sup> Cephos relies on a second proprietary method of using functional MRI (fMRI) that it claims derives from the original scientific research, conducted in

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as deception. Moreover, the ability to examine in real time the response of the subject brain during a question and answer session makes it feasible to use this technique forensically, so long as the pattern of brain activity corresponding to deception is sufficiently well-characterized.

*Id.*

5. See *Slaughter v. State*, 105 P.3d 832, 835 (Okla. Crim. App. 2005) (finding that there was “no real evidence that Brain Fingerprinting has been extensively tested, has been presented and analyzed in numerous peer-review articles in recognized scientific publications, has a very low rate of error, has objective standards to control its operation, and/or is generally accepted within the ‘relevant scientific community’”).

6. See *id.*; see also Lawrence A. Farwell & Sharon S. Smith, *Using Brain MERMER Testing to Detect Knowledge Despite Efforts to Conceal*, 46 J. OF FORENSIC SCI. 135, 136 (2001) (“Recent research has shown that electrical brain responses can be a reliable indicator of information-processing activities in the brain.”); see also Andre A. Moenssens, *Brain Fingerprinting—Can it Be Used to Detect the Innocence of Persons Charged with a Crime?*, 70 UMKC L. REV. 891, 900 (2002) (noting that the research surrounding brain fingerprinting is focused on finding ways to indirectly detect lying).

7. Halliburton, *supra* note 3, at 320-21; see LAWRENCE A. FARWELL, DETECTION OF FBI AGENTS USING BRAIN FINGERPRINTING TECHNOLOGY: A NEW PARADIGM FOR PSYCHOPHYSIOLOGICAL DETECTION OF CONCEALED INFORMATION (1993), <http://brainwavescience.com/FBIStudy.php> (“Brain Fingerprinting technology depends only on brain information processing, it does not depend on the emotional response of the subject.”).

8. See Christopher Intagliata, *Is the MRI Lie Detector Test Reliable?*, SCIENCELINE, Nov. 3, 2008, <http://scienceline.org/2008/11/03/ask-intagliata-lie-detection-fmri-brain-scan/> (providing overview of increasing commercialization and market consumption of brain-based lie detection services).

9. Cephos Corp, <http://www.cephoscorp.com/index.htm> (last visited Dec. 20, 2008).

10. Basic Lie Detection Technology, <http://www.cephoscorp.com/ld-tech-basics.htm> (last visited Feb. 7, 2009).

2001, which pioneered the use of fMRI to detect deception,<sup>11</sup> and that it has now achieved a 97% accuracy rate in blind clinical tests.<sup>12</sup> Cephos thus appears to be building the basis in accepted scientific opinion and verification that Brain Fingerprinting has yet to establish, and which may have slowed its spread in the relevant markets.

There are, of course, other companies currently pursuing this line of research and product development, no doubt due in part to the tremendous financial upside for those able to create a product that can satisfy the wide range of potential consumers of brain-based lie detection tests. One final example of currently available CCT services is offered by California corporation No Lie MRI, which claims to provide “unbiased methods for the detection of deception and other information stored in the brain.”<sup>13</sup> Particularly telling is No Lie MRI’s contention that “[l]egal battles often revolve around unsubstantiated claims that cannot be proven by hard evidence [and that i]n legal cases, NO LIE MRI will enable objective, scientific evidence regarding truth verification or lie detection to be submitted in a similar manner to which DNA evidence is used.”<sup>14</sup> While the time of any perceived equivalence in the reliability of DNA evidence and CCT evidence in the American legal system has yet to come, there has been at least one widely reported use of CCT evidence in a criminal proceeding internationally.<sup>15</sup>

Moving beyond present knowledge confirmation, researchers are also using variants of the CCT concept to predict and analyze intentions and future decision-making probabilities.<sup>16</sup> European scientists appear to be leading the charge, but they have already reported development of an fMRI “scanner” capable of monitoring the brain for specific indicia of decision-making moments occurring in various areas (for different

11. Cephos Corporation, A Brief History, <http://www.cephoscorp.com/history.htm> (last visited Dec. 20, 2008).

12. *Id.*

13. No Lie MRI, <http://www.noliemri.com/> (last visited Dec. 20, 2008).

14. See Product Benefits, <http://www.noliemri.com/products/ProductBenefits.htm> (last visited Dec. 20, 2008).

15. See Anand Giridharadas, *India’s Novel Use of Brain Scans in Courts Is Debated*, N.Y. TIMES, Sept. 14, 2008, at A10 (reporting the conviction of Aditi Sharma of murder based on brain scans that proved her possession of “experiential knowledge” proving her involvement in the planning and execution of the crime). This prosecution was not based on the proprietary versions of CCTs currently marketed in the United States, but upon the Brain Electrical Oscillation Signature (BEOS) Test developed by Dr. Champadi Raman Mukundan in India, but BEOS is related to the same fMRI science on which the American counterparts rely. *Id.*

16. See Ian Sample, *Brain Scans that Can Read People’s Intentions*, GUARDIAN, Feb. 9, 2007, <http://www.guardian.co.uk/science/story/0,,2009217,00.html?jusrc=rss&feed=11> (summarizing the ethical issues involved in developing technology that can predict human behavior).

areas control decision-making and action of different types).<sup>17</sup> Those decision-making moments are not only tracked and recorded, but there appears to be a signature associated with those decision-making moments that allow prediction of the substance of the decision before the decision is consciously reached.<sup>18</sup> With such a capacity, it may be possible to determine a person's actions or intentions before they are manifest.<sup>19</sup>

Finally, neuroscientists are improving their understanding of the brain's relationship to personality traits like morality, and refining the application of technology designed to analyze those portions and processes of the brain that are thought to be responsible for that aspect of our programming.<sup>20</sup> At least one study, involving neurology patients who had suffered specific damage to identifiable areas of the brain, has emerged to show how physical changes in certain brain structures will alter moral standards.<sup>21</sup> Although it is not yet possible to create a complete moral personality profile from this sort of monitoring, little further development in this area would be necessary before brain scans can reliably identify outliers who defy the orthodox moral conventions of the community.<sup>22</sup>

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17. *See id.* (explaining a study in which researchers used a brain scan to determine, in advance, whether participants would add or subtract two numbers that flashed on a screen).

18. *See id.* (noting the seventy percent accuracy rate of the study described above).

19. According to Barbara Sahakian, a professor of neuropsychology at *Cambridge University*: [a] lot of neuroscientists in the field are very cautious and say we can't talk about reading individuals' minds, and right now that is very true, but we're moving ahead so rapidly, it's not going to be that long before we will be able to tell whether someone's making up a story, or whether someone intended to do a crime with a certain degree of certainty.

*Id.*

20. *See* Martha J. Farah & Paul Root Wolpe, *Monitoring and Manipulating Brain Function: New Neuroscience Technologies and Their Ethical Implications*, 34 HASTINGS CTR. REP. 35, 44 (2004) ("If specific abilities, personality traits, and dispositions are manifest in characteristic patterns of brain activation and can be manipulated by specific neurochemical interventions, then they must be part of the physical world."); *see also* Martha J. Farah, *Neuroethics: The Practical and the Philosophical*, 9 TRENDS COGNITIVE SCI. 1, 34-35 (2005) (explaining that brain imaging technology can currently measure neurological activity involving specific psychological traits, such as racial attitudes and sexual attraction).

21. Benedict Carey, *Brain Injury Said to Affect Moral Choices*, N.Y. TIMES, Mar. 22, 2007, at A19; *see* Robert Lee Hotz, *Scientists Draw Link Between Morality and Brain's Wiring*, WALL ST. J., May 11, 2007, at B1 (describing a medical experiment in which scientists used neurology patients to demonstrate a neurological basis for moral judgment).

22. *See, e.g.*, Hotz, *supra* note 21 (explaining that people who suffered a rare injury to a specific area of the brain were more likely to express a willingness to defy certain societal norms such as harming one person to save the life of another).

Each of these initiatives redefines the indistinct and, at times, dimly perceived boundary between the individual and the community collective, or redraws the line separating the person and the personal from the public.<sup>23</sup> This line drawing is a core function of any legal system,<sup>24</sup> and of our Constitution specifically.<sup>25</sup> Defining the powers of the people (or of persons) as compared to the powers of the state is a relational exercise<sup>26</sup> which, however they may ultimately be mapped, produces certain zones of exclusion,<sup>27</sup> aspects in the life of the constitutional person where the government is denied a place and is powerless to forcibly intrude.<sup>28</sup> In times past, society had instinctively and unflinchingly treated the mind of an individual as one of those zones of exclusion,<sup>29</sup> and there has developed a widely shared belief in the existence and value of individual cognitive freedom.<sup>30</sup>

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23. See generally CRAIG JACKSON CALHOUN, *HABERMAS AND THE PUBLIC SPHERE* 2 (MIT Press 1992) (discussing Habermas' theory about the role the "public sphere"—or that portion of an individual that exists outside of his own thoughts and relates to the world at large—plays in shaping public opinion and societal values).

24. JÜRGEN HABERMAS, *BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY* (William Rehg trans., MIT Press 1996) (explaining "why human [or individual, subjective] rights and the principle of popular sovereignty [or a commitment to the validity of contractarian community self-organization and governance] . . . constitute the sole ideas that can justify modern law").

25. Robert A. Sedler, *The Legitimacy Debate in Constitutional Adjudication: An Assessment and a Different Perspective*, 44 OHIO ST. L.J. 93, 126 (1983) ("Our Constitution embodies the fundamental concept that no government, no matter how democratic and no matter how electorally accountable it may be, can violate important individual rights. The government cannot do certain things simply because no government should ever be able to do them . . . . [T]he overriding principle of the structure of constitutional governance established by our Constitution is the principle of limitation on government power . . .").

26. HABERMAS, *supra* note 24 at 133. Habermas states that informal public opinion-formation generates "influence"; influence is transformed into "communicative power" through the channels of political elections. Communicative power is again transformed into "administrative power" through legislation. This influence, carried forward by communicative power, gives law its legitimacy and thereby provides the political power of the state its binding force.

27. Halliburton, *supra* note 3, at 313; see *Jacobson v. Massachusetts*, 197 U.S. 11, 29 (1905) ("There is . . . a sphere within which the individual may assert the supremacy of his own will and rightfully dispute the authority of any human government, especially of any free government existing under a written constitution, to interfere with the exercise of that will.").

28. See Halliburton, *supra* note 3, at 313 (arguing that the Constitution grants individuals the right to be free from unwanted intrusion into specific areas of life and provides important protections against any action by the government in violation of this right); *id.* at 327-28 (recognizing the importance of an individual's sense of self in relation to the rest of society, including the concept that our thoughts provide the basis for who we are and how we view the world in which we live); see also MORRIS ROSENBERG, *CONCEIVING THE SELF* 5-51 (Basic Books 1979) (discussing the concept of self as it applies to mankind, including the thoughts and feelings that make a person an "object" as opposed to a "subject").

29. Halliburton, *supra* note 3, at 313.

30. *Id.* at 310.

The panoply of burgeoning CCTs now threatens this consistency because it is no longer realistic, or wise, to assume that information within and about the brain is off-limits to interested government actors.<sup>31</sup> With each new incursion into the individual's province of cognitive freedom or autonomy comes an opportunity to resist and reconsider the legal provisions that create this particular zone of exclusion. Given the severity of the risks inherent in unchecked and unreflective use of CCTs, this reconsideration can no longer be deferred.

When viewed carefully, and in their full context, the specific CCTs adverted to and the larger trend towards cognitive surveillance present social and legal challenges of fundamental magnitude.<sup>32</sup> Aside from breaching the walls of protection surrounding constitutionalized zones of exclusion—that is, aside from enabling the state to intrude where the Constitution says it shall not—non-consensual use of CCTs threaten deeper harms to our shared notions of social, spiritual, and political identity.<sup>33</sup> As detailed elsewhere, but still of relevance here, governmental use of CCTs may intrude upon the individual realization of a full and robust sense of self,<sup>34</sup> may impede effective civic participation in the democratic system,<sup>35</sup> and may even complicate our relationship with the divine or other metaphysical yearnings.<sup>36</sup> This, arguably, presents a crisis to which the Constitution must respond.

Yet the current legal framework, and specifically the existing doctrines of the Fourth Amendment,<sup>37</sup> are not and cannot be adequately

31. *See id.* at 316-17 (theorizing that political power involves the ability to have access to and control of information, and that there is great incentive for people in power to develop and use new technology to extract such information from those who may have it).

32. *Id.* at 310. *See generally* Jeffrey Bellin, *The Significance (if any) for the Federal Criminal Justice System of Advances in Lie Detection Technology*, 80 TEMP. L. REV. 711 (2007); Leo Kittay, Note, *The Admissibility of fMRI Lie Detection: The Cultural Bias Against "Mind Reading" Devices*, 72 BROOK. L. REV. 1351 (2007); NATIONAL RESEARCH COUNCIL, COMMITTEE ON MILITARY AND INTELLIGENCE METHODOLOGY FOR EMERGENT NEUROPHYSIOLOGICAL AND COGNITIVE/NEURAL RESEARCH, EMERGING COGNITIVE NEUROSCIENCE AND RELATED TECHNOLOGIES (National Academies Press 2008).

33. Halliburton, *supra* note 3, at 332-41.

34. *See id.* at 332-35 (linking the ability of CCTs to intrude into the mind of a person with the loss of identity, due to the fact that such intrusions interrupt the intimate relationship a person has with her thoughts).

35. *See id.* at 329-31 (considering the negative effects of labeling people based on what their brain activity suggests they might do in the future, including limiting free expression and exchange of ideas because society will assume such people have little of value to add to open discussions).

36. *See id.* at 336-38 (drawing a connection between religious experience and our internal thought processes—specifically noting the role “visionaries” and “prophets” played in shaping religious thought due to their inner spiritual experiences, and finding that science is dangerously close to explaining aspects of religion in terms of neurology).

37. This Article's targeted exploration of the Fourth Amendment should not be taken to

responsive to this fundamental challenge. The modern Fourth Amendment is a creature of the Supreme Court's somewhat schizophrenic privacy doctrine,<sup>38</sup> and privacy simply cannot keep the mind free in the shadow of CCT development and use.<sup>39</sup> Each of the available Fourth Amendment approaches,<sup>40</sup> all of which have their genesis in the privacy norm elevated to constitutional rule in *Katz v. United States*,<sup>41</sup> are individually and collectively incapable of preventing the government from forcibly penetrating your mind.<sup>42</sup> If that is so, privacy has failed us.

As it turns out, that failure might have been averted forty years ago, if the *Katz* Court had either spoken more clearly about the principles that animate the Fourth Amendment and not been content to articulate a descriptive explanation of its decision that masquerades as a principle,<sup>43</sup>

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suggest that CCTs and their underlying processes do not implicate other social and legal considerations. For example, CCTs will inevitably raise serious questions regarding the Fifth Amendment privilege against compelled self-incrimination, and will complicate the related definitions of compulsion, of testimony, and of the freedom of conscience that traditionally has grounded the privilege. While the property-infused model of the Fourth Amendment developed here can in many ways inform forward-looking interrogation of the Fifth Amendment, that interaction falls outside the ambit of the present undertaking and must be left for another day.

38. See Cheryl Kettler Corrada, Comment, *Dow Chemical and Ciralo: For Government Investigators the Sky's No Limit*, 36 CATH. U. L. REV. 667, 668-69 (1987) (discussing how the Court's adoption of the reasonable expectation of privacy doctrine expanded the scope of Fourth Amendment protection but provided a less mechanical guideline for government investigators seeking to avoid the Fourth Amendment's warrant requirement).

39. See Halliburton, *supra* note 3, at 322-24 (discussing the way in which CCTs are currently used to determine whether a person has relevant information, but noting that the technology is not currently advanced enough for routine use by law enforcement, nor is such routine use currently foreseeable).

40. Those alternative approaches generally entail: (1) an expectation that searches and seizures will be based on probable cause and conducted pursuant to a warrant, unless the context presents a recognized exception to the warrant requirement; (2) a more generalized inquiry into the reasonableness of the police intrusion; or (3) an analysis which focuses on the nature of sense-enhancing technologies employed during the intrusion. *Id.* at 340-43, 350-51.

41. 389 U.S. 347 (1967).

42. See Halliburton, *supra* note 3, at 340-41 (setting forth the warrant preference approach, in which law enforcement officers must obtain a warrant from a magistrate before conducting a search, and explaining that such a Fourth Amendment approach would not protect a person against the use of CCTs because officers would only need to demonstrate a reasonable belief that a person has specific knowledge about a crime); *id.* at 342-50 (explaining the warrant exceptions approach, in which the Court labels certain activity—including the use of some technology—outside the scope of Fourth Amendment protection when such technology is easily accessible by the general public); *id.* at 354-56 (maintaining that the reasonableness approach—which would involve the use of a balancing test by the Court to determine when the interests of law enforcement to effectively investigate crime outweigh the rights of an individual—is most likely to shape the Court's opinions surrounding the use of CCTs).

43. The point is that the *Katz* Court's opinion can be described as and ascribed to privacy—the opinion can of course be seen as preserving privacy to a greater extent than did the previous

or if it had not simply cast aside the old property-driven regime<sup>44</sup> for the new privacy-based era too hastily. Indeed, it appears that the Court may not have meant what we read it to say in *Katz*,<sup>45</sup> and that a property-based theory of the Fourth Amendment was still viable even post-*Katz*.<sup>46</sup> Even if this theory cannot be *conclusively* proven, it is clear that privacy's useful normative lifetime has run its course, and that in order to preserve constitutional and social integrity, the Court needs to commit itself to a new Fourth Amendment principle.

This Article suggests that the search for a new concept of Fourth Amendment freedoms able to carry us into the future actually requires us to look back at the past and reinvigorate the notion of property forsaken in *Katz*. There are several scholarly critiques of *Katz*'s privacy norm,<sup>47</sup> and even a few scholars who have postulated that the Fourth Amendment embraces at least some limited constitutionalized property right.<sup>48</sup> However, none of these critiques, whether property driven or

regime—but privacy does not explain or justify the steps taken to reach that desired outcome.

44. In *Katz*, the Court explicitly rejected the argument that Fourth Amendment rights are perfectly co-extensive with property interests, and introduced privacy as a notion that might transcend such limitations. See generally *Katz v. United States*, 389 U.S. 347 (1967).

45. See *infra* Part I.C (arguing that portions of the *Katz* opinion explain that the decision does not solely rest on privacy grounds).

46. See *infra* Part I.C (noting that the *Katz* opinion is based on several decisions that emphasize property rights under the Fourth Amendment).

47. See Lior Jacob Strahilevitz, *A Social Networks Theory of Privacy*, 72 U. CHI. L. REV. 919, 933 n.35 (2005) (“As a practical matter . . . defendants virtually always claim to have a subjective expectation of privacy, and the courts rarely second-guess those representations about the defendant’s state of mind. When courts do discuss the first prong, their analysis sometimes invokes the ‘reasonableness’ issues that ought to be analyzed under the second prong . . . . The second prong of *Katz*, the so-called objective prong, is therefore the locus of most of the action under Fourth Amendment law.”); see also David W. Cunis, Note, *California v. Greenwood: Discarding the Traditional Approach to the Search and Seizure of Garbage*, 38 CATH. U. L. REV. 543, 565 (1989) (observing that the Court in four cases has quickly glossed over the question raised by the first prong in *Katz*); Jon E. Lemole, Note, *From Katz to Greenwood: Abandonment Gets Recycled from the Trash Pile—Can Our Garbage Be Saved from the Court’s Rummaging Hands?*, 41 CASE W. RES. L. REV. 581, 595 n.92, 601 (1991) (noting that the Court usually accepts as fact a defendant’s assertion of a subjective expectation of privacy); James J. Tomkovicz, *Beyond Secrecy for Secrecy’s Sake: Toward an Expanded Vision of the Fourth Amendment Privacy Province*, 36 HASTINGS L.J. 645, 651-54, 679-80 (1985) (noting that *Katz*’s first prong has become decreasingly important relative to its second prong).

48. See generally Edward L. Barrett, Jr., *Personal Rights, Property Rights, and the Fourth Amendment*, 1960 SUP. CT. REV. 46 (1960) (tracing the developments that resulted in interpreting the Fourth Amendment to afford greater protection to property rights than to personal liberty); Thomas K. Clancy, *What Does the Fourth Amendment Protect: Property, Privacy, or Security?*, 33 WAKE FOREST L. REV. 307, 333-36 (1998) (stating that the Court has too readily made privacy expectations contingent on technology, empiricism, and government regulation, highlighting the problem of relying on privacy to define a person’s protected interest rather than property rights).

not, has adequately conceptualized the nature of the right to property that we must use to reform our Fourth Amendment jurisprudence.

What privacy advocates and even the rare property proponents have failed to do is appreciate the scope of the property rights a reinvigorated Fourth Amendment could embrace, and the complex relationship those rights have to conceptions of personhood. This is the gap filled by the present Article in order to erase this blind spot in the normative debate surrounding the Fourth Amendment. This Article seeks for the very first time to inform that debate with a notion of property as an essential aspect of human identity in a “mash-up”<sup>49</sup> of sorts that might be called Fourth Amendment jurisprudence meets the Radinesque Property of Personhood.<sup>50</sup>

Using an expanded version of the notion of property developed by Professor Margaret Radin in her pioneering work *Property and Personhood*,<sup>51</sup> the Fourth Amendment must contend with the social reality that some aspects of “ownership” or entitlement to property, and some level of vindication of those interests, are essential to the formation and viability of complete human beings.<sup>52</sup> Such an expanded notion of property avoids all the pitfalls associated with the trespassory property concepts criticized in *Katz*.<sup>53</sup> This expanded notion of property, enjoying an explicit foundation in the constitutional text,<sup>54</sup> is in fact

49. Mashup is a musical genre which, in its purest form, consists of the combination (usually by digital means) of the music from one song with the acappella from another. Typically, the music and vocals belong to completely different genres. At their best, [mashup] songs strive for musical epiphanies that add up to considerably more than the sum of their parts.

The Bastard Art Gallery, <http://www.bastard-art-gallery.com/navigator.php> (last visited Dec. 20, 2008). See also “Mashup,” The Free Dictionary, <http://encyclopedia.thefreedictionary.com/mash-up> (last visited Dec. 20, 2008).

50. See Margaret Jane Radin, *Property and Personhood*, 34 STAN. L. REV. 957, 957 (1982) (“The premise underlying the personhood perspective is that to achieve proper self-development—to be a *person*—an individual needs some control over resources in the external environment.”) (emphasis added).

51. *Id.*

52. See generally *id.* (exploring the complicated relationship between personhood and property, specifically in the context of legal thought).

53. This is because a personhood model of property does not conceptually depend on trespass or physical invasion to establish a violation of such rights, but rather focuses on whether a particular approach to regulating or structuring property relationships interferes or is incompatible with recognized individual interests in what Radin calls “personal property.” See *id.* at 959; see also *infra* Part III.A (providing a fuller explanation of this aspect of the personhood model). The point is that such interference can certainly occur even if there is no physical invasion or trespass against the unit of property in which a person has legitimately invested a sense of self.

54. See generally U.S. CONST. amend. IV; U.S. CONST. amend. V. Most specifically, I note that our constitutional democracy explicitly guarantees our interests in “life, liberty, and property”

more authentic to the aspiration of the Bill of Rights.<sup>55</sup> This idea is further buttressed by constitutional interpretive frameworks that emphasize holism and constitutional consistency.<sup>56</sup> Finally, the proffered Fourth Amendment property right conceptualized and advanced in this Article produces superior outcomes in disputed cases compared to the privacy approach,<sup>57</sup> and consequently would produce a more credible and coherent body of judicial opinion.<sup>58</sup> Perhaps most important of all, focusing on a notion of property in the Fourth Amendment setting makes us more free: by preserving our cognitive freedom against encroachment, and through more consistent and aggressive policing of constitutionally-protected zones of exclusion, the proposed property rights model of the Fourth Amendment theorized here would be a liberty-preserving device that correlates with the needs and mores of the society it serves.

The present effort to vindicate these claims proceeds in three principal parts. Part I briefly traces the Fourth Amendment's<sup>59</sup> historical approach of analyzing Fourth Amendment claims by reference to property rights and common law prohibitions on trespass against property. Part I also presents the *Katz* Court's privacy-based response to that historical approach. While this Part explores the possibility that *Katz* does not stand for the proposition that the Fourth Amendment deals only with privacy to the exclusion of property, it concludes by emphasizing that, at present, privacy rules the Fourth Amendment roost. Part II takes on this privacy-centric Fourth Amendment and considers the extent to which it might preserve the mental solitude and freedom of thought that is fundamental to so many of our personal and social dynamics. Following this practical analysis, which reaches negative conclusions about privacy's utility, are further discussions of the normative weakness of the privacy regime and of the jurisprudential

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against deprivation without due process by either the federal or state government.

55. One of the primary intentions of this Article, although not the immediate or explicit doctrinal focus, is to restore the Fourth Amendment to its preferred position within the constitutional framework by reconnecting it to the freedom-preserving spirit of the Bill of Rights. This allows us to consider Fourth Amendment freedoms as an essential component of the aggregated rights and obligations that characterize our constitutional or civic existence rather than as efficiency considerations relevant only to domestic policing activities.

56. This interpretive advantage is explored more fully in Part II.A.

57. See generally *infra* Part III.C.1.

58. See generally *infra* Part III.C.1 (arguing that the person property model is superior compared to the current privacy model of Fourth Amendment jurisprudence).

59. See *infra* Part I.A (describing the early Supreme Court cases that focused on a property analysis as compared to the later Supreme Court cases that focused on privacy).

sleight-of-hand necessary to support it. Part III then presents the argument that if we did demote (but not entirely discard) privacy, and installed a robust respect for the property of personhood in its place, it would restore the vitality and authenticity of the Fourth Amendment. This final part develops Radin's personal property model, offers several conceptual enhancements to that model necessary to adapt it to the Fourth Amendment, and then applies this enhanced theory to CCTs and a series of other Fourth Amendment issues in order to demonstrate the value of this proposed reform.

## II. FROM PROPERTY TO PRIVACY

### A. Pre-Katz Fourth Amendment History

For what is still a majority of the Fourth Amendment's lifetime, the law treated it as having nothing to do with privacy.<sup>60</sup> Indeed, far from regulating police forces or broadly limiting official intrusions, with or without a warrant, the Fourth Amendment merely served as a procedural device that laid out the steps investigators had to take in order to receive judicial approval to engage in either search or seizure activity.<sup>61</sup> In this

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60. See generally *Katz v. United States*, 389 U.S. 347 (1967) (explaining how, even though it was enacted in 1791, the Fourth Amendment did not affect privacy in any functional way until 1967).

61. Akhil Reed Amar, *Fourth Amendment First Principles*, 107 HARV. L. REV. 757, 771-72 (1996). Amar stated bluntly:

The Amendment's Warrant Clause does not require, presuppose, or even encourage warrants—it *limits* them. Unless warrants meet certain strict standards, they are per se unreasonable. The Framers did not exalt warrants, for a warrant was issued ex parte by a government official on the imperial payroll and had the purpose and effect of precluding any common law trespass suit the aggrieved target might try to bring before a local jury after the search or seizure occurred.

*Id.* A somewhat parallel argument has been made with respect to the Fifth Amendment. Eben Moglen's historical discussion of the privilege against compelled self-incrimination is meant to show that early colonial versions of the privilege, and the eventual federal distillation of the colonial provisions, were meant only to restrict a very narrow set of practices and were neither construed nor applied to vest a criminal defendant with a general right to withhold information. See Eben Moglen, *Taking the Fifth: Reconsidering the Origins of the Constitutional Privilege Against Self-Incrimination*, 92 MICH. L. REV. 1086, 1094 (1992) ("The[ ] elements of colonial criminal procedure demonstrate that American legal systems at the turn of the eighteenth century conformed to the model of the 'accused speaks' trial, with which the notion of an accused's right to silence in the face of the evidence was incompatible."). Amar's argument about the Fourth Amendment's warrant clause and Moglen's argument about the Fifth Amendment's privilege are both meant to suggest that the Amendments have an historical meaning very different from what they appear to say on their face. The difficulty with these types of historical assessments, which measure modern doctrine against colonial and early American procedures, is that they limit the meaning of the

light, the Fourth Amendment functioned in its earliest days as the direct post-Colonial response to the hated writs of assistance so abused by the English crown.<sup>62</sup> With passage of the Fourth Amendment, early lawmakers did away with general warrants and ensured that probable cause was the sole standard of suspicion that allowed the government to forcibly override an individual's desire to remain undisturbed by the government.<sup>63</sup> However, the Fourth Amendment did not initially operate

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constitutional text based on the founding generation's occasional but not infrequent failure to live up to its newly codified ideals. Rather than suggesting a narrow or even hobbled "originalist" view of the Fourth or Fifth Amendment, colonial and early American practices seemingly inconsistent with a broad construction of the text (and with subsequent liberal construction of the text by the Court) may depict nothing more than a system slow to change its ways. The disconnect that Amar and Moglen describe, that between modern treatment of constitutional texts and the practices prevailing at the time of their adoption, is not at all unique in the field of constitutional interpretation and decision-making—religious discrimination after passage of the First Amendment, racial subordination after passage of the Civil War Amendments, and even basic denials of the right to counsel guaranteed by the Sixth Amendment are all examples of the same dynamic, and yet none of these infringing behaviors are legitimately used to argue against the clear import of the underlying legal provision.

Perhaps more so than constraining the meaning of these Amendments to mirror their initial application, the disconnect that Amar and Moglen convincingly describe may best be explained by the absence of an effective exclusionary remedy for violation of these rights, one which was capable of incentivizing if not forcing compliance with the newly-adopted constitutional requirements. For a discussion of how a properly-designed exclusionary rule is essential if the Constitution's criminal procedure provisions are to be given full force (or even taken seriously), see Christian M. Halliburton, *Leveling the Playing Field: A New Theory of Exclusion for a Post-PATRIOT Act America*, 70 MO. L. REV. 519 (2005).

62. See Amar, *supra* note 61, at 767 ("At common law . . . [e]ven if a constable had no warrant, and only weak or subjective grounds for believing someone to be a felon . . . the constable could seize the suspected person . . ."); Bruce A. Antkowiak, *Saving Probable Cause*, 40 SUFFOLK U. L. REV. 569, 573 (2007) (arguing that the probable cause doctrine plays a greater role in the meaning of the Fourth Amendment than the warrant requirement due to the fact that, historically, the warrant requirement lacked substantial value, and there now exist numerous exceptions to the rule); Tracey Maclin, *When the Cure for the Fourth Amendment is Worse than the Disease*, 68 S. CAL. L. REV. 1, 8 (1994) [hereinafter Maclin, *Fourth Amendment*] (proposing that the Framers established a warrant requirement as a check on executive power); Tracey Maclin, *Let Sleeping Dogs Lie: Why the Supreme Court Should Leave Fourth Amendment History Unabridged*, 82 B.U. L. REV. 895, 941-43, 966-77 (2002) [hereinafter Maclin, *Let Sleeping Dogs Lie*] (finding that, although the text of the Fourth Amendment bans only the use of general warrants, its broad implications include protecting citizens from overreaching authority by the government); Robert J. McWhirter, *Molasses and the Sticky Origins of the Fourth Amendment*, 43 ARIZ. ATT'Y 16, 32-34 (2007) (summarizing the various lessons history has taught us about the meaning of the Fourth Amendment, including the fact that the reasonableness clause provides greater insight than the warrant clause because a search pursuant to a warrant does not necessarily protect a person's right to be secure from his government).

63. See Amar, *supra* note 61, at 767-68 (detailing situations in which a warrant requirement simply makes no sense, such as when there are exigent circumstances justifying a search or when government agents receive uncoerced consent to search a place); see also Antkowiak, *supra* note 62, at 573-74 (categorizing the warrant requirement as watered down and lacking strength); Maclin,

as any sort of independent check on government conduct or as a fundamental individual right observed during all law enforcement encounters.<sup>64</sup>

This rather narrow view of the Fourth Amendment did not persist long.<sup>65</sup> By 1886, when the Court decided *Boyd v. United States*,<sup>66</sup> American law had wholly abandoned the purely procedural view of the Fourth Amendment.<sup>67</sup> It had come to embrace that provision of the Bill of Rights as creating affirmative, overarching individual rights that limit the spheres of permissible law enforcement conduct generally, and certainly not only when seeking magisterial approval on a warrant application.<sup>68</sup> However, declaring the broad applicability and individual nature of the right was not enough. The questions that still needed answering were: (1) to what rights are Fourth Amendment freedoms instrumental,<sup>69</sup> and (2) what is the legal or social value vindicated by the specific rights enumerated in the text of the amendment?

At first glance, the Court's opinion in *Boyd* appears to offer conflicting guidance. For example, Justice Bradley takes care to unpack the language of search and seizure by placing the challenged practices

*Fourth Amendment*, *supra* note 62, at 9 (questioning how the Framers would respond to current issues in Fourth Amendment jurisprudence such as undercover informants and the so-called "knock and announce" rule); Maclin, *Let Sleeping Dogs Lie*, *supra* note 62, at 903 (examining the complexities surrounding the use of history to analyze the true meaning of the Fourth Amendment, including the issue of when such a use of history is appropriate); McWhirter, *supra* note 62, at 27-28 (analyzing the angry reaction of the colonies to the King of England's issuing of Writs of Assistance—which acted as general search warrants—to enforce the Molasses Act).

64. See Amar, *supra* note 61, at 767 ("For example, less than a dozen years after the adoption of the Constitution and the ratification of the Bill of Rights, Congress passed and federal judges upheld the now-infamous Sedition Act."); Antkowiak, *supra* note 62, at 578 ("The Founders drafted the Amendment to curtail the capricious search powers exercised under general warrants and writs of assistance . . ."); Maclin, *Fourth Amendment*, *supra* note 62, at 11 ("The [Fourth] Amendment was a symbolic response to a tradition and historical period that showed scant respect for individual privacy."); Maclin, *Let Sleeping Dogs Lie*, *supra* note 62, at 905 (setting forth the purposes for the announcement rule under common law: "it decreased the potential for violence; it protected a home's privacy; and it prevented the physical destruction of the home"); McWhirter, *supra* note 62, at 32 (explaining that the Fourth Amendment's warrant requirement is significantly harder to meet than the general warrants issued under the Crown).

65. Although roughly one hundred years may seem like a long time, because of the exceptionally limited nature of the colonial constable's authority to intrude upon personal affairs, the Fourth Amendment was not commonly invoked or involved in legal disputes. Indeed, the *Boyd* opinion is the first fully reported opinion in which the Court used the Fourth Amendment as an analytical tool in the process of judicial decision-making. See generally *Boyd v. United States*, 116 U.S. 616 (1886).

66. *Id.*

67. *Id.* at 623.

68. *Id.*

69. *Id.*

within the historical experience of American colonials, and by linking the Fourth Amendment to the English practices to which they strenuously objected.<sup>70</sup> Justice Bradley's review of available authority settles on Lord Camden's opinion in *Entick v. Carrington*<sup>71</sup> "as the true and ultimate expression of constitutional law," one which was "in the minds of those who framed the Fourth Amendment to the constitution, and . . . considered as sufficiently explanatory of what was meant by unreasonable searches and seizures."<sup>72</sup>

According to Camden, "[t]he great end for which men entered into society was to secure their property,"<sup>73</sup> and "every invasion of private property, be it ever so minute, is a trespass."<sup>74</sup> Thus, in the case challenging the government's forcible seizure of certain private papers, Camden recognized that the papers "are the owner's goods and chattels; they are his dearest property; and are so far from enduring a seizure, that they will hardly bear an inspection . . . ."<sup>75</sup> Consistent with the remainder of the Camden opinion, this language explicitly locates the claimant's Fourth Amendment rights in his ownership status with respect to the seized items and the items' status as property.<sup>76</sup>

Justice Bradley begins with this property foundation and understands Camden's opinion to mean that the constitutional guarantees of liberty and security under the Fourth Amendment "apply to all invasions on the part of the government and its employes [sic] of the sanctity of a man's home and the privacies of life."<sup>77</sup> This latter clause has been seized on as a possible indication that the interests inherent in

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70. *Id.* at 624-25.

71. 19 How. St. Tr. 1029 (C.P.D.) (1765), cited in *Boyd*, 116 U.S. at 626.

72. *Boyd*, 116 U.S. at 626-27.

73. *Id.* at 627.

74. *Id.*

75. *Id.* at 627-28.

76. *See id.* (denying the right to inspect a person's papers as a trespass on the person's personal property).

77. *Id.* at 630.

the Fourth Amendment are matters of privacy, not property,<sup>78</sup> or perhaps that property rules protect privacy interests instrumentally.<sup>79</sup>

On closer examination, however, it becomes clear that the personal interest that invests the Fourth Amendment with its power and significance derives from an individual's entitlement to own and control property.<sup>80</sup>

It is not the breaking of his doors, and the rummaging of his drawers, that constitutes the essence of the offence; but it is the invasion of his indefeasible right of personal security, personal liberty, and private property . . . it is the invasion of this sacred right which underlies and constitutes the essence of Lord Camden's judgment.<sup>81</sup>

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78. See *United States v. Dunn*, 480 U.S. 294, 300 (1987) (determining that the central component of the inquiry regarding what should be considered curtilage is “whether the area harbors the ‘intimate activity associated with the sanctity of a man’s home and privacies of life’”) (quoting *Boyd*, 116 U.S. at 630); *Doe v. Bolton*, 410 U.S. 179, 209 n.2 (1973) (Douglas, J., concurring) (stating that while the Bill of Rights does not reference privacy, the court has recognized that there should be no undue intrusion into the “privacies of life”); *Warden, Md. Penitentiary v. Hayden*, 387 U.S. 294, 301 (1967) (articulating the Fourth Amendment’s intent to “protect against invasions of ‘the sanctity of a man’s home and the privacies of life,’ from searches under indiscriminate, general authority”) (quoting *Boyd*, 116 U.S. at 630).

79. See Gregory S. Alexander, *Property as a Fundamental Constitutional Right? The German Example*, 88 CORNELL L. REV. 733, 735-36 (2003) (“Property once enjoyed an exalted status in American constitutional law[,]” but “[n]o modern Supreme Court decision has recognized a property right as fundamental for substantive due process purposes.”); see also Justin Stec, Comment, *Why the Homeless Are Denied Personhood Under the Law: Toward Contextualizing the Reasonableness Standard in Search and Seizure Jurisprudence*, 3 RUTGERS J.L. & URB. POL’Y 321, 323 (2006) (“Without a home, a person lacks that presumption of privacy and liberty in law. Without a home, a person is forced to affirmatively prove an expectation of privacy—exactly the opposite of the homeowner or occupant of legitimized privacy space.”); Jeffery Lawrence Weeden, Note, *Genetic Liberty, Genetic Property: Protecting Genetic Information*, 4 AVE MARIA L. REV. 611, 657 (2006) (“The myriad of principals now protected by privacy rights are in peril as long as they are anchored to privacy’s newly created, ill-defined, and ever-shifting principals instead of the bedrock of the time-tested rights and principles associated with property rights.”).

80. Justice Brandeis expressed this opinion in his dissenting opinion in *Olmstead v. United States*:

The progress of science in furnishing the government with means of espionage is not likely to stop with wire-tapping. Ways may some day be developed by which the Government, without removing papers from secret drawers, can reproduce them in court, and by which it will be enabled to expose to a jury the most intimate occurrences of the home. Advances in the psychic and related sciences may bring means of exploring unexpressed beliefs, thoughts and emotions. “That places the liberty of every man in the hands of every petty officer” was said by James Otis of much lesser intrusions than these. To Lord Camden a far slighter intrusion seemed “subversive of all the comforts of society.” Can it be that the Constitution affords no protection against such invasions of individual security?

277 U.S. 438, 474 (1928) (Brandeis, J., dissenting).

81. *Boyd*, 116 U.S. at 630.

This is not to suggest that privacy is necessarily unimportant, but it is noticeably absent from the litany of sacred rights protected by the Fourth Amendment.<sup>82</sup> Still, privacy has a recognized role to play in thinking about Fourth Amendment liberty and security. The language quoted by Justice Bradley makes clear that “the secret [or private] nature of those goods [seized by the government] *will be an aggravation of the trespass*, and demand more considerable damages in that respect.”<sup>83</sup> This interaction between property rights and personal privacy is, arguably, the premise behind *Boyd*’s “privacies of life” phrase, reflecting one of the “circumstances of aggravation” in an official interference with private property.<sup>84</sup> Thus, while the language may weakly suggest some privacy concern, this first functional Fourth Amendment opinion in the post-ratification era certainly grounded itself within a property rights framework.

This intimation was not lost on succeeding courts or commentators. During the period between the decision in *Boyd* and the opinion in *Katz*, there was an unbroken and unequivocal resort to property rights theories in Fourth Amendment opinions, whether they dealt with application of the Fourth Amendment to a particular case or with the availability of Fourth Amendment protections as a threshold matter.<sup>85</sup> Threaded through these cases, there is a debate about the scope of that protection,<sup>86</sup>

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82. *See id.* (listing the rights of personal security, personal liberty, and private property as the sacred rights protected by the Fourth Amendment).

83. *Id.* at 628 (emphasis added).

84. Indeed, it may be argued that privacy is essentially an interest abstracted from property rights. The “bundle of sticks” metaphor for thinking about the contours of property rights would suggest privacy is simply one of the sticks. While this simple statement of the derivative nature of privacy might seem to be inherently regressive because it is valuable only to property owners, property law embraces far more than ownership entitlements alone, and includes such concepts as leaseholds and tenancies. Thus, the stick in the bundle representing privacy would not be restricted to solely property *owners*, and can be seen as a broad societal interest which nevertheless may owe its existence to the right to own and control property.

85. *See generally* *Griswold v. State of Conn.*, 381 U.S. 479 (1965) (including, within the right to privacy, the right of personal security, personal liberty, and private property); *Rios v. United States*, 364 U.S. 253 (1960) (remanding a lower court decision for a determination of whether officers satisfied the Fourth Amendment requirements for seizing the defendant’s property); *Jones v. United States*, 362 U.S. 257 (1960), *overruled on other grounds*, *United States v. Salvucci*, 448 U.S. 83 (1980) (asserting that restrictions on searches and seizures were intended to protect against state invasion of “privacy and the security of property”); *Silverthorne Lumber Co. v. United States*, 251 U.S. 385 (1920) (reversing a district court decision to allow the government to use copies of documents taken in violation of the Fourth Amendment as evidence because the Constitution protected the defendants’ physical possession of the items and forbade the government from using any advantage gained by violating the right to possess the items).

86. *Compare* *Lopez v. United States*, 373 U.S. 427 (1963) (holding that use of electronic device to enable government agents to overhear conversation that would have been beyond the

and the line drawn between the individual and the state periodically shifted.<sup>87</sup> Yet, in each of these cases, seminal and mundane, the questions of what and how the Fourth Amendment protects were answered by reference to the contours of the claimant's right to own, control, and direct disposition of property.<sup>88</sup>

### B. *The Katz Revolution: Was Privacy Really the Point?*

This is the legacy, in terms of judicial decision, that the *Katz* Court inherited, and the backdrop against which it would cast its soon-to-be announced privacy regime. In fact, the *Katz* Court was explicitly aware that the Fourth Amendment had been construed with an emphasis on property rights,<sup>89</sup> and that was the strict approach the Court sought to avoid.<sup>90</sup> The *Katz* Court, therefore, famously began its analysis with the

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reach of the human ear does not violate rights under the Fourth Amendment when the electronic device has not been planted by an unlawful physical invasion of a constitutionally protected area), *with* *McPhaul v. United States*, 364 U.S. 372 (1960) (analyzing the nature, extent, character, and objects of the permissible scope of material that could be reasonably sought when a congressional subcommittee made an inquiry into whether there had been Communist activity in vital defense area), *and* *Ker v. California*, 374 U.S. 23, 33 (1963) (stating that the Fourth Amendment “is to be liberally construed and all owe the duty of vigilance for its effective enforcement lest there shall be impairment of the rights for the protection of which it was adopted”) (quoting *Go-Bart Importing Co. v. United States*, 282 U.S. 344, 357 (1931)).

87. *See generally* *Lanza v. New York*, 370 U.S. 139, 142 (1962) (holding that the Fourteenth Amendment extends the Fourth Amendment's protection to conduct of officials of any state); *Frank v. Maryland*, 359 U.S. 360, 365-66 (1959) (stating that “[w]hile these concerns for individual rights [to be secure from searches for evidence to be used in criminal prosecutions or for forfeitures] were the historic impulses behind the Fourth Amendment and its analogues in state constitutions, the application of the Fourth Amendment and the extent to which the essential right of privacy is protected by the Due Process Clause of the Fourteenth Amendment are . . . not restricted within these historic bounds”); *Breithaupt v. Abram*, 352 U.S. 432 (1957) (holding that the generative principles of the Bill of Rights of the Federal Constitution do not, through the Due Process Clause of the Fourteenth Amendment, extend the protections of the Fourth and Fifth Amendments to a criminal prosecution in state court).

88. For example, in *Olmstead v. United States*, the Court held that the absence of physical penetration foreclosed further Fourth Amendment inquiry. 277 U.S. at 466. Similarly, in *Goldman v. United States* the Court concluded that the Fourth Amendment was not violated when the defendant's conversation was overheard from another room. 316 U.S. 129, 133 (1942). Finally, in *Silverman v. United States* the Court adhered to a strict application of trespass and affirmed *Goldman*, holding that a listening device did trespass because it made contact with a heating duct serving the defendant's house. 365 U.S. 505, 510-11 (1961).

89. *See* *Katz v. United States*, 389 U.S. 347, 353 (1967) (“[O]nce it is recognized that the Fourth Amendment protects people—and not simply ‘areas’—against unreasonable searches and seizures, it becomes clear that the reach of that Amendment cannot turn upon the presence or absence of a physical intrusion into any given enclosure.”).

90. *See id.* (rejecting the narrow view that surveillance without any trespass and without the seizure of any material object fell outside the domain of the Constitution).

recognition that “the Fourth Amendment protects people, not places.”<sup>91</sup> This protected core does not embrace “[w]hat a person knowingly exposes to the public,”<sup>92</sup> but it does shroud “what he seeks to preserve as private, even in an area accessible to the public.”<sup>93</sup>

This focus on the person and the scope of privacy represented a shift away from the traditional approach. Both parties in *Katz* argued the case by asking whether a seizure requires a physical invasion and whether a phone booth was a “constitutionally protected” space,<sup>94</sup> but only because this was the framework established by precedent at that time.<sup>95</sup> With the succinct comment regarding the beneficiary of Fourth Amendment protections (“people, not places”), Justice Stewart’s opinion deftly disposed of the debate over constitutionally protected spaces.<sup>96</sup>

Resolving the debate over the government’s physical invasion argument required two subsidiary steps. First, the Court had to contend with the line of cases (building on *Boyd*) that limited Fourth Amendment application to those situations expressly involving common law trespass or other physical transgression of a recognizable boundary.<sup>97</sup> “It is true that the absence of such penetration [in these cases] was . . . thought to foreclose further Fourth Amendment inquiry.”<sup>98</sup> “But [t]he premise that property interests control the right of the Government to search and seize has been discredited.”<sup>99</sup> To the extent that conflicting cases remained on the books, *Katz* declared that “the ‘trespass’ doctrine there enunciated can no longer be regarded as controlling.”<sup>100</sup>

Second, the Court needed to deal with the conventional position that, given the nature of the Fourth Amendment’s phrasing, it only

91. *Id.* at 351.

92. *Id.*

93. *Id.*

94. *See id.* (“[T]he parties have attached great significance to the characterization of the telephone booth from which the petitioner placed his calls. The petitioner has strenuously argued that the booth was a ‘constitutionally protected area.’ The Government has maintained with equal vigor that it was not.”).

95. *Id.* at 351, 351 n.9 (acknowledging that the Court had previously described the problem in terms of “constitutionally protected areas,” but stating that by focusing on “whether or not a given ‘area’ . . . [was] ‘constitutionally protected,’ . . . [the parties were] deflect[ing] attention from the problem presented by this case”).

96. *See id.* at 351 (declaring that the Fourth Amendment protects people as well as areas).

97. *See id.* at 352 (citing *Olmstead v. United States*, 277 U.S. 438, 464, 466 (1928)) (acknowledging that past Court decisions required a physical penetration to establish a Fourth Amendment violation).

98. *Id.*

99. *Id.* at 353 (quoting *Warden v. Hayden*, 387 U.S. 284, 304 (1967)).

100. *Id.*

guarded against seizure of tangible things.<sup>101</sup> However, the Court had already “departed from the narrow view on which that decision rested. Indeed, [it] expressly held that the Fourth Amendment governs not only the seizure of tangible items, but extends as well to the recording of oral statements . . . .”<sup>102</sup> The substantive innovation of *Katz* was the recognition that the collapse of the tangible/intangible object distinction further eroded the legitimacy of the Fourth Amendment’s historical trespass doctrine.<sup>103</sup> This erosion of trespass severed the final link between the Fourth Amendment and property rights forged by *Boyd*, and led to the most famous aspect of *Katz*, articulated in Justice Harlan’s concurring opinion.<sup>104</sup> Thereafter, Fourth Amendment protections would be tested by “a twofold requirement, first that a person have exhibited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as ‘reasonable.’”<sup>105</sup>

The change announced, or at least invited, by *Katz* manifested almost right away. From the date of the *Katz* decision forward, the Supreme Court has consistently evaluated Fourth Amendment claims and resolved Fourth Amendment interpretive moments by reference to some form of the *Katz* expectation of privacy standard.<sup>106</sup> It is now hornbook boilerplate to say that the key issue under the Fourth Amendment is “what expectations of privacy are constitutionally ‘justifiable.’”<sup>107</sup> From courts to legislators to scholars, the general and

101. *Id.* at 353 (asserting that the Court previously departed from the former view that the Fourth Amendment only guarded against seizures of tangible items).

102. *Id.*

103. *Id.* (rejecting the Government’s contention that the Fourth Amendment should not apply to the surveillance of *Katz* due to the lack of physical penetration of the phone booth because the “trespass” doctrine was too eroded to be controlling).

104. *See id.* at 361 (Harlan, J., concurring) (stating that the Fourth Amendment protects places where a person has shown a subjective expectation of privacy and that society believes the expectation is reasonable).

105. *Id.*

106. *See generally* *Minnesota v. Carter*, 525 U.S. 83, 91 (1998) (holding that defendants, who were in another person’s apartment for a short period of time solely for the purpose of packaging cocaine, had no legitimate expectation of privacy in the apartment); *California v. Ciraolo*, 476 U.S. 207, 213-14 (1986) (holding that warrantless aerial observation of fenced-in backyard within the curtilage of home was not unreasonable under the Fourth Amendment because the yard was observable to any person traveling by air); *Smith v. Maryland*, 442 U.S. 735, 745-46 (1979) (holding that installation and use of a pen register by a telephone company does not constitute a “search” because the content of the communication was not obtained and one could not have a reasonable expectation that the phone number dialed would remain private).

107. *See, e.g.* *United States v. White*, 401 U.S. 745, 752 (1971) (declaring that undercover surveillance employing remote electronic surveillance did not implicate a reasonable expectation of privacy, and thus was not a search within the meaning of the Fourth Amendment).

largely unchallenged consensus is that privacy is paramount to Fourth Amendment freedom.

Such unreflective or uncritical invocations of privacy, or of any socio-legal construct, make me nervous. This is particularly so when a constitutional norm operates to restrict rather than augment liberty,<sup>108</sup> and where deployment of the norm in analytical situations is destructive of the social dynamics nominally elevated to normative significance.<sup>109</sup> In the pages that follow, I argue that this is true of privacy: it has been used to justify increasingly severe intrusions upon personal freedom, and it has produced a jurisprudence that is hostile to personal privacy, intimacy, and confidentiality. Far from proving that now, my purpose here is only to suggest several intuitions or motivations for exploring whether, notwithstanding what *Katz* said, privacy really is or should be the point of the Fourth Amendment.

### C. *Post-Katz Interpretive Options*

There is ample room, both within the *Katz* opinion and within the larger doctrinal discourse, to argue that *Katz* does not stand for the proposition that the Fourth Amendment protects *only* reasonable expectations of privacy and *cannot* be understood by reference to property rights models. First, the *Katz* opinion itself is far from absolute

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108. See John W. Whitehead & Steven H. Aden, *Forfeiting "Enduring Freedom" for "Homeland Security": Constitutional Analysis of the USA Patriot Act and the Justice Department's Anti-Terrorism Initiatives*, 51 AM. U. L. REV. 1081, 1108 (2002) (discussing how, despite the heightened protection under *Katz*, wiretaps to record private conversations are "virtually never denied"); see also Scott E. Sundby, *"Everyman"'s Fourth Amendment: Privacy or Mutual Trust Between Government and Citizen?*, 94 COLUM. L. REV. 1751, 1757 (1994) (describing privacy as the "counterweight" that is "placed on the other side of the scale against the government's interest in deciding whether a search was 'reasonable,'" which opens the door "for a variety of government intrusions that lacked individualized probable cause under traditional Warrant Clause analysis but could now be approved if the Court found that the government's need made the intrusion on privacy 'reasonable'").

109. See Patrick Haines, *Embracing the DNA Fingerprint Act*, 5 J. TELECOMM. & HIGH TECH. L. 629, 649 (2007) ("Even if society does recognize a reasonable expectation of privacy in an arrestee's DNA fingerprint under *Katz*, a Fourth Amendment balancing test that weighs the government's legitimate and narrowly tailored interest in obtaining DNA fingerprints against the arrestee's diminished privacy interest should favor the government."); Mark G. Milone, *Biometric Surveillance: Searching For Identity*, 57 BUS. LAW. 497, 507-08 (2001) (arguing that "as sophisticated technologies with the ability to secretly invade privacy become widely utilized Constitutional privacy protection diminishes"); Christopher Slobogin, *The Liberal Assault on the Fourth Amendment*, 4 OHIO ST. J. CRIM. L. 603, 605 (2007) (arguing how *Katz*, once hailed as a major enhancement of constitutional protection against government intrusion, has become the stepping stone to many of the privacy-diminishing holdings of the Court).

in its emphasis on the former to the exclusion of the latter.<sup>110</sup> In fact, at the beginning of the opinion, the Court cautions against using the Fourth Amendment as a “general constitutional ‘right to privacy.’”<sup>111</sup> The Fourth Amendment “protects individual privacy against certain kinds of governmental intrusion, but its protections go further, *and often have nothing to do with privacy at all.*”<sup>112</sup> It is interesting to note that, when the Court refers to these other Fourth Amendment interests having nothing to do with privacy, the first interest cited is a right to property.<sup>113</sup>

*Katz* may also be seen as building on an idea of privacy earlier set forth in *Warden v. Hayden*,<sup>114</sup> and *Katz* relies on *Warden* for the premise that privacy, and not property, is the proper measure of the Fourth Amendment.<sup>115</sup> *Warden*, in turn, relies extensively on Justice Bradley’s opinion in *Boyd*, but only insofar as Justice Bradley discussed the “privacies of life.”<sup>116</sup> As discussed earlier, the “privacies of life” that were at issue in *Boyd* were those invested in and protected through the fundamental property rights that gave *Boyd* standing to challenge the government’s conduct.<sup>117</sup>

The consequence of this is that the *Katz* opinion does not wholly require, nor justify, the shift from a property to a privacy perspective that we attribute to it. The most salient aspects of the *Katz* Court’s analysis, and its true precedential value, are its rejection of the limitations of the

110. See *Katz v. United States*, 389 U.S. 347, 350 (1967) (asserting that the Fourth Amendment does not grant a general right to privacy and that the Fourth Amendment’s protections go beyond privacy).

111. See *id.* at 350 (“[T]he Fourth Amendment cannot be translated into a general constitutional ‘right to privacy.’”).

112. *Id.* (emphasis added).

113. See *id.* at 350 n.4 (asserting that the average person will be just as aggrieved if his property is seized openly as if it is seized “privately and by stealth” (quoting *Griswold v. State of Connecticut*, 381 U.S. 479, 509 (1965) (Black, J., dissenting))).

114. 387 U.S. 284 (1967).

115. See *Katz*, 389 U.S. at 353 (quoting *Hayden*, 387 U.S. at 304) (stating that the idea that property rights control the ability to search and seize is no longer credible).

116. As the Court stated in *Hayden*:

We have examined on many occasions the history and purposes of the [Fourth] Amendment. It was a reaction to the evils of the use of the general warrant in England and the writs of assistance in the Colonies, and was intended to protect against invasions of “the sanctity of a man’s home and the privacies of life,” from searches under indiscriminate, general authority. Protection of these interests was assured by prohibiting all “unreasonable” searches and seizures, and by requiring the use of warrants, which particularly describe “the place to be searched, and the persons or things to be seized,” thereby interposing “a magistrate between the citizen and the police.”

387 U.S. at 301 (citations omitted).

117. See *Boyd v. United States*, 116 U.S. 616, 630 (1886) (discussing the “indefeasible right of personal security, personal liberty, and private property”); see also *supra* Part I.A.

trespass doctrine and the refusal to invest any significance in the difference between tangible and intangible items.<sup>118</sup> The trespass doctrine itself is not wholly irrelevant after *Katz* because *Katz* merely held that a trespass is not *necessary* to trigger the Fourth Amendment, but it nowhere stated that it is *insufficient*.<sup>119</sup> In fact, property-related spatial considerations are logically intertwined with the *Katz* rule regarding the Fourth Amendment because “[g]enerally . . . the answer to th[e] question [whether the Fourth Amendment in fact protects a person] requires reference to a ‘place.’”<sup>120</sup>

With these considerations in mind, it becomes more difficult to follow *Katz* and proponents of the case’s unidimensionality down the primrose path. A very real possibility exists, to this day, that *Katz* has been misused as authority to divorce property notions from the Fourth Amendment’s doctrinal structure, and that property retains this now apocryphal significance. Yet this is no more than a possibility, and perhaps no more conclusive than the framework it seeks to displace, but I do think this interpretation of *Katz* is far more defensible than reducing it to a simple privacy-over-property binary. What seems inescapable, however, is that if *Katz* has been correctly interpreted and applied over the past forty years, continued reliance on that conventional interpretation is, and perhaps always was, manifest error when considered from a normative rather than instrumentalist perspective.

### III. THE PROBLEM WITH PRIVACY

What is the problem with privacy? If *Katz* did indeed transform the Fourth Amendment into a constitutionalized right to demand respect for certain expectations of privacy, what is the big deal?

It is certainly true that Fourth Amendment privacy considerations, in some instances, have been effective in providing the protections that meet our constitutional and social expectations.<sup>121</sup> A prime example of

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118. *Katz*, 389 U.S. at 353 (adopting the previous departure from the idea that the Fourth Amendment only covered the seizure of tangible property).

119. See *generally id.* (asserting that the Fourth Amendment extends beyond the trespass on tangible goods, but not stating that the Fourth Amendment excludes trespass on tangible goods).

120. *Id.* at 361 (Harlan, J., concurring).

121. See Mary Helen Wimberly, *Rethinking the Substantive Due Process Right to Privacy: Grounding Privacy in the Fourth Amendment*, 60 VAND. L. REV. 283, 299-300 (2007) (stating that “[i]n its pivotal 1965 decision, *Griswold v. Connecticut*, the Supreme Court elevated the right to privacy beyond statutory and tort law into the realm of constitutional protection”). See *generally* Omar Saleem, *The Physics of Fourth Amendment Privacy Rights*, 32 T. MARSHALL L. REV. 147 (2007). In an interesting analysis of how law and science share traits of rationality, a quest for universality, and theoretical evolution, Saleem articulates how the U.S. Supreme Court’s decision in

this is the Court's aggressive restriction on violations of the sanctity of the home.<sup>122</sup> Proceeding on the assumption that privacy interests are nowhere more compelling than in a person's residential domestic space, the Court has maintained the most rigorous version of the warrant preference, and has allowed only minimal slippage under its reasonableness alternative to the warrant clause when compared to the use of the reasonableness construct elsewhere.<sup>123</sup>

Still, the Court's Fourth Amendment privacy rationale is subject to regular attack from both sides of the ideological spectrum. For example, legitimate criticism has been leveled at the Court's Fourth Amendment jurisprudence based on its a-textual or contra-textual interpretive approach.<sup>124</sup> The Fourth Amendment, according to this argument, says nothing about privacy, and where the Fourth Amendment does speak it emphasizes aspects or repositories for personal behavior that are separate and distinct from an amorphous right to privacy.<sup>125</sup>

*Katz* and the subsequent application of the two-prong objective-subjective analysis demonstrated a positive variance from absolutism to fluidity. *Id.*

122. Given the Court's treatment, the home can be seen as one of the constitutionally created zones of exclusion described earlier. *See, e.g.,* *Kyllo v. United States*, 533 U.S. 27, 37 (2001) (citation omitted) (applying the traditional view that a miniscule invasion of the home without a warrant, even though only by an external heat detecting device, violated the Fourth Amendment because all intimate details of a home are protected from government surveillance).

123. *Compare* *Michigan v. Summers*, 452 U.S. 692, 705 (1981) (holding that "a warrant to search for contraband founded on probable cause implicitly carries with it the limited authority to detain the occupants of the premises while a proper search is conducted"), *and* *Muehler v. Mena*, 544 U.S. 93, 98-100 (2005) (concluding that officers acted reasonably by detaining occupant in handcuffs for two to three hours while a search of the home was in progress, given fact that warrant sought weapons and evidence of gang membership), *with* *Vernonia Sch. Dist. 47J v. Acton*, 515 U.S. 646, 664-65 (1995) (allowing the random warrantless drug testing of student athletes as reasonable under the Fourth Amendment because the invasion of privacy was minimal compared to the compelling government interest), *and* *Terry v. Ohio*, 392 U.S. 1, 20 (1968) (holding that a search must be "reasonably related in scope to the circumstances which justified the interference in the first place"), *and* *Camara v. Mun. Ct. of San Francisco*, 387 U.S. 523, 534 (1967) (denying the use of administrative building inspections without warrants to ensure compliance with city housing code).

124. *See, e.g.,* *Katz v. United States*, 389 U.S. 347, 373 (1967) (Black, J., dissenting) ("Since I see no way in which the words of the Fourth Amendment can be construed to apply to eavesdropping, that closes the matter for me. . . . I simply cannot in good conscience give a meaning to words which they have never before been thought to have and which they certainly do not have in common ordinary usage. I will not distort the words of the Amendment in order to 'keep the Constitution up to date' or 'to bring it into harmony with the times.'"); Maclin, *Let Sleeping Dogs Lie*, *supra* note 62, at 899 (arguing that "a textual approach to constitutional decision-making, defining the scope of a constitutional right according to the 'original intent' of the Framers provides a cloak of objectivity for the Court's rulings"); David A. Strauss, *Common Law Constitutional Interpretation*, 63 U. CHI. L. REV. 877, 878 (1996) (noting that "[a]n air of illegitimacy surrounds any alleged departure from the text or the original understandings" of the Framers' intent).

125. *See* U.S. CONST. amend. IV (guaranteeing the right to security of persons, houses, papers,

Specifically, if the drafters meant to protect privacy in the Fourth Amendment, “persons, houses, papers and effects” would not be the language logically chosen to achieve that outcome.<sup>126</sup>

From the other direction, many have faulted the privacy regime for allowing the Court to engage in wide-ranging social engineering,<sup>127</sup> and to measure objective expectations of privacy by reference to their own subjective valuations of the privacy interest asserted.<sup>128</sup> The result, it is claimed, is that the Fourth Amendment fails to protect privacy where ordinary objective people would actually expect it to intervene on their behalf.<sup>129</sup>

I mean to suggest that both of these broad critiques are well-placed and well-deserved. Part I of this Article traced the contours of potential bases that in some ways support the textualist rejection of privacy as the

and effects, but without any mention of general “privacy”).

126. As one commentator has characterized the situation:

The “right of the people to be secure in their persons, houses, papers, and effects” presupposes and conjures up tort law, which protects persons and property from unreasonable invasions. . . . [T]extual analysis is strongly supported by history—no framer ever argued for exclusion, nor did any early commentator, or judge—and by common sense: unlike tort law, exclusion rewards the guilty but gives absolutely zilch to the innocent citizen, whom the government seeks to hassle.

Akhil Reed Amar, *The Fourth Amendment, Boston, and the Writs of Assistance*, 30 *SUFFOLK U. L. REV.* 53, 64 (1996).

127. See *New Jersey v. T.L.O.*, 468 U.S. 1214, 1215 (1984) (Stevens, J., dissenting) (“Of late, the Court has acquired a voracious appetite for judicial activism in its Fourth Amendment jurisprudence, at least when it comes to restricting the constitutional rights of the citizen.”). See generally Jeffrey M. Shaman, *Constitutional Interpretation: Illusion and Reality*, 41 *WAYNE L. REV.* 135, 136 (1994) (“Throughout its history, constitutional interpretation, particularly as practiced by the United States Supreme Court, has been characterized by two distinct modes of thought. One, which was the predominant mode of constitutional adjudication during the Supreme Court’s first 150 years or so, can be referred to as ‘categorizing’ or ‘defining.’ The other mode of thought, developed more recently, is called ‘balancing.’ While categorization is a formal mode of thought, balancing is functional or realistic.”).

128. See Harvard Law Review Ass’n, *The Supreme Court, 1977 Term: Administrative Searches: Marshall v. Barlow’s, Inc.*, 92 *HARV. L. REV.* 210, 217 (1978) [hereinafter *The Supreme Court, 1977 Term*] (concluding that the analysis of reasonableness through a balancing test “offers no clear guidance for defining warrant exceptions, except perhaps to give greater sway to the judge’s subjective evaluation of the importance of the substantive regulation being enforced”). See generally Joseph Ricchezza, Note, *Are Undocumented Aliens “People” Persons Within the Context of the Fourth Amendment?*, 5 *GEO. IMMIGR. L.J.* 475 (1991) (suggesting that subjective application of the Fourth Amendment results in lack of protection for undocumented aliens, which in turn serves to perpetuate a certain level of callousness toward the privacy rights of citizens, and eliminates much of the deterrent effect of the exclusionary rule).

129. See *The Supreme Court, 1977 Term*, *supra* note 128, at 217 (arguing that a balancing test could allow judges to decide that the government’s enforcement needs outweigh the protective value of a warrant in almost any administrative or criminal case).

Fourth Amendment's core concern.<sup>130</sup> This present section takes on the second pragmatic argument and explores the toll privacy has taken on the level of liberty we might seek to ensure through the Constitution and its Fourth Amendment. This section also explores the havoc that privacy has wrought on the system of law responsible for making the Constitution and the Fourth Amendment meaningful. First, this exploration will look again at cognitive freedom and the concerns raised by CCTs, and suggest that a Fourth Amendment that does not keep the government out of your head is unworthy of our allegiance and should be put out to pasture posthaste. This exploration will also look at the more general critiques of the privacy model that center on the model's inability to adapt to new law enforcement techniques, and the limited utility of an objective expectations analysis in the face of such change. Finally, this part will describe the role privacy has played in producing analytically and intellectually suspect Supreme Court precedent, and the corrosive effect privacy has had on the coherency of the law of search and seizure. The conclusion to be taken from these three strands of discussion is that privacy has thwarted the great potential of the Fourth Amendment to keep "the people" free from government overreaching. Privacy, as a normative commitment for the Fourth Amendment, is dead; and if it is not dead, it is time for us to kill it to end our collective suffering.

#### A. *Lapse in Cognitive Freedom*

In a prelude to this present undertaking, I identified a class of innovative technologies that allow operators access to information residing and activities that occur solely within the brain of the examined subject (or target) to whom the technology is applied.<sup>131</sup> Because they give broad substantive access to the contents of the cognitive environment, I call these cognitive camera technologies.<sup>132</sup> The specific scientific bases of the myriad approaches vary, but they generally rely on medical diagnostic techniques, like magnetic resonance imaging (MRI), electroencephalography (EEG), near-infrared (NIR) and infrared (IR) light detection, and ocular thermography, which measure electrical

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130. See *supra* Part I.A-B (describing the original pre-*Katz* focus on property rights as the impetus for the Fourth Amendment).

131. Halliburton, *supra* note 3, at 310 (identifying a number of technologies, such as EEG monitoring and fMRI that provide the ability to access "cognitive contents" for information-gathering techniques such as Brain Fingerprinting).

132. See *id.* (referring to the technologies that allow access to "cognitive content" in a group as "Cognitive Camera Technologies" or "CCTs").

brainwave activity, blood flow concentrations, and vascular changes, or some combination of the three.<sup>133</sup> This information is increasingly susceptible of correlation and association with specific known behaviors, cognitive and emotional states, information exposure histories and, now, even to moral character and future decision-making probabilities.<sup>134</sup>

A good representative of the basic CCT is the proprietary assessment method called Brain Fingerprinting.<sup>135</sup> The Brain Fingerprinting technique involves simultaneous use of EEG and MRI to generate data that maps changes in the subject brain's activity during display of deliberately selected slides, which are chosen for their relevance (or lack thereof) to the proposition being tested.<sup>136</sup> For example, if investigators want to know if a suspect was at a crime scene at a particular time, they can show that suspect an image of the crime scene and determine, within approximately 300 milliseconds, whether that scene or image is new or known to that individual.<sup>137</sup> The value of Brain Fingerprinting data is augmented by the fact that clinical studies have depicted what a lying brain and a truthful brain each look like, and they simply do not look the same.<sup>138</sup> Brain Fingerprinting thus has two important functionalities: first, it is a twenty-first century update on the old and unreliable polygraph;<sup>139</sup> and second, it is a mind-probing device

133. *See id.* (listing a variety of technologies that “provide the power to peer behind the veil that keeps our thoughts . . . confidential” and therefore qualify as CCTs).

134. *See* Sara Solovitch, *Mind Reader*, LEGAL AFF., Nov.-Dec. 2004, at 66 (describing the potential of Brain Fingerprinting to assist in the investigation of crimes, free the innocent, combat terrorism, identify fraud, and diagnose brain disorders such as Alzheimer's disease).

135. Halliburton, *supra* note 3, at 320-23 (outlining the ability of Brain Fingerprinting to determine whether a person knows specific information regardless of voluntary action or consent by the subject).

136. *See generally id.* (describing the process of Brain Fingerprinting and the data it produces). Sara Solovitch describes brain fingerprinting as follows:

A headband of electrodes is placed on a subject, who watches words or pictures flash across a computer screen. Some of the images are meant to stimulate memories, which cause the brain to fire off an electrical response 300 milliseconds after the stimulus . . . .

The stimuli come in three categories: “target” stimuli (details of an activity that would be known to the subject), irrelevant stimuli (which would not be expected to elicit a response), and “probe” stimuli (phrases or pictures supposedly known only to a select few, like the perpetrator and investigators of a crime). If a suspect exhibits a P300 response to a probe stimulus, he is presumed guilty. If not, he is presumed innocent.

Solovitch, *supra* note 134.

137. *Id.* (recounting the process of Brain Fingerprinting, which includes the possibility of showing a criminal suspect a “probe” image and recording the subject's brain response 300 milliseconds after the image is shown).

138. *See id.* (referencing the work of two scientists that suggests that certain parts of the brain show increased activity when a subject is lying).

139. *See, e.g.,* United States v. Scheffer, 523 U.S. 303, 312 (1998) (upholding an evidentiary

that can, under proper conditions, “read” your thoughts, whether you like it or not.<sup>140</sup>

This presents a problem. Non-consensual cognitive surveillance is simply incompatible with our, or perhaps with any, western democracy that shares in the Cartesian philosophical heritage<sup>141</sup> or adopts Lockean natural law-based conceptions of individual autonomy.<sup>142</sup> Cognitive surveillance presents a potentially far-reaching threat to our ability to compose a unique social self,<sup>143</sup> to our prospects for religious or spiritual development,<sup>144</sup> and may detract from the effectiveness of civic institutions by disempowering the rational political choice on which democratic political theory relies.<sup>145</sup>

CCTs are antagonistic to these three areas of social inquiry because each centrally relies on notions of cognitive freedom—the liberty to think and imagine what one will, the absolute solitude of the mind, and the right to be left alone and unmolested in that literal and figurative space. Post-Cartesian philosophy, the heart of the established western

rule barring polygraph evidence from military trials because inherent doubts and uncertainties regarding the accuracy of every polygraph test and administrator’s interpretations render polygraph evidence unreliable).

140. See Solovitch, *supra* note 134 (describing the ability of Brain Fingerprinting to determine whether a suspect has committed a crime based on the nearly instantaneous and involuntary response of the subject’s brain to stimuli).

141. See generally René Descartes, *Meditations on First Philosophy*, in 1 THE PHILOSOPHICAL WORKS OF DESCARTES 131-200 (Elizabeth S. Haldane & G.R.T. Ross trans., Cambridge Univ. Press 1968) (1641).

142. “Another classical view of the person makes the essential attributes self-consciousness and memory. Locke defines a person as ‘a thinking intelligent being, that has reason and reflection, and can consider itself as itself, the same thinking thing in different times and places.’ For Locke, memory signifies this continuous self-consciousness. Locke’s theory still holds great appeal for those who puzzle over the mysteries of personal identity.” Radin, *supra* note 50, at 963 (citing JOHN LOCKE, AN ESSAY CONCERNING HUMAN UNDERSTANDING 280-81 (John W. Yolton ed., Dent 1965) (1690)). See also *id.* at 963 n.15-16 (citing Anthony Flew, *Locke and the Problem of Personal Identity*, in PHILOSOPHICAL ESSAYS 61-80 (John Shosky ed., Rowman & Littlefield 1998) (1951) (critiquing Locke’s views on personhood); David Wiggins, *Locke, Butler and the Stream of Consciousness: And Men as a Natural Kind*, in THE IDENTITIES OF PERSONS 139, 149 (A. Rorty ed. 1976) (augmenting Locke’s theory of the person and the construction of personal identity)).

143. See Halliburton, *supra* note 3, at 313 (declaring that the Constitution creates a number of zones of exclusion for areas that are essential to our fundamental human nature and that the non-consensual use of CCT technologies breaches these protected areas); *id.* at 27-28 (arguing that the idea of an individual person in society keys upon the notion that there exists in each individual a unique “inner existence” that is unavailable to anyone outside of the individual).

144. See *id.* at 336-38 (asserting that free and individual thought is central to spiritual existence and that CCTs intrude on the role of religion in personal and communal life).

145. See *id.* at 338-40 (arguing that thought free from coercion on public policy issues is essential for democratic institutions and that CCTs could distort the political process because thought monitoring naturally curtails free thought and allows the enforcement of political orthodoxy).

canon,<sup>146</sup> identifies the process of thinking as constitutive of being, and holds that the process of intellectual inquiry and discernment is what substantiates our existence.<sup>147</sup> The fact that we have our own thoughts, which are unique to us and therefore not attributable to others, assures us that we “are.”<sup>148</sup> Related to this, social or behavioral psychologists may debate the methods individuals use to create and perpetuate a subjective identity, but all agree that humanity requires an ability to distinguish the “I” recognized by an individual as herself from the collective “they” who surround her in her social context.<sup>149</sup> Indeed, an unthinking brain is dehumanized—hence the term vegetable<sup>150</sup>—and an unindividuated brain is considered pathological, often derided in terms of mental illness, disease, or defect.<sup>151</sup>

So too do considerations of religion and spirituality implicate our right to cognitive freedom and mental solitude. At the heart of almost

146. See generally DESMOND CLARKE, *DESCARTES: A BIOGRAPHY* (2006) (discussing Descartes’s range of interests in theology, philosophy, and the sciences, and tracing his intellectual development throughout his life); STEPHEN GAUKROGER, *DESCARTES: AN INTELLECTUAL BIOGRAPHY* (1995) (outlining Descartes’s many fundamental insights into the nature of knowledge and the mind, which have been the basis for study and debate in the centuries since his death).

147. See THE CAMBRIDGE COMPANION TO DESCARTES 141, 236 (John Cottingham ed., 1992) (analyzing Descartes’s claim to certainty about his thought and existence); Frank B. Dilley, *Taking Consciousness Seriously: A Defense of Cartesian Dualism*, 55 INT’L J. PHIL. RELIGION 135, 135-53 (2004) (defending Cartesian dualism as it has been modified over time, claiming that a substance view of the self is required if we are to take consciousness as we actually experience it).

148. See Halliburton, *supra* note 3, at 313 (arguing that there is a broad social consensus on the right to a cognitive zone of exclusion, which the non-consensual use of CCTs intrudes upon by invading human thought, directly affecting human nature); *id.* at 333; see also RENÉ DESCARTES, *DISCOURSE ON THE METHOD AND MEDIATIONS ON FIRST PHILOSOPHY* 21 (David Weissman ed., Yale Univ. Press 1996); MORRIS ROSENBERG, *CONCEIVING THE SELF* 5-51 (1986).

149. See Halliburton, *supra* note 3, at 332-35 (discussing the different theories of identity, each providing an individual identity relative to the external world); see also Michael S. Gazzaniga, *The Split Brain Revisited*, 279 SCI. AM. 50, (1998) (examining cases of patients whose separated cerebral hemispheres act as two semi-independent selves); Brent W. Roberts & Eileen M. Donahue, *One Personality, Multiple Selves: Integrating Personality and Social Roles*, 62 J. PERSONALITY 199, 200-202 (1994) (associating behavior with role-specific conceptions of how to act formed over time through social context). See generally H. GARDNER, *MULTIPLE INTELLIGENCES: THE THEORY IN PRACTICE* 8-9 (Basic Books 1993) (discussing evidence for the existence of seven semi-independent intelligences, such as logical-mathematical, linguistic, spatial, etc., which can be found in specific regions of the brain).

150. MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 1304 (10th ed. 1996).

151. See generally ALLAN V. HORWITZ, *CREATING MENTAL ILLNESS* 5-16 (2002) (arguing that our current understanding of mental illness as a disease actually fits only a relatively small number of problematic psychological conditions and that most conditions currently considered mental illness are merely “cultural constructions,” “normal reactions to stressful social circumstances,” or simply “forms of deviant behavior”); Peggy A. Thoits, *On Merging Identity Theory and Stress Research*, 54 SOC. PSYCHOL. Q. 101, 102-12 (1991) (applying theoretical work on social identity to an individual’s increased vulnerability to physical or psychological disorders).

every religious tradition is the dynamic of faith, a willingness to believe in divinity and grace in the absence of factual proof.<sup>152</sup> Mental solitude is essential to the development of faith because it provides a basis or explanation for the need for the proverbial leap; we must have faith in what we experience internally because we could never prove it to the external world.<sup>153</sup> However, faith, whatever its transcendent connection to the divine, may manifest in the material world as nothing more than a particular cognitive state.<sup>154</sup> If people are not truly at liberty to think as they will, to let the mind wander even, they may be discouraged or prevented from thinking in those ways or generating those patterns of consciousness that comprise faith.<sup>155</sup> In a related way, the revelatory aspect of prophet-based or messianic religions<sup>156</sup> also relies on the construction of the mind as free and impenetrable—if it did not, then prophets would not need to convince their followers of the validity of their visions. Moreover, religious practice in many traditions entails prayer<sup>157</sup> or meditation,<sup>158</sup> and the intimacy of this perceived

152. See Halliburton, *supra* note 3, at 336-37 (discussing religious mythology and its regular use of transcendent revelation as a means of conveying divine knowledge to worldly followers). See Ina Praetorius, *Speaking of God as a Woman Since the Enlightenment*, 15 FEMINIST THEOLOGY 84, 88-90 (2006).

153. See Seth Holtzman, *Science and Religion: The Categorical Conflict*, 54 INT'L J. PHIL. RELIGION 77, 79-87 (2003) (discussing the role of empirical facts and internal beliefs in the conflict between science and religion); George Johnson, *Ideas & Trends: True Believers; Science and Religion Cross Their Line in the Sand*, N.Y. TIMES, July 12, 1998, § 4 at 41.

154. See generally MATTHEW ALPER, THE "GOD" PART OF THE BRAIN: A SCIENTIFIC INTERPRETATION OF HUMAN SPIRITUALITY AND GOD 227-28 (Sourcebooks 2006) (described by the publisher as presenting a "systematic, scientific argument that shows why belief in God is an inherent evolutionary mechanism that enables us to cope with our greatest, universal terror—death").

155. See Halliburton, *supra* note 3, at 333-34 (describing a person's behavior and patterns as important factors philosophers use to illustrate the nature of the self). See Linda Martin Alcoff, *Habits of Hostility on Seeing Race*, 44 PHIL. TODAY 30, 30-40 (2000) (addressing the mind in terms of perceiving race and physical features); Kim-chong Chong, *Zhuangzi and the Nature of Metaphor*, 56 PHIL. E. & W. 370, 370-91 (2006); Deborah Cook, *Nature Becoming Conscious of Itself: Adorno on Self-Reflection*, 50 PHIL. TODAY 296, 296-306 (2006); James S. Hans, *Alexander Nehamas and the Art of Living*, 44 PHIL. TODAY 190, 190-205 (2000).

156. A definition of "Messiah" in the Oxford Dictionary of World Religions states:

Although at an early date the followers of Jesus were marked out as those who believed that Jesus was the promised messiah/christ . . . Jesus appears to have resisted any attempt to interpret what he was doing and saying in his God-derived way through that category—to such an extent that it gave rise to the theory of the messianic secret . . . . Some aspects of his life (e.g. the entry into Jerusalem) were clearly open to the interpretation that he was acting as the descendant of David, but it was only after his death and resurrection that the appropriateness of interpreting him as messiah was developed . . . .

THE OXFORD DICTIONARY OF WORLD RELIGIONS 637 (John Bowker ed., 1997).

157. For example, in Christianity, prayer is an expression of wonder and a cry for help because

communication with the divine is essential to the value it presents to the individual.<sup>159</sup> At every turn, the process and dynamics of spirituality or religiosity have their basis in the premises of cognitive liberty and conditions of mental solitude.

Our cherished democratic political system makes precisely parallel assumptions in formulating the concept of the rational political actor,<sup>160</sup> and in relying on the aggregate expressions of informed political judgment to produce its ideal of true popular governance.<sup>161</sup> Cognitive freedom is a necessary aspect of the rational actor by definition; without the freedom to follow rational decision-making strategies, the actor

it is an “acknowledgement of God as the source of all goodness and therefore the One who can meet human need and longing.” *Id.* at 763. However, in Islam, prayer is much more formal or detached in style and is done five times a day in remembrance of God. *Id.*

158. *Id.* at 631. Meditation is defined as:

A form of mental prayer. In Christianity, the term has been used since 16th cent., in distinction from contemplation, as a discursive activity, which involves thinking about passages from scripture and mysteries of the faith with a view to deeper understanding and a loving response. Many methods of meditation were taught, especially by the Jesuits. Outside this historical context, the term meditation is used more widely, embracing contemplation; and in this wider sense, is applied to practices of many different kinds in virtually all religions.

*Id.*

159. This may be the dynamic that has come to be known as “personalism”:

[A]ppplied primarily to the philosophy of the French thinker Emmanuel Mounier (1905-50), [personalism is] a Christian version of existentialism stressing communion on the basis of shared values, with the person, as distinct from the political individual, as the locus of a “unique vocation” directed towards fellowship. Other philosophers who have made personhood a fundamental concept include the German philosopher Rudolf Hermann Lotze (1817-81), the American idealists Josiah Royce (1855-1916) and Edgar Sheffield Brightman (1884-1953), and the Scottish humanist, John Macmurray (1891-1976). Common to these thinkers is the view that the finite individual is somehow grounded in and seeks its fulfillment in an infinite spirit, or God, understood as personal, though Macmurray opposed idealism and considered “God” mainly a negative concept given positive content only in actual relations among persons.

THE OXFORD COMPANION TO PHILOSOPHY 692 (Ted Honderich ed., 2d ed. 2005).

160. See John H. Aldrich, *Rational Choice and Turnout*, 37 AM. J. POL. SCI. 246, 247 (1993) (discussing the rational choice theory and how a person’s preferences determine their political behavior); Thomas Emerson, *Toward a General Theory of the First Amendment*, 72 YALE L.J. 877, 882-84 (1963) (stating that the inherent right of all members in society to freely form their own opinions and beliefs through open discussion is an indispensable piece of a democratically organized society).

161. See Aldrich, *supra* note 160, at 247-48 (outlining the choices rational political actors will make based on their preferences for outcomes with higher individual utility). See generally D.M. ARMSTRONG, *A MATERIALIST THEORY OF THE MIND* 158 (Routledge 1993) (1968); Roger W. Sperry, *Changing Concepts of Consciousness and Free Will*, 20 PERSPECTIVES IN BIO. & MED. 9, 14-15 (1976); Roger W. Sperry, *Mind, Brain, and Humanist Values*, 22 BULLETIN ATOMIC SCIENTISTS 2-6 (1966) (proposing that subjective experience plays a very significant role in brain function).

cannot make the kind of presumptively valid and predictable decision we need from her.<sup>162</sup> Cognitive freedom is also necessary to effective public governance because that effectiveness is influenced by the expression of well informed social and political conscience,<sup>163</sup> and conscience itself presupposes a right to defy orthodoxy in belief.<sup>164</sup> It occurred to me that a useful metaphor for the solitary and unfettered nature of political thought is embodied in the polling station itself. The curtained black box into which we insert our physical bodies in order to cast our votes is an instantiation of the zone of exclusion sheltering our political ideas, and while we ultimately mark our votes on a ballot, our votes are cast in our heads first.

These three different contexts for tracking human social conventions and behaviors—philosophy and psychology, religion and theology, and liberal political theory—were selected for this survey because they are representative of the shared social consensus that exists on matters of cognitive freedom or liberty. The inherent solitude of the human mind is the foundation for our understanding of how we relate as individuals to the external world.<sup>165</sup> The premise that we can and should exclude all others from the sphere of our inner cognitive environment is central to the manner in which each person formulates a sense of self, and provides a framework or point of reference for navigating a given social context.<sup>166</sup> Both the institutions of religion and individual experiences of the divine proceed from the understanding that what appears before me in my inner visions is as true and authentic as any consciousness that could be shared by the wider community, and the solitary nature of revelation may be essential to the generation of faith in general. Governance of political communities requires the expression of informed judgment by independent, rational decision-makers who are free to hold whatever opinions they might.<sup>167</sup> Each aspect of thinking

162. See Aldrich, *supra* note 160, at 247-51 (defining the basic model of voting and explaining the motive and predictability of rational decision-making). See generally Halliburton, *supra* note 3.

163. See Aldrich, *supra* note 160, at 248 (explaining that there are costs of voting, including the cost of finding and processing information, as well as deciding how to vote with that information). See generally Halliburton, *supra* note 3.

164. *Id.* at 339 (“The validity of these decision-making moments depends on there being a genuine choice presented to the decision-maker, or else the rational calculation is short-circuited.”). See generally Aldrich, *supra* note 160.

165. See Halliburton, *supra* note 3, at 339-40 (summarizing three areas of our self that define us both internally and externally which CCTs could threaten: the nature of our subject self, nature of our spiritual identity, and our political beliefs).

166. *Id.*

167. Emerson, *supra* note 160, at 882-84.

about the human animal, as both a solitary and socialized creature, depends on the theoretical and actual treatment of the human mind as an absolute zone of exclusion.

The problem with privacy-based Fourth Amendment jurisprudence, at least in this regard, is that it fails to adequately police and preserve this most important zone of exclusion in a way that defies the social command that the mind be free. There are three very basic methods the existing privacy approach might offer to determine whether the government may permissibly employ CCTs or engage in cognitive surveillance.<sup>168</sup> The first and most conventional approach would be to determine whether there was probable cause for the intrusion, and either a warrant or a recognized exception to the warrant requirement.<sup>169</sup> It appears that there very often may be probable cause to believe that a cognitive examination will uncover important evidence of crime, and it is as easy to imagine a magistrate approving a warrant on that basis as it is to concoct hypothetical circumstances presenting sufficient exigency to forego a warrant. But neither of these analyses are structured to consider the impact on the individual's cognitive freedom, so the traditional approach would obscure rather than resolve the concerns raised by CCTs.

The second approach would simply ask whether the cognitive surveillance activity appears reasonable, balancing the government's need to conduct the intrusion against the depth of that intrusion upon the individual's interest in being let alone.<sup>170</sup> While this model might

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168. Halliburton, *supra* note 3, at 340-43, 350-51.

169. *See, e.g.*, Johnson v. United States, 333 U.S. 10, 15-17 (1948). With this decision, Justice Jackson gave concrete form to a previously amorphous "warrant preference," and established a standard under which all warrantless intrusions (that is, either a "search" or "seizure" as those terms of art are defined) are presumptively illegal. *Id.* There are numerous examples of the Court invalidating a law enforcement search for failure to secure a warrant. *See, e.g.*, Steagald v. United States, 451 U.S. 204, 213 (1981); Coolidge v. New Hampshire, 403 U.S. 443, 477-79 (1971); Katz v. United States, 389 U.S. 347, 357 (1967); Johnson, 333 U.S. at 13-14. The Court has also discussed the "warrant preference" in the context of doctrinal exceptions to application of the preference. *See, e.g.*, Knowles v. Iowa, 525 U.S. 113, 116 (1998) (discussing the two historical reasons for allowing a search incident to arrest: the need to disarm a suspect and the need to preserve evidence for use at trial); Minnesota v. Dickerson, 508 U.S. 366, 379 (1993) (applying the *Terry* exception to the facts and deciding that the doctrine cannot apply because the incriminating character of the contraband was not immediately clear); Arizona v. Hicks, 480 U.S. 321, 326 (1987) (holding that the plain view doctrine does not extend to the seizure of stolen stereo equipment found while executing a search for other evidence); California v. Carney, 471 U.S. 386, 394 (1985) (declining to distinguish between "worthy" and "unworthy" vehicles for purposes of the vehicle exception).

170. *E.g.*, Terry v. Ohio, 392 U.S. 1, 21 (1968); *see* Vernonia Sch. Dist. 47J v. Acton, 515 U.S. 646, 656 (1995) (upholding warrantless and suspicionless searches of high school students on the

suggest an avenue for at least considering the harm caused by CCTs, the reasonableness approach is nevertheless centered on privacy and, as detailed later in this Article, privacy as a construct is too porous or too malleable to ensure consistent treatment of, and protection from, CCTs.<sup>171</sup>

The final strand of the Fourth Amendment that might be used to measure the validity of cognitive surveillance is the “sense enhancing technology” doctrine from *Kyllo v. United States*.<sup>172</sup> According to this doctrine, we have a legitimate expectation of privacy that protects us (at least in the home) against intrusions affected by technology not generally available for public use.<sup>173</sup> This would also appear to offer some check against cognitive surveillance, for certainly the sophisticated machinery needed to engage in such surveillance is not widely available or accessible to the average member of the community.<sup>174</sup> But that is little consolation in light of the nature of CCTs and their potential. It is not difficult to imagine private, non-law enforcement incentives to use CCTs in the areas of employment, health care, and transportation,<sup>175</sup> and if CCTs become prevalent in these private contexts, then that social reality would undermine or neutralize the limitation imposed by *Kyllo*.<sup>176</sup>

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grounds that state’s interest in educational order outweighs students’ diminished interests in personal privacy and autonomy); *United States v. Montoya de Hernandez*, 473 U.S. 531, 544 (1985) (concluding that monitoring bowel movement of detained border crossers based upon agents’ suspicion of alimentary canal smuggling need only be, and was, reasonable); *United States v. Martinez-Fuerte*, 428 U.S. 543, 562 (1976) (explaining that brief interrogative stops of all motorists crossing certain border checkpoints are reasonable even without individualized suspicion because of sovereign interest in controlling entry).

171. *Supra* note 3 and accompanying text.

172. *See Kyllo v. United States*, 533 U.S. 27, 40 (2001) (holding that use of sense-enhancing technology to gather *any* information regarding interior of home that could not otherwise have been obtained without physical intrusion into constitutionally protected area constitutes a “search” within the meaning of the Fourth Amendment).

173. *Id.* at 34-35.

174. *See* Paul Root Wolpe, Kenneth R. Foster & Daniel D. Langleben, *Emerging Neurotechnologies for Lie-Detection: Promises and Perils*, AM. J. BIOETHICS, Mar.-Apr. 2005, at 39, 39-40 (acknowledging that while most brain-imaging technologies are still in the research stage, the possibility of wider public use is a concern that must be addressed).

175. “For example, private firms employing CCT technology may come to offer ‘deception detection’ to banks looking for honest employees, to schools looking to weed out potential child molesters, or to security companies seeking to identify those that might have a propensity for corruption.” Halliburton, *supra* note 3, at 330 n.9; *see* Wolpe et al., *supra* note 174, at 45-46 (discussing the current need for highly trained professionals to read the data which CCT technology produces, while analyzing the possible uses if the technology were developed enough to be used by the general public).

176. *See Kyllo*, 533 U.S. at 34 (“[W]here (as here) the technology in question is not in general public use . . . [t]his assures preservation of that degree of privacy against government that existed when the Fourth Amendment was adopted.”). Inevitably, technology will advance, and if CCT

The consequence is that, even respecting the *Kyllo* opinion, the Fourth Amendment could eventually be reconciled with warrantless, suspicionless application of CCTs without the Court ever having to decide whether the harm imposed by that cognitive intrusion has diminished. The *Kyllo* doctrine permits liberty to vary with the level of technological sophistication possessed by the larger society,<sup>177</sup> but cognitive liberty and mental solitude have meanings and values that do not similarly fluctuate.

These three strikes by the privacy-driven Fourth Amendment—representing failed efforts to capture the whole of liberty—ignore the premise offered by the surveyed fields that our thoughts are our own, and the contents of the mind are off-limits to uninvited interlopers. This premise offers a depiction of the society, of the human reality, that the law generally and the Fourth Amendment specifically must serve, for cognitive freedom is necessary to being a person and it is the rights of persons that our Bill of Rights variously guarantees.<sup>178</sup> In short, the Fourth Amendment is fatally out of step with the society it governs, if it does not respect the centrality of cognitive freedom and mental solitude in defining who we are as persons and as a nation.

Moreover, our failure to conceive of the Fourth Amendment in a way that reflects and corresponds to the centrality of cognitive liberty produces unnecessary and counterproductive tensions within the Constitution itself. In the face of the inevitable interpretive moment, when the meaning of a constitutional provision or aspect of the Bill of Rights is less clear than is the legal system's need for an answer, one of the most reliable methods for resolving the ambiguity is to do so in a way that advances or at least is in harmony with other substantive provisions of the charter.<sup>179</sup> Much like the approach of the

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technology becomes as common as cellular phones or the Internet (once used exclusively by the United States military), then *Kyllo* will no longer serve as protection.

177. See *id.* (holding that the issue turns on whether the general public has access to the technology).

178. See *Jacobson v. Massachusetts*, 197 U.S. 11, 29 (1905) (noting that there is a zone within which an individual can assert his own free will and contest the authority of the people's government).

179. Compare James J. Brudney, *Recalibrating Federal Judicial Independence*, 64 OHIO ST. L.J. 149, 175 (2003) (“[T]extualism focuses almost exclusively on the words Congress has enacted, relying on ordinary usage, dictionary definitions, canons of construction, and harmonization with similar language in other laws or in other provisions of the same statute.”), and Caleb Nelson, *What is Textualism?*, 91 VA. L. REV. 347, 352 (2005) (“[I]nterpretation should focus ‘upon what the text would reasonably be understood to mean, rather than upon what it was intended to mean.’” (quoting Antonin Scalia, *Common-Law Courts in a Civil-Law System: The Role of United States Federal Courts in Interpreting the Constitution and Laws*, in *A MATTER OF INTERPRETATION: FEDERAL*

intratextualist, what I have called organism-perpetuating constitutional consistency (OPCC) seeks to infuse any ambiguous provisions with meaning informed by a sense of the overall health of, and vital coordination between, the Constitution and the Bill of Rights.<sup>180</sup> This mode of interpretation recognizes that liberty is a complex creature, and that it can be maintained only by the operation of specialized, but mutually reinforcing constitutional provisions.<sup>181</sup> Reusing a very simple example, OPCC would encourage interpretation of the Fourth Amendment's existing privacy provisions in a way that maximizes First Amendment freedoms, or construes First Amendment protections in a way that advances Fourth Amendment-style privacy (at least so long as privacy remains the Fourth Amendment's accepted normative focus). At the very least, OPCC eschews interpretive outcomes that produce intratextual antagonism or analytical hostility between and within constitutional sections.

Within the rubric of OPCC, a Fourth Amendment founded on privacy does not fare well. Again using the porosity of privacy in the face of CCTs as a data point, and incorporating the suggestion that cognitive liberty is at the core of human identity and freedom, privacy approaches to regulating police behavior prove counterproductive or even incompatible with other well established and important constitutional freedoms. Most obviously, CCTs violate the most basic of Fifth<sup>182</sup> and Fourteenth Amendment<sup>183</sup> liberty interests, the right to

COURTS AND THE LAW 3, 129, 144 (Amy Gutmann ed., 1997)), with Vicki C. Jackson, *Holistic Interpretation: Fitzpatrick v. Bitzer and Our Bifurcated Constitution*, 53 STAN. L. REV. 1259, 1281 (2001) (defining holism as "an approach that seeks to take into account the basic structure and values of the Constitution in the interpretation of all of its provisions").

180. The OPCC approach can be summarized as follows:

Organism-perpetuating constitutional models would therefore seek to preserve and promote that vitality, and eschew the introduction of any disease or defect that is destructive to the body. Biological health tends to maximize survival, and survival is the strongest genetic incentive, so we should likewise understand the Constitution to promote action in accordance with its best health prospects and to ensure its own survival.

Organism-perpetuating models thus reject the utility if not the very validity of construing constitutional provisions as operating in tension with one another. Just as biological health is impaired when collaborative systems become antagonistic to each other, so too is the health of the Constitution impaired when coexisting coordinate legal provisions are applied in an antagonistic fashion. In concrete terms, organism-perpetuating models prevent an interpretation of the Constitution that causes one process (i.e. provision) of the organism (i.e. the Constitution) to impair the full and optimal functioning of another.

Halliburton, *supra* note 3, at 366-67.

181. *Id.*

182. See U.S. CONST. amend. V ("No person shall be . . . deprived of life, liberty, or property, without due process of law.").

simply be left alone,<sup>184</sup> and they violate that right in the most egregious fashion, by opening up your mind, your most personal of spaces, to official scrutiny. Non-consensual use of CCTs is also destructive of the rights of conscience, belief, and expressive activity enshrined in the First Amendment<sup>185</sup> because freedom to enjoy any of those rights requires the right to think freely *a priori*.<sup>186</sup> Finally, resorting to privacy for Fourth Amendment purposes defeats the many aspects of the Constitution that guarantee the individual's right to vote<sup>187</sup> and exert her political will through the democratic process.<sup>188</sup> While these are just some of the ways in which resolving Fourth Amendment debates by reference to privacy is inefficient, they are sufficient for anyone concerned with the Constitution's (and the nation's) long-term vitality to reconsider this prevailing approach. Applying the guidelines of OPCC to this scenario does two things: it provides an explicit basis for rejecting the conventional but unhealthy beliefs about the Fourth Amendment's true purpose, and it provides clues in the search for superior alternatives. In this present situation, OPCC unquestionably suggests that a new and

183. The Fourteenth Amendment states:

No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the law.

U.S. CONST. amend. XIV, § 1.

184. The Supreme Court has described this right as follows:

The protection guaranteed by the [Fourth and Fifth] Amendments is . . . broad[] in scope. The makers of our Constitution undertook to secure conditions favorable to the pursuit of happiness. They recognized the significance of man's spiritual nature, of his feelings and of his intellect. They knew that only a part of the pain, pleasure and satisfactions of life are to be found in material things. They sought to protect Americans in their beliefs, their thoughts, their emotions and their sensations. They conferred, as against the Government, the right to be let alone—the most comprehensive of rights and the right most valued by civilized men. To protect that right, every unjustifiable intrusion by the Government upon the privacy of the individual, whatever the means employed, must be deemed a violation of the Fourth Amendment.

*Olmstead v. United States*, 277 U.S. 438, 478 (1928) (Brandeis, J., dissenting).

185. See U.S. CONST. amend. I (“Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press, or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.”).

186. See Halliburton, *supra* note 3, at 310 (positing an interdisciplinary “consensus” around the proposition that cognitive confidentiality and unfettered thought are essential “in the conceptualization of an open human society”).

187. See U.S. CONST. amend. XV, § 1 (“The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State . . .”).

188. See U.S. CONST. art. IV, § 4 (“The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion . . .”).

improved Fourth Amendment norm is one that maximizes the freedoms specifically addressed by other liberty provisions of the Constitution.

It is important to comprehend the urgency of this search. Brain Fingerprinting and similar CCTs pose a threat to human freedom and cognitive liberty that is both real and severe enough to justly provoke a response from the legal academy and from the judicial system, and they present a challenge to the Fourth Amendment's ability to preserve our cognitive landscape as a zone of exclusion that it is incapable of meeting in its current form. Yet Brain Fingerprinting is already in some ways yesterday's news, and new frontiers in CCT are rapidly opening.<sup>189</sup> CCTs are being developed that go beyond mere lie detection and knowledge assessment and allow operators to predict future intentions and choice probabilities,<sup>190</sup> and to make determinations about a person's moral character and judgment,<sup>191</sup> all based on what happens inside the mind. Each of these new capacities employs cerebral monitoring technologies that can gather the relevant data without the consent or even active participation of the subject.<sup>192</sup>

As fascinating as these new devices and processes are, and as much promise as they hold for many areas of human development, their only relevance here is as heralds of the arrival of the era of cognitive surveillance.<sup>193</sup> As cognitive and diagnostic sciences continue to advance, there will be more and more ways to peer into an individual's mind, and history shows that CCTs (as with all scientific techniques)

189. See Wolpe et al., *supra* note 174, at 41 (concluding that the technology is not actually new, pointing to a report of similar studies as far back as 1988, and asserting that the technology is already being marketed for forensic, medical, advertising, and security purposes).

190. According to one news report:

In the past, scientists had been able to detect decisions about making physical movements before those movements appeared. But researchers at Berlin's Bernstein Center for Computational Neuroscience claim they have now, for the first time, identified people's decisions about how they would later do a high-level mental activity—in this case, adding versus subtracting.

Maria Cheng, *Scientists Try to Predict Intentions*, CBS NEWS ONLINE, Mar. 5, 2007, <http://www.cbsnews.com/stories/2007/03/05/ap/tech/mainD8NM008G0.shtml>.

191. *Id.*

192. See Wolpe et al., *supra* note 174, at 46 (adding that brain scans could reveal data about us, including personality traits, mental illness, sexual preferences, or predisposition to drug addiction).

193. See generally Kirstie Ball, *Elements of Surveillance: A New Framework and Future Directions*, 5 INFO. COMM'N & SOC'Y 573, 573-90 (2002); John Pienaar, *Olympics Audio Surveillance Row*, BBC NEWS ONLINE, Nov. 26, 2006, [http://news.bbc.co.uk/1/hi/uk\\_politics/6186348.stm](http://news.bbc.co.uk/1/hi/uk_politics/6186348.stm) (reporting how a new civil liberties controversy flared up over the news that police chiefs were considering using high-powered microphones to "eavesdrop"); Nick Taylor, *State Surveillance and the Right to Privacy*, 1 SURVEILLANCE & SOC'Y 66, 66-85 (2002), available at <http://www.surveillance-and-society.org/articles1/statesurv.pdf> (describing the new technological advancements that allow increased privacy intrusions).

will do so with increasing resolution and accuracy.<sup>194</sup> Brain Fingerprinting-type CCTs were enough to raise a whole host of potential harms to cognitive autonomy, and to expose a fatal flaw in the Fourth Amendment. These new and emerging species of CCT only make matters worse. They extend the temporal span of available information from what you know or what you might have done to embrace predictions of what you *may* do in the future.<sup>195</sup> These forward-looking CCTs also expand the range of culpability determinations that can be made from whether one is lying to whether one is morally inclined to be a liar in general.<sup>196</sup> With each of these expansions in the type of cognitive surveillance comes a proportional exacerbation of the toll CCTs can take on our cognitive and constitutional liberty interests. The very express point of this discussion is to sound the alarm now, while the law can still lead the way, and before CCTs become so widespread that our Constitution is forced to adapt to, rather than resist, their application.

### *B. The Critiques of Katz*

The preceding section described the deep sense of dread that I felt when I considered the implications that an era of cognitive surveillance carried, and my critique of the Fourth Amendment as a privacy-fueled failure when cognitive liberty is at stake. My point there was to suggest that cognitive liberty is essential to at least this human society, if not to all, and that the Fourth Amendment's failure to preserve that liberty produces serious and untenable consequences that are directly attributable to its privacy norm. This section incorporates several additional critiques of the Fourth Amendment's privacy fetish that do not depend so centrally on cognitive liberty, but which nonetheless add fuel to the pyre on which I hope to immolate the current Fourth Amendment.<sup>197</sup> Perhaps, in its ashes, we will see the birth of a new Fourth Amendment norm that can carry this country into and through the cognitive surveillance era. This section aims to turn up the heat.

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194. Henryk Skolimowski, *The Structure of Thinking in Technology*, 7 *TECH. & CULTURE* 301, 375 (1966) ("The growth of technology manifests itself precisely through its ability to produce more and more diversified objects with more and more interesting features, in a more and more efficient way.").

195. See Wolpe et al., *supra* note 174, at 46 (noting that the scans could locate predisposition to certain types of behavior, even if they have yet to manifest).

196. *Id.*

197. See discussion *infra* Part II.B.1 (describing the inadequacies of the protections under the Fourth Amendment).

### 1. Privacy Flaws in the Legal Definition of a “Search”

One need not probe too deeply into the academic literature to find doctrinal critiques of the Court’s privacy-based Fourth Amendment jurisprudence, but there are several important or innovative perspectives worth mentioning here. Professor Sherry Colb has laid out one strategy for addressing “the instability and poverty of Fourth Amendment doctrine”<sup>198</sup> by highlighting two aspects of the Court’s privacy framework that have “steadily eroded privacy in specific cases, and conceptually promise to eliminate it altogether.”<sup>199</sup> Recognizing that the Court’s discomfort with the privacy norm it created stems in part from the evidentiary consequences of a judicial finding that reasonable expectations of privacy have been violated by state action,<sup>200</sup> Professor Colb identifies two analytical “moves” that the Court will make in its privacy discussions that allow it to avoid suppressing evidence, but which also lead it to construe privacy unduly narrowly.<sup>201</sup>

In its first move, the Court uses the “knowing exposure” component of its privacy framework to equate risk of exposure to third parties as intentional invitation for that exposure.<sup>202</sup> In essence, the Court may be seen as using a recklessness or even negligence standard in place of a true knowledge standard when it considers the consequences of an individual’s failure (or inability) to protect against disclosure vis-à-vis that person’s reasonable expectations of privacy.<sup>203</sup> This means that individuals will be deemed to have surrendered their right to exclude others without being aware of that surrender or having such surrender as their conscious objective, and it “effectively excuses (and even justifies) what would otherwise be wrongful conduct by third parties, including the police.”<sup>204</sup>

In what is described as the second move, the Court treats limited and circumscribed exposure to specific third parties as intentional exposure to the whole world.<sup>205</sup> In this way, the Court may be seen as

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198. Sherry F. Colb, *What is a Search? Two Conceptual Flaws in Fourth Amendment Doctrine and Some Hints of a Remedy*, 55 STAN. L. REV. 119, 123 (2002).

199. *Id.* at 121.

200. *Id.*

201. *See id.* at 122 (acknowledging that both of these moves occur beneath the surface, causing the doctrine and the concept of privacy to be unstable).

202. *Id.* at 124.

203. *See id.* (contending that the behavior of an individual, if reasonably believed to be inviting others to look or listen, is, in effect, an invitation for the police to do the same).

204. *Id.* at 122.

205. As Colb explains, this practice:

[t]reats the risk of exposure through third-party wrongdoing as tantamount to an

treating Fourth Amendment privacy much the way it does confidentiality for purposes of evidentiary privileges.<sup>206</sup> Just as any exposure to third parties destroys the confidentiality underlying the attorney-client privilege,<sup>207</sup> the Court treats Fourth Amendment privacy as an all-or-nothing proposition,<sup>208</sup> the protections of which are surrendered forever and entirely even if the intentional exposure is expressly limited in scope, duration, and audience. The consequences of this analytical move, and the Court's ambivalence about privacy as a legal value, results in a failure "to recognize degrees of privacy in the Fourth Amendment context,"<sup>209</sup> and provides a ready opportunity for transgression of societal norms by government actors en route.<sup>210</sup> Before providing two possible remedies that could reduce the detrimental impact of using these two analytical moves,<sup>211</sup> Professor Colb very precisely demonstrates that the Court's approach to privacy under the Fourth Amendment is flawed at its core because privacy considerations have produced analytically and normatively suspect subsidiary doctrines.

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invitation for that exposure . . . . If a man lies down and falls into a deep sleep on a subway train, for example, he risks having his pocket picked. A pickpocket can easily swipe the sleeping man's wallet without encountering any resistance. We might even say colloquially that the sleeping man has "asked to have his pocket picked." This colloquialism does not, however, describe a legal justification for the pickpocket. We would not say, in other words, that the man on the train has willingly agreed to the taking of his wallet (as we would, for example, if he had abandoned the wallet in the street). Like taking candy from a baby, taking a wallet from a sleeping man remains a crime, no matter how easy it is to accomplish.

*Id.*

206. See 2 KENNETH S. BROWN ET AL., MCCORMICK ON EVIDENCE 150-71 (6th ed. 2006) (discussing exceptions to the hearsay rule).

207. *Id.*

208. See Colb, *supra* note 198, at 122-24 (claiming that exposure to a few people is treated as exposure to the world); see also Anthony G. Amsterdam, *Perspectives on the Fourth Amendment*, 58 MINN. L. REV. 349, 395 (1974) (referring to the Fourth Amendment as a monolith and concluding that neither the history nor text of the Amendment is of any help in construing its meaning).

209. Colb, *supra* note 198, at 122.

210. *Id.* at 122-23.

211. *Id.* at 123 (arguing that the "notion of 'knowing exposure' ought to (and does, in its definition) resemble the idea of 'consent' to a search"). Colb continues:

Recognizing a common definition for these two concepts would yield beneficial results. First, it would represent an open acknowledgement that "knowing exposure" only occurs when there has been some explicit or tacit consent to public observation, and not simply the *taking of a risk* or the *limited exposure* of what is then further disseminated. Second, the coordination of "knowing exposure" and "consent" might move the Court to reconsider its ill-advised position that one can give voluntary consent to a search without knowing that police would take "no" for an answer.

*Id.* (emphasis in original).

## 2. Privacy and the Problem of Hiddenness

Professor Daniel Yeager very persuasively argues that the problematic operation of the privacy construct in the context of criminal procedure regulations is a reflection of privacy's sense of "hiddenness."<sup>212</sup> Privacy is conceived of as a veil of secrecy that prevents the development of factual knowledge or access to information by an outside observer about what a person thinks and knows, and about what they have done or will do.<sup>213</sup> This notion of hiddenness is in tension with the jurisprudence of criminal procedure, which otherwise relies so fundamentally on levels of information or knowledge to justify police action.<sup>214</sup> What the Fourth Amendment doctrines refer to as levels of suspicion, from "hunches" to specific and articulable facts, to probable cause and even proof beyond a reasonable doubt, are simultaneously measures of an individual's success (or failure) at being hidden from the public, and also represent levels of justification recognized by the law as bases for overcoming an individual's desire to remain hidden.<sup>215</sup> The problem with privacy, then, is that its aspect of hiddenness—the ability of people to keep information and facts confidential—produces a systemic incentive to overcome that hiddenness most strongly where information is not otherwise available except from the hiding individual.<sup>216</sup> Further, when grappling with the question of what level of informational or suspicious justification is sufficient to overcome expectations of privacy, the Court is essentially deciding what level of hiddenness merits legal recognition, but does not and cannot identify empirical bases for its line-drawing exercises. Professor Yeager demonstrates that property law provided the necessary empirical basis lacking in privacy prior to *Katz*,<sup>217</sup> and that more general expressions of social values in positive law played that role for a time even after the *Katz* decision.<sup>218</sup> He then correctly concludes that the Court has since lacked any objective criteria for determining when a

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212. Daniel Yeager, *Overcoming Hiddenness: The Role of Intentions in Fourth Amendment Analysis*, 74 MISS. L.J. 553, 564-71 (2004).

213. *See id.* at 557-58 (arguing that privacy is a problem, because it provides a license to deceive, misunderstand, and make incorrect judgments).

214. *Id.*

215. *Id.* at 561-62.

216. *See id.* at 560 (noting that when someone is suspicious, others are less likely to ask them what is going on, even though that is often the best way to obtain information, and instead attempt to overcome their hiddenness through covertness or coercion).

217. *Id.* at 567-68.

218. *See id.* at 574-75 (quoting cases that hold that property law is not completely outside Fourth Amendment protection).

desire for hiddenness is a viable aspect of Fourth Amendment privacy and when such expectations must give way to superior public or law enforcement interests.<sup>219</sup> After reading Professor Yeager's article one might fairly claim that privacy's scion—hiddenness—produces an informational imbalance and uncertainty regarding other people's acts and intentions that make it impossible to distinguish “good,” justifiable privacy from “bad,” unjustifiable privacy. This allows the Court to essentially make up the rules as it goes along.<sup>220</sup>

### 3. Privacy as Vigilance or Forbearance

Professor William Heffernan joins this chorus by faulting the Court for paying nominal attention to privacy interests while giving nothing more than lip service to the mechanisms that protect those interests.<sup>221</sup> Heffernan suggests that the Court has been hypocritical in Fourth Amendment cases by feigning concern for residential and interpersonal privacy while allowing police practices wholly destructive of such privacy,<sup>222</sup> and he attributes that sort of judicial double-dealing to a flaw in the very concept of privacy the Court employs.<sup>223</sup> Modern Fourth Amendment doctrine, according to Heffernan, produces dysfunctional results that narrowly rather than broadly construe liberty or privacy interests because the Court employs “a vigilance model of privacy, one that requires people to be constantly alert to the way in which others can intrude on their lives.”<sup>224</sup> However, Heffernan points out that the Court has always used the mores shared by the lay public (rather than police or institutional actors) as a measure of the right to privacy.<sup>225</sup> The problem with privacy arises because these norms generally embraced by lay society “are grounded not in vigilance but in an expectation of forbearance on the part of others—that is, in an expectation that others will restrain their curiosity with respect to those aspects of life that are essential to defining and maintaining individual identity.”<sup>226</sup> This

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219. *Id.* at 575.

220. *See id.* at 560 (claiming that hiddenness precludes people from asking about suspicious actions, making it impossible to know whether their actions are legal or illegal).

221. *See generally* William Heffernan, *Fourth Amendment Privacy Interests*, 92 J. CRIM. L. & CRIMINOLOGY 1 (2001-02).

222. *Id.* at 3.

223. *Id.* at 5-6.

224. *Id.* at 6.

225. *Id.* at 5. This analytical reliance on public values largely explains Justice Harlan's repeated references to *objectively* reasonable expectations as the touchstone of Fourth Amendment privacy.

226. *Id.* at 6.

misguided choice of the vigilance model over the forbearance model allows the Court to reflect generally on privacy expectations by reference to public values, which are in fact shaped by an expectation that people will leave one another alone, while fixing the level of privacy protection in specific cases by reference to law enforcement institutional values, which necessarily are shaped by the obligation and desire not to leave people alone or to obviate privacy to the greatest extent possible.<sup>227</sup> This disconnect between the vigilance model and the forbearance model, and the occupational discounting of privacy by police actors which it allows, is constitutionally unacceptable.

#### 4. Privacy and New Technologies

Turning from these doctrinal and analytical inquiries to more pragmatic concerns, a legal understanding of emerging technologies other than CCTs is also showing privacy's futility in regulating the current hi-tech social context. Scholars working in this area have argued that the modern spate of technological innovation presents challenges to which privacy is ill-equipped to respond.<sup>228</sup> For example, DNA collection and use of DNA evidence in criminal prosecutions is an investigative technique unknown to either the founders or to the *Katz* Court when it was writing privacy into the Fourth Amendment for the first time.<sup>229</sup> Because this forensic technique is not going away, "[i]t is clear that if the judiciary is to maintain control over the expansion of DNA profiling, then non-intrusive DNA collection must be

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227. See *Johnson v. United States*, 333 U.S. 10, 14 (1948) (pointing out that police officers, and law enforcement more generally are engaged in the "often competitive enterprise of ferreting out crime").

228. See, e.g., Derek T. Conom, Comment, *Sense-Enhancing Technology and the Search in the Wake of Kyllo v. United States: Will Prevalence Kill Privacy?*, 41 WILLAMETTE L. REV. 749, 751 (2005) (showing that the general public use standard, though it purports to adhere to the public officer/private individual search rules the Court has used in the past, is not well-suited to handle modern issues of law and privacy such as those presented by technology like thermal imaging and image-enhancing devices); Rickey G. Glover, *A Probable Nightmare: Lifting the Fog From the Cellular Surveillance Statutory Catastrophe*, 41 VAL. U. L. REV. 1543, 1544-45 (2007) (arguing that, rather than elucidating the requisite showing required for law enforcement to obtain protected information, the resulting jurisprudence has merely confused what was an already complex area of technology law); Steven V. Treglia, *Trailing Cell Phones: Courts Grapple with Requests from Prosecutors Seeking Prospective Tracking*, N.Y. L.J., July 18, 2006, at 5 (discussing the district split, the minority position requiring a showing of specific and articulable facts, and the majority position requiring a showing of probable cause).

229. See Cynthia E. Jones, *Evidence Destroyed, Innocence Lost: The Preservation of Biological Evidence Under Innocence Protection Statutes*, 42 AM. CRIM. L. REV. 1239, 1239 (2005) (noting that DNA technology was not yet available in a 1985 murder trial; the *Katz* case was before the U.S. Supreme Court in 1967).

accommodated” by Fourth Amendment doctrine.<sup>230</sup> However, the kinds of “lasting limitations on the collection, use, and storage of DNA profiles and samples” that the Constitution should produce are not forthcoming under a privacy analysis.<sup>231</sup> This is because two subsidiary strands of Fourth Amendment analysis, the knowing exposure doctrine, and judicial assessments of the degree of physical intrusiveness entailed in a search, are structured in a way that does not contend with the complexities and sophistication of DNA collection and profiling methods.<sup>232</sup> “The Supreme Court’s current constitutional doctrines defining what constitutes a search requiring Fourth Amendment protection do not contemplate the ability to collect sensitive genetic information without any intrusion into an individual’s bodily integrity or offense to personal dignity.”<sup>233</sup>

Professor Orin Kerr, one of the foremost scholars in the law and technology area, has similarly identified “a critical gap between privacy rules the modern Fourth Amendment provides and privacy rules needed to effectively regulate government use of developing technologies.”<sup>234</sup> Professor Kerr argues that courts should tread lightly when using the Constitution to scrutinize new technologies, and should defer in favor of legislative responses.<sup>235</sup> One basis of this argument is his belief that the privacy norm in *Katz* has done little to move the Fourth Amendment beyond the limitations of its archaic property-based jurisprudence.<sup>236</sup> Another is that the salient legal challenges that new technologies pose neither implicate property rights with sufficient regularity, nor can these challenges be resolved by resort to a generalized right to privacy in the face of developing technologies.<sup>237</sup> Again, while Kerr’s thesis is that courts are not institutionally well-situated to make the necessary regulatory decisions regarding new technology, this is so at least in part because of the shortcomings of privacy as a motivating constitutional concept.<sup>238</sup>

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230. Justin A. Alfano, Note, *Look What Katz Leaves Out: Why DNA Collection Challenges the Scope of the Fourth Amendment*, 33 HOFSTRA L. REV. 1017, 1042 (2005).

231. *Id.* at 1046.

232. *Id.* at 1019.

233. *Id.* at 1046.

234. Orin S. Kerr, *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution*, 102 MICH. L. REV. 801, 807 (2004).

235. *Id.* at 805-06.

236. *Id.* at 815-16.

237. *Id.* at 809.

238. *Id.* at 806.

### 5. Norm-Level Assaults on Privacy

In addition to the pointed attacks on the doctrines that the privacy norm has produced, there have been numerous efforts (of which this Article is one) to reorient the Fourth Amendment toward, or altogether displace privacy in favor of, other socio-legal values.<sup>239</sup> Professor Morgan Cloud's 1996 article, *The Fourth Amendment During the Lochner Era: Privacy, Property and Liberty in Constitutional Theory*<sup>240</sup> attacks *Katz*'s privacy principle by suggesting that the only clear or coherent theory of the Fourth Amendment was that utilized during the "Lochner Era" (1897-1937).<sup>241</sup> Cloud seeks to replicate the rigor of that theory by proposing a fusion of three influences: (1) Fourth Amendment pragmatism, along the lines advocated by Justice Brandeis; (2) legal formalism; and (3) the warrant model.<sup>242</sup> These three jurisprudential influences would coordinate to restore the formal legal recognition of the relationship among property, privacy, and liberty, and thus would blend the primary influences driving the Fourth Amendment in its pre-*Katz* era.<sup>243</sup>

In this same vein, Professor Heffernan has argued that property and privacy go hand-in-hand, and that they can play simultaneous and mutually reinforcing roles in Fourth Amendment analysis.<sup>244</sup> Based largely on the Supreme Court's decision in *Soldal v. Cook County*,<sup>245</sup> Heffernan's understanding of the Fourth Amendment is not one which privileges privacy to the exclusion of all else, but rather one that creates two "independently actionable interests—a privacy interest that is protected in the absence of interference with a property interest (as in a wiretapping case) and a property interest that is protected in the absence of an interference with a privacy interest (as in a government-aided eviction)."<sup>246</sup>

Going beyond such hybridization models, which accept privacy as one of a matrix of complimentary legal norms, Professor Raymond Ku

239. See, e.g., Halliburton, *supra* note 3; Heffernan, *supra* note 221 (submitting alternative theories upon which Fourth Amendment privacy and personal security can be based).

240. Morgan Cloud, *The Fourth Amendment During the Lochner Era: Privacy, Property, and Liberty in Constitutional Theory*, 48 STAN. L. REV. 555 (1996).

241. *Id.* at 556.

242. *Id.* at 561.

243. *Id.*

244. Heffernan, *supra* note 221.

245. 506 U.S. 56 (1992).

246. William C. Heffernan, *Property, Privacy, and the Fourth Amendment*, 60 BROOK. L. REV. 633, 636 (1994) (emphasis added).

has argued the now radical proposition that the Fourth Amendment is about power, not about privacy.<sup>247</sup> Professor Ku contends that “the [Fourth] [A]mendment is best understood as a means of preserving the people’s authority over government—the people’s sovereign right to determine how and when the government may intrude into the lives and influence the behavior of its citizens.”<sup>248</sup> While privacy certainly may be infringed when the government disregards the Constitution, it is not a concern for privacy, but instead a “[f]ear of government power and discretion . . . [that] runs through even the most privacy-centric decision.”<sup>249</sup> “The [A]mendment affords [its] protection not by defining what is private, but by expressly limiting government’s power to conduct searches.”<sup>250</sup> The net effect of this, according to Ku, is that the law is able to assure “preservation of that degree of privacy against government that existed when the Fourth Amendment was adopted.”<sup>251</sup> Ku’s proposal is both well-reasoned and incredibly promising. It self-consciously presents a “macro level”<sup>252</sup> perspective that may be in harmony with the aspirations of the founders and the Fourth Amendment. However, this model does not sufficiently operationalize the Fourth Amendment as a tool for “micro level” decisions.

Though a good number of other valid ways of problematizing the privacy theory of the Fourth Amendment exist,<sup>253</sup> the examples presented here are representative of a rich constellation of doctrinal strategies and theoretical alternatives. These strategies and theories interact, in a sense, insofar as many of the theoretical alternatives are shaped and justified by one or more doctrinal weaknesses in the privacy rubric. The purpose of their placement here is to suggest that, even though the Court may have made up its mind, the best mode and method for Fourth Amendment interpretation may have yet to be identified.

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247. Raymond Shih Ray Ku, *The Founder’s Privacy: The Fourth Amendment and the Power of Technological Surveillance*, 86 MINN. L. REV. 1325, 1326 (2002).

248. *Id.* at 1326.

249. *Id.* at 1337.

250. *Id.* at 1338.

251. *Id.* at 1364 (quoting *Kyllo v. United States*, 533 U.S. 27, 34 (2001)).

252. *Id.* at 1361.

253. See, e.g., Morgan Cloud, *A Liberal House Divided: How the Warren Court Dismantled the Fourth Amendment*, 3 OHIO ST. J. CRIM. L. 33, 46 (2005) (discussing the civil libertarian perspective, most notably attributed to Justice Douglas, which construed the Fourth Amendment expansively to restrict government intrusions into people’s lives); Lloyd L. Weinreb, *Generalities of the Fourth Amendment*, 42 U. CHI. L. REV. 47, 49 (1974) (stating that “[t]he absence of a continuously developing rationalization of the amendment has enabled the Court to change direction, even to veer rapidly and sharply, without too obvious inconsistency; but the result is a body of doctrine that is unstable and unconvincing”).

#### IV. RESTORING FOURTH AMENDMENT VITALITY WITH AN INFUSION OF THE PROPERTY OF PERSONHOOD

Thus far, the aims of this Article have been threefold. First, it meant to frame the discussion about *Katz*'s privacy principle with an appreciation of its historical place in Fourth Amendment doctrine. Second, it sought to expose the weaknesses within that privacy-based doctrine that become apparent when the Fourth Amendment is called upon to defend certain core social and constitutional values. Third, it advanced the proposition that there are competing and perhaps superior normative perspectives that could drive Fourth Amendment interpretation and decision-making.

In fact, I now make the corollary assertion that present law in this area is badly in need of reform. Several possible kinds of approaches to reform have been briefly sketched, from calls to be more pragmatic or sensitive to other social norms in construing the privacy principle, to suggestions for augmenting privacy, or replacing it whole cloth.<sup>254</sup>

I find myself agreeing with these jabs at Fourth Amendment privacy and its subsidiary doctrines or standards, individually and collectively. Yet I do not find any one wholly satisfactory to the present challenge. What I seek is greater clarity in the modes of analysis that courts will employ in Fourth Amendment (or any) cases, and a theory of the Fourth Amendment that does the intention and spirit of the framers' justice. But I also seek a theory that is not operating purely on the level of abstraction, so that it actually has utility in the real world. My sense is that the Fourth Amendment has become far too complicated to do the job of guaranteeing the right of the people to be free in their persons, houses, papers, and effects, and that this complication is totally unnecessary. I'm sure that this is not what she had in mind, but in what might have been a grand-maternal allusion to the logic rule known as Occam's Razor,<sup>255</sup> my Grandmother has repeatedly told me that when

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254. See *supra* Parts II.B.2, II.B.4 (arguing that some of the problems with the privacy jurisprudence are its emphasis on "hiddenness" and its inability to adequately address concerns related to technological advancement).

255. [A]ttributed to the 14th century English logician and Franciscan friar William of Ockham. The principle states that the explanation of any phenomenon should make as few assumptions as possible, eliminating those that make no difference in the observable predictions of the explanatory hypothesis or theory. The principle is often expressed in Latin as the *lex parsimoniae*["entities should not be multiplied beyond necessity." [This is often paraphrased as "All other things being equal, the simplest solution is the best."].

Wikipedia, *Occam's Razor*, [http://en.wikipedia.org/wiki/Occam's\\_Razor](http://en.wikipedia.org/wiki/Occam's_Razor) (last visited Apr. 1, 2009).

things seem to be getting more complicated than necessary, they probably are, and that the best way to clearly see a way forward is to take a step back.

That is what I now seek to do with this Article: to take a step back from the obsession with (and fight over) privacy, and to think anew about the Fourth Amendment from the ground up. I propose to go back to square one, to re-center the Fourth Amendment on notions of property, and then to adapt that traditional focus to the modern era. In short, I want the Fourth Amendment to return to its roots in respect for property, and to simultaneously push the concept of property to embrace a wider range of human interests.

Here is where Professor Radin's notion of property and personhood promises such illumination.<sup>256</sup> When initially struggling with the future of CCTs, and the incursion they can make into human consciousness, I kept circling back to a problem that did not involve privacy so much as ownership, dominion, and exclusion. My instincts told me that I own my mind as much as I own my brain, and that I own my thoughts as much as the skull that houses them. A conception of property as being essential to personhood grounds that intuition in a theoretical and normative reality.

The final part of this Article lays out the relationship that may be forged between a personhood model of property and the liberty interests secured by the Fourth Amendment. The argument in favor of such a relationship begins by describing the content and contours of Radin's personhood model of property, and the personal property model of the Fourth Amendment that would result from this synthesis. The discussion then returns to the problem of CCTs in order to map the application thereto of a proposed Fourth Amendment framework that relies on the property for personhood theory as its core value. This section also identifies specific doctrinal differences that could be expected between a privacy-based and a personhood property-based Fourth Amendment, and ends with the assertion that returning to (or perhaps advancing towards) a robust property norm in Fourth Amendment criminal procedure is the most theoretically consistent and constitutionally authentic approach available.<sup>257</sup>

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256. See generally Radin, *supra* note 50 (exploring the relationship between property interests and an individual's need to control certain external resources to become a fully developed person).

257. See *infra* Part III.1.A-III.2.A.c.

### A. Radin's Property and Personhood

Professor Radin's insightful exploration of the relationship between the law of property and what she calls the "personhood perspective"<sup>258</sup> led her to the conclusion that "the personhood perspective is often implicit in the connections that courts and commentators find between property and privacy or between property and liberty."<sup>259</sup> The core "premise underlying the personhood perspective is that to achieve proper self development—to be a person—an individual needs some control over resources in the external environment."<sup>260</sup> This personhood view of property embraces the reality that "[m]ost people possess certain objects they feel are almost part of themselves,"<sup>261</sup> and that these things "are closely bound up with personhood because they are part of the way we constitute ourselves as continuing personal entities in the world."<sup>262</sup> "Personal Property"—that property which is bound up with, or necessary, to becoming a full person and cannot be readily replaced or substituted,<sup>263</sup>—is distinguishable from "fungible property"—"that [which] is held purely instrumentally" and is "perfectly replaceable with other goods of equal market value."<sup>264</sup>

Radin seeks to contrast the "so-called personality theory of property" against both traditional libertarian, autonomy-centered notions of property and communitarian, public welfare-maximization models of property.<sup>265</sup> While the personality theory of property may already play an implicit role in shaping conceptions of property,<sup>266</sup> she suggests that the personality theory can provide both a general justification of property rights and a means of their specific delineation.<sup>267</sup> Although she concedes that the former is beyond the scope of her article, she does undertake to demonstrate the latter.<sup>268</sup>

Radin's effort to provide content to her theory of property requires the ability to resolve competing property claims, and thus a method for

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258. See generally, Radin, *supra* note 50 (positing that the personality theory of property may be able to resolve disputes between two individual claimants to the same object of personal property).

259. *Id.* at 957.

260. *Id.*

261. *Id.* at 959.

262. *Id.*

263. *Id.*

264. *Id.* at 959-60.

265. *Id.* at 958.

266. *Id.*

267. *Id.*

268. *Id.* at 1008.

distinguishing “good” property interests from “bad” property interests.<sup>269</sup> She uses these moral labels self-consciously, for she means to suggest that “good” property interests are those that reflect a positive social consensus on the value of those interests, and “bad” property claims are those that are socially unacceptable, or at least those less favored.<sup>270</sup> This good versus bad dichotomy allows Radin a measure for determining which of multiple competing property claims is superior.<sup>271</sup> However, before we can comfortably use her model for decision-making in specific contexts, a theoretical perspective on both the concept of the person and the concept of property must be developed.

### 1. Radin’s Model Person

Of course, Radin must ground her personality theory of property in a definition of the person that supports the extensions she subsequently makes. Her survey of available philosophical answers to the question of personhood reveals no overarching consensus,<sup>272</sup> but she does find the prevailing approaches to fall into one of two broad categories: (1) the individualist approach and (2) the communitarian approach.<sup>273</sup> Among the individual-centered concepts of the person, at least four basic modes of construction exist.<sup>274</sup> The first concept she engages is Kant’s notion of the person as rights-holder.<sup>275</sup> The rights-holder theory presupposes the person to be “a free and rational agent whose existence is an end in itself,” and entails a focus on “universal abstract rationality.”<sup>276</sup> While this view underlies much of what we think being a “person” means, Radin points out that the Kantian view divorces the person from any idiosyncratic characteristics or “individual histories that differentiate one [person] from another.”<sup>277</sup>

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269. *Id.* at 961, 968.

270. *Id.* at 968-69.

271. *Id.* at 979.

272. *See generally id.* at 961-65 (differentiating between good and bad identification of personal property objects to determine whether such objects are deserving of legal recognition as personhood interests).

273. *Id.* at 964-65.

274. *Id.* at 962-64.

275. *Id.* at 967 (considering the individual through the prism of Kantian individual rationality); *see* John Rawls, *Kantian Constructivism in Moral Theory*, 9 J. PHIL. 515, 533-35 (1980). *See generally* IMMANUEL KANT, *FUNDAMENTAL PRINCIPLES OF THE METAPHYSICS OF MORALS* (T. Abbott trans., 1949).

276. Radin, *supra* note 50, at 962, 962 n.12 (citing IMMANUEL KANT, *FUNDAMENTAL PRINCIPLES OF THE METAPHYSICS OF MORALS* (T. Abbott trans., 1949)).

277. *Id.*

A second “classical” view of the person is the Lockean definition of “a person as ‘a thinking intelligent being, [one] that has reason and reflection, and can consider itself as itself, the same thinking thing in different times and places.’”<sup>278</sup> Thus, for Locke, individual self consciousness and subjective personal memory are the essential attributes of the person.<sup>279</sup> A third available view, which might conflict with or augment the Lockean rationale, holds an “individual’s ability to project a continuing life plan into the future [to be] as important as memory or continuing consciousness.”<sup>280</sup>

Against these dualist models, which see the person or the self as separate and distinct from the physical body, Radin contrasts what might be called the “physicalist” notion of the person typified by Wittgenstein.<sup>281</sup> In the latter’s view, the dualist approaches might describe a criterion of personhood, but they do not capture its whole essence unless the disembodied self is continuously housed in a human body.<sup>282</sup>

After dispensing with several subspecies of the individualist model of the person, Radin turns to the communitarian model of the person, which rejects the “individualistic worldview that flowered in western society with the industrial revolution.”<sup>283</sup> Communitarians find individualist models unsatisfactory because, advocates contend, “[p]ersons are embedded in language, history, and culture, which are social creations; [and that] there can be no such thing as a person without society.”<sup>284</sup>

Yet after tracing these various alternatives, Radin does not make an unconditional election between the two broad categories, nor among the specific theories that fall under each heading.<sup>285</sup> While Radin nominally chooses “the more traditional, individual-oriented theories,”<sup>286</sup> she proposes an analysis that remains sensitive “to the role of groups both as

278. *Id.* at 963 (quoting JOHN LOCKE, AN ESSAY CONCERNING HUMAN UNDERSTANDING bk. II, ch. XXVII, § 9 (A. Fraser ed., 1894) (1690)).

279. *Id.* at 963, 963 n.15 (citing Antony Flew, *Locke and the Problem of Personal Identity*, 26 PHIL. 53 (1951)).

280. *Id.* at 963; *see, e.g.*, BERNARD WILLIAMS, PERSONS, CHARACTER AND MORALITY in MORAL LUCK (1981).

281. Radin, *supra* note 50, at 963. *See generally* LUDWIG JOSEF JOHANN WITTGENSTEIN, THE PHILOSOPHICAL INVESTIGATIONS (G. Pitcher ed., 1966).

282. WILLIAMS, *supra* note 280; Radin, *supra* note 50, at 963.

283. Radin, *supra* note 50, at 965.

284. *Id.*; *see, e.g.*, J. HABERMAS, COMMUNICATION AND THE EVOLUTION OF SOCIETY 95, 100 (Thomas McCarthy trans., 1979).

285. Radin, *supra* note 50, at 965.

286. *Id.*

constituted by and as constitutive of persons.”<sup>287</sup> Thus, Radin’s model of the person may be the best of all approaches, an amalgam of all that is theoretically implied by the Kantian, Lockean, future character structure, and Wittgensteinian physicalist ideas of the person, together with the increased resolution offered by the communitarian consideration of the person in the richness of his or her social context. The unifying force that she applies is the thesis that property is essential to defining the person in both individualistic and communitarian traditions, and she demonstrates how this conception of the person allows us to extract important insights across theoretical lines.<sup>288</sup>

Yet this admittedly incomplete sampling of the available theories of the person is also a limitation on Radin’s model and a source of potential critique.<sup>289</sup> Most saliently, Radin’s choice of the classical individualistic view, even as nuanced as it is, is sure to be unpersuasive to any theoretical purists of either the individualist or communitarian type.<sup>290</sup> In addition, the “thorough empiricist and metaphysical skeptic[s]” may be out in the cold, for Radin’s subsequent discussion of the property model of the person does not seem to incorporate or engage those competing theories.<sup>291</sup>

I do not dispute these critiques. Rather, they are flagged and acknowledged here, but only insofar as is necessary to show that I have made a philosophical choice to follow Radin’s lead toward the personal property perspective. I find Radin’s treatment of the philosophical spectrum sufficiently robust to support further consideration of her property model, but I proceed with an awareness that this assumption is being made.

287. *Id.*

288. *Id.* at 966.

289. There are several other specific doctrinal critiques leveled at Radin’s personhood model. For example, Stephen Schnably contends:

[T]he law can never simply implement some consensus regarding property and personhood [because t]he social constitution of personhood is always at stake when issues of property and commodification are decided. A theory that brackets moral issues from legal ones overlooks the manner in which exercises of power help shape the consensual norm that is supposedly being taken as a guide. To avoid that circularity, legal theorists must focus on the conflict that can always be found beneath the surface of apparent consensus.

Stephen J. Schnably, *Property and Pragmatism: A Critique of Radin’s Theory of Property and Personhood*, 45 STAN. L. REV. 347, 353 (1993).

290. *See id.* at 357 (“Beyond these general outlines [between individualism and communitarianism], Radin offers no comprehensive theory of the ideal of human flourishing. Rather, she offers particular judgments about particular issues.”).

291. Radin, *supra* note 50, at 964.

## 2. Selecting a Theory of Property

Radin compliments her selected theory of the person with a primarily Hegelian notion of property.<sup>292</sup> Interestingly, perhaps because property, strictly defined, does not exist without reference to a person or persons (if assuming the communitarian perspective), her discussion of Hegel's theory of property must begin with a discussion of the Hegelian theory of the person.<sup>293</sup> The latter is construed as essentially Kantian—the person is “simply an abstract autonomous entity capable of holding rights, a device for abstracting universal principles and hence by definition devoid of individuating characteristics.”<sup>294</sup> This is subject to the same theoretical critique as the Kantian choice itself: the personhood “perspective assumes that persons are not persons except by virtue of those particulars, and therefore sees the person as the developed individual human being in the context of the external world.”<sup>295</sup>

But Hegel's related theory of property tends to avoid some of the Kantian limitations, and bears several strong indications that inform the personhood theory of property.<sup>296</sup> Of greatest importance to Radin's theory is Hegel's idea that a person “is merely an abstract unit of free will or autonomy, [and] it has no concrete existence until that will acts on the external world.”<sup>297</sup> “For Hegel, individuals could not become fully developed outside such [external] relationships,”<sup>298</sup> and the Hegelian perspective is thus important to “a theory of personal property, because the concept of person in the theory of personal property refers to [that same] fully developed individual.”<sup>299</sup>

Once Radin has established her Hegelian model of property, and identified the hybridized model of the person that will be used to inform that model of property, she need only demonstrate the capacity of the

292. *Id.* at 971-78, 971 n.49 (citing Stillman, *Property, Freedom, and Individuality in Hegel's and Marx's Political Thought*, in *NOMOS XXII, PROPERTY* 130 (J. Pennock & J. Chapman eds., 1980)).

293. *See id.* at 972 (arguing that Hegel's conception of the person “can be seen as consistent with the idea of personal property”).

294. *Id.* at 971.

295. *Id.* at 972.

296. *See id.* (arguing that Hegel's theory understands an individual first in the realm of rights but then moves beyond to the concept of a whole person in the external world and therefore makes sense in the context of personal property).

297. *Id.* at 972 (“[T]he person must give its freedom an external sphere in order to exist as Idea.”). *Id.* (quoting GEORG W.F. HEGEL, *PHILOSOPHY OF RIGHT* § 41 (T. Knox trans., 1942)) (alteration in original). “Since Hegel, like Plato, was an idealist, something must exist as Idea in order to be actualized or real.” *Id.* at 972 n.52.

298. *Id.* at 975.

299. *Id.*

personal property model to set up the necessary dichotomy between good and bad, or between justified and less justified (or totally unjustified) property interests.<sup>300</sup> She then delves into several extant theoretical critiques of property in order to prove the claim “that the common thread in these theories relates the stronger property claims to recognized indicia of personhood. The personhood perspective can thus provide a dichotomy that captures this critical intuition explicitly and accurately.”<sup>301</sup>

The theories presenting this common thread are the Marxist distinctions between property that is the fruit of the individual’s labor (justified) and that which is fruit of others’ toil (unjustified),<sup>302</sup> and the Hobhousian dichotomy between property held for personal use (justified) and that which is held for “control of [other] persons through things” (unjustified).<sup>303</sup> Radin relates both theories to personal property with the suggestion that Marx’s first-party-labor/third-party-toil dichotomy, and Hobhouse’s use/power dichotomy, track or replicate the personality theory’s dichotomy between personal property and fungible property in useful ways.<sup>304</sup>

Radin also addresses utilitarian critiques of property, which have at their core the assumption that justifiable property entitlements are those which maximize efficiency and social welfare.<sup>305</sup> Such utilitarian calculi do not superficially consider or predict property for personhood to be more valuable than fungible property because either may be efficiency-maximizing or efficiency-diminishing.<sup>306</sup> However, the utilitarian calculus has also produced a hierarchy of remedies that purport to reflect

300. *See id.* at 978-79 (noting that property that is used to create a fully developed individual is entitled to a stronger moral claim and more legal protection than other forms of property).

301. *Id.* at 979.

302. *See id.* at 981 (explaining how, under the Marxist approach, a property interest is only valid if the property was created by one’s own work); *id.* at 980 n.79 (citing KARL MARX & FRIEDRICH ENGELS, *THE COMMUNIST MANIFESTO* 1, 96 (Samuel Moore trans., Penguin Books 1979) (1888)).

303. *Id.* at 980, 980 n.80 (citing Leonard Hobhouse, *The Historical Evolution of Property, in Fact and in Idea, in PROPERTY: ITS DUTIES AND RIGHTS* 3, 9-11 (2d ed. 1922)).

304. *See id.* (explaining that Hobhouse may associate property for use with personal property and that one can understand the Marxist theory in terms of personal property by positing that by laboring on resources one intends to bind up with one’s own life, he can more easily justify ownership than when he labors in order to later exchange the property).

305. *Id.* at 984.

306. *Id.* at 984 (arguing that there is no distinction between different kinds of entitlements under a utilitarian calculus); *id.* at 958 n.3 (citing RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* (2d ed. 1977)); Harold Demsetz, *Toward a Theory of Property Rights*, 57 *AM. ECON. REV.* 347 (1967)).

this efficiency analysis, and it is here that personal property finds its entrée.<sup>307</sup>

Utilitarian remedies for injury to property rights come in one of two basic flavors: property rules or liability rules.<sup>308</sup> Property rules are more protective of initial property-holder interests and more restrictive of potential invasions of that interest than are liability rules.<sup>309</sup> The distinction between the rigor and content of each remedy scheme reflects an assumption in the utilitarian model that different levels of protection do exist, “without telling us which items deserve which levels.”<sup>310</sup> Personal property can be reconciled with the efficiency arguments underlying the property/liability rule distinction by positing personal property and fungible property as poles on the spectrum of rights that will be protected on one end by property rules and on the other end by liability rules, respectively.<sup>311</sup> Thus, although personal property cannot wholly convert utilitarian property ideas into a holistic moral theory, it does provide some rough considerations relating remedial choices to the moral underpinnings of the personal/fungible property dichotomy.

Finally, when confronting a welfare rights critique of property, Radin recognizes that the welfare rights model might encompass a concept of personhood by assuring citizens of “all entitlements necessary for personhood,”<sup>312</sup> but this would produce a personhood theory of entitlements encompassing but not centering on property rights.<sup>313</sup> Still, a personhood theory of property (as opposed to entitlements) may be analytically useful even in a welfare rights model if we believe that “[t]he attachment to things may be different from other necessities of personhood, and it may be worth noticing the difference sometimes, even though, by itself, it would not determine questions of just distribution.”<sup>314</sup> Indeed, the personal property perspective can be immensely valuable because

307. Radin, *supra* note 50, at 984.

308. *Id.* at 984, 984 n.93 (citing Calabresi & Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972)).

309. *See id.* at 984-85 (distinguishing between those traditional property rights which are protected by a property rule and those that are protected merely by a liability rule).

310. *Id.* at 985.

311. *See id.* at 985-86 (outlining the starting point for a theory that divides those rights to property which are closely tied to personhood and, thus, should be entitled to greater protection, from those rights to property less tied to personhood and therefore entitled to less protection).

312. *Id.* at 990.

313. *Id.* (arguing that, under the welfare rights theory, the government could organize property rights around the concept of personhood and give everyone at minimum what is required for personhood).

314. *Id.*

a welfare rights theory incorporating property for personhood would suggest not only that government distribute largess in order to make it possible for people to buy property in which to constitute themselves but would further suggest that government should rearrange property rights so that fungible property of some people does not overwhelm the opportunities of the rest to constitute themselves in [personal] property.<sup>315</sup>

The foregoing is a somewhat shallow recitation of Radin's property for personhood theory and its bases, but it does tease out all the substantive nuances embedded within the theory that are necessary for me to now propose its extension and application to a theory of the Fourth Amendment.

Before that application can be attempted, however, there are two ways in which Radin's personhood perspective on property must be enhanced if it is to do the great work on the Fourth Amendment of which it is ultimately capable. First, the personality theory of property must be pushed beyond its current focus on the "thing" or object in which property interests reside and must be forced to include intangible things or interests within its ambit.<sup>316</sup> Second, although Radin broaches the topic of Fourth Amendment privacy and liberty,<sup>317</sup> she does so in a purely positivist or descriptive fashion and does not develop the personhood model as a moral or normative framework within the Fourth Amendment context.<sup>318</sup> Correcting these two shortcomings, and then employing the personhood normative model to evaluate the government's present and future use of CCTs make up the bulk of the remainder of this Article. The balance is spent buttressing the CCT discussion by applying my property-infused Fourth Amendment theory to a sampling of troubling criminal procedure standards, and then exploring more general considerations of the benefits of a property-

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315. *Id.*

316. Radin's discussion is, in some ways oddly, expressly limited to a discussion of "things" that have form and substance, and she does not explicitly or implicitly develop a property rights regime that contends with what might be considered legitimate property interests in ephemeral and intangible items. *See generally id.* at 991-1013 (naming homes and cars as examples of things in which a person could have a property interest, and objects and wealth as property that the government could take, none of which go beyond the tangible).

317. *See id.* at 991-1002 (discussing the Fourth Amendment in terms of the sanctity of the home, including liberty and privacy, residential tenancy, and homes and cars).

318. *See generally id.* at 996-1002 (focusing on the privacy element of the Fourth Amendment by describing the cases in which the Court protected it).

driven Fourth Amendment compared to our current creature of privacy.<sup>319</sup>

### *B. Personhood as Property Under the Fourth Amendment*

In order to make full use of the personhood perspective in Fourth Amendment analysis, it must be able to explain rights residing in tangible as well as intangible things. Indeed, transcending the tangible/intangible distinction as a measure of Fourth Amendment interests was essentially the point, or at least part of the point, of the decision in *Katz*.<sup>320</sup> The Court grounded its rejection of the government's claim that only tangible things could be seized, in Fourth Amendment terms, on reasonable expectations of privacy.<sup>321</sup> However, *Katz* nonetheless reflects the Court's intuitive judgment that Mr. Katz's conversation merited protection in spite of its ephemeral nature.<sup>322</sup>

One need not reject that aspect of *Katz* that collapsed any distinction between tangible and intangible property even when preparing to jettison the related privacy rationale.<sup>323</sup> The only coherent theory for maintaining the distinction came from constitutional textualists like Hugo Black,<sup>324</sup> and similar arguments have not

319. See *infra* Part III.C (describing how the personal information property theory would apply to situations like open fields, aerial surveillance, dog sniffs, and thermal imaging).

320. *Katz v. United States*, 389 U.S. 347, 350-51 (1967) (holding that the Fourth Amendment "protects people, not places" and furthermore "protects individual privacy against certain kinds of governmental intrusion").

321. In rejecting *Goldman v. United States*, 316 U.S. 129, 133 (1942) (holding that government eavesdropping without a physical trespass did not violate the Fourth Amendment), Justice Harlan stated that its "limitation on Fourth Amendment protection is, in the present day, bad physics as well as bad law, for reasonable expectations of privacy may be defeated by electronic as well as physical invasion." *Katz*, 389 U.S. at 362 (Harlan, J., concurring).

322. *Id.* at 361 (Harlan, J., concurring). Justice Harlan argued:

The critical fact in this case is that "one who occupies it, [a telephone booth] shuts the door behind him, and pays the toll that permits him to place a call is surely entitled to assume" that his conversation is not being intercepted. The point is not that the booth is "accessible to the public" at other times, but that it is a temporarily private place whose momentary occupants' expectations of freedom from intrusion are recognized as reasonable.

*Id.* at 361-62 (citations omitted) (alteration in original).

323. See *id.* at 362 (Harlan, J., concurring) (relating the rejection of the distinction between the physical and the non-physical to privacy in order to support the notion that an electronic invasion is as intrusive as a physical invasion).

324. Justice Black phrased his textualist objections as follows:

The first clause [of the Fourth Amendment] protects "persons, houses, papers, and effects, against unreasonable searches and seizures . . ." These words connote the idea of tangible things with size, form, and weight, things capable of being searched, seized, or both. The second clause of the Amendment still further establishes its Framers'

resurfaced since they were squarely rejected in *Katz* and the cases that followed.<sup>325</sup> For purposes of harmonizing the Fourth Amendment with a personality theory of property, it would seem vitally important to continue to disregard the tangible/intangible dichotomy as irrelevant. Although Radin's model is at all times expressly limited to things or objects as property that may house personhood, her premise that there are things external to the individual that are nevertheless "closely bound up with personhood because they are part of the way we constitute ourselves as continuing personal entities in the world"<sup>326</sup> has no inherent conceptual preference regarding an aspect of personal property's permanence.<sup>327</sup>

Once the line between tangible and intangible things is erased, the personhood model can then be used to think about what things qualify as intangible property of personhood. Here again, I want to use what is useful about the *Katz* revolution without getting bogged down in its privacy detour.<sup>328</sup> The *Katz* case tested the Fourth Amendment's ability to deal concretely with eavesdropping, a non-trespassory seizure of an intangible good in the form of his telephone conversation.<sup>329</sup> In trying to distill what is so important about that telephone conversation as to render it beyond the government's reach, it should be clear that it was neither the mode of the collection nor the nature of the thing collected that shaped the Court's judgment about the value of the right invaded.<sup>330</sup> Instead, the Court chose to declare Mr. Katz's conversation within the

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purpose to limit its protection to tangible things by providing that no warrants shall issue but those "particularly describing the place to be searched, and the persons or things to be seized." A conversation overheard by eavesdropping, whether by plain snooping or wiretapping, is not tangible and, under the normally accepted meanings of the words, can neither be searched nor seized.

*Id.* at 365 (Black, J., dissenting).

325. Compare *California v. Ciraolo*, 476 U.S. 207, 214 (1986) (holding in part that the Fourth Amendment should not be limited to proscribing only physical intrusions onto private property), with *Minnesota v. Carter*, 525 U.S. 83, 88 (1998) (concluding that a person has no legitimate expectation of privacy in the home of a third party, which the Court articulates does not violate the principle announced in *Katz*).

326. Radin, *supra* note 50, at 959.

327. See *id.* at 960 (discussing the personhood theory in terms of "things" in the "external world," but not adding anything more as to the requirements of the permanent aspects of these "things").

328. *Supra* notes 320-322 and accompanying text.

329. See *Katz*, 389 U.S. at 372 (Black, J., dissenting) (framing the majority and concurring opinions in terms of the distinction between tangibles and intangibles and asserting that the real holding means that "eavesdropping is subject to Fourth Amendment restrictions and . . . conversations can be 'seized'").

330. See *id.* at 353 (relying on the speaker's interests instead of the mode of collection or the thing seized).

scope of the Fourth Amendment in spite of those considerations, and certainly not because of them.<sup>331</sup>

Rather, what seems most important about Mr. Katz's conversation, and deserving of Fourth Amendment attention, was that it contained sensitive *information*.<sup>332</sup> The Court's analytical method in *Katz*, and perhaps in many (or all) other Fourth Amendment cases, is to shape its rule guided by the perceived value to the individual of the *information* gathered by law enforcement and the latter's competing claim of entitlement thereto.<sup>333</sup> This suggests that one can bypass trespassory considerations and the tangible/intangible object dichotomy without devolving to a privacy framework. The instrumental outcome of *Katz* could be achieved by emphasizing that the police interrupted or interfered with the flow of Mr. Katz's targeted delivery of information and not necessarily his privacy.

Assuming that the right to control and direct the flow of information is the locus of the interest being protected in *Katz*, and proposing that information is the locus of the interest most relevant to the Fourth Amendment,<sup>334</sup> we still need a coherent moral or normative model for assessing the existence and relative strength of claims to information or, as Radin supplies for good and bad property interests, a

331. See *id.* (holding that the Fourth Amendment did apply in this instance because the government's actions "violated the privacy upon which he [Mr. Katz] justifiably relied" and dismissing the concern that these activities could not constitute a seizure because no physical trespass occurred).

332. See *id.* at 361 (Harlan, J., concurring) (identifying the "critical fact" in the case as Mr. Katz's assumption that his conversation would remain confidential, and that the information he expressed would not be captured or subsequently disclosed).

333. See, e.g., *Thornburgh v. Am. Coll. of Obstetricians and Gynecologists*, 476 U.S. 747, 792 n.2 (1986) (White, J., dissenting) (quoting *id.* at 776 (Stevens, J., concurring)) ("For if the liberty to make certain decisions with respect to contraception without governmental constraint is 'fundamental,' it is not only because those decisions are 'serious' and 'important' to the individual, but also because some value of privacy or individual autonomy that is somehow implicit in the scheme of ordered liberties established by the Constitution supports a judgment that such decisions are none of government's business."); *Hudgens v. Nat'l Labor Relations Bd.*, 424 U.S. 507, 542 (1976) (Marshall, J., dissenting) ("No one would seriously question the legitimacy of the values of privacy and individual autonomy traditionally associated with privately owned property. But property that is privately owned is not always held for private use, and when a property owner opens his property to public use the force of those values diminishes.").

334. Distinguishing between "privacy" and "privity" of communication, DeFilippis argues that the Court in *Katz* "failed to acknowledge . . . that privity, and not merely privacy, is central to any plausible understanding of [Mr.] Katz's claims" because one cannot understand the need to protect the privacy of Mr. Katz's phone conversation without first identifying the relevant privity links. Andrew J. DeFilippis, *Securing Informationships: Recognizing a Right to Privity in Fourth Amendment Jurisprudence*, 115 YALE L.J. 1086, 1103 (2006). Thus, the inherent value of the conversation is not necessarily just the conversation itself.

rationale for deciding which interests in information to protect and when.<sup>335</sup>

*Katz*'s privacy norm purports to do just that. Mr. Katz conveyed information during a conversation in which he reflected a sufficiently strong interest such that he was "entitled to assume that the words he utter[ed] . . . [would] not be broadcast to the world."<sup>336</sup> This may be explained in a positivist way simply by saying that Mr. Katz exhibited an expectation of privacy that society would find reasonable, but neither with this statement nor elsewhere in the opinion does the Court provide a true normative tool for decision-making.<sup>337</sup> In this sense, the privacy rationale was a descriptive model that explained the outcome in *Katz* nicely, but it is not sufficient.<sup>338</sup>

Applying a personhood perspective to this informational quandary would, in contrast to the above, provide the Court a more effective way to determine what sort of interests the Fourth Amendment should protect and to what extent. The personality theory of property, once open to considering intangible property as possibly personal, would differentiate informational interests based on the extent to which the information is "closely bound up with personhood"<sup>339</sup> or otherwise forms "part of the way we constitute ourselves as continuing entities in the world."<sup>340</sup> This would honor my own intuition that information in general, and specific kinds of information in particular, are essential to or even a manifestation of personhood. We might call this extrapolated theory "property in the information of personhood," or more succinctly, "personal informational property."

Similarly to Radin's personality theory of property, my personal informational property theory of the Fourth Amendment supplies the two basic requirements of a complete theory of rights: it gives us a moral justification for recognizing rights and a mode for their specific delineation. Just as Radin suggests that property rights vested in certain

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335. See Radin, *supra* note 50, at 1014-15 (outlining the conclusion that personal property interests should be prima facie protected while fungible property interests should be unprotected when viewed against personhood interests).

336. *Katz v. United States*, 389 U.S. 347, 352 (1967).

337. See *id.* at 361 (Harlan, J., concurring) (explaining the two-part test that requires a subjective expectation of privacy that society recognizes as reasonable and limiting the rest of the analysis to subjective intentions and society's expectations).

338. See *id.* at 365 (Black, J., dissenting) (rejecting the majority's reliance on privacy as a "nebulous subject").

339. Radin, *supra* note 50, at 959.

340. *Id.*

things are essential to the realization of personhood,<sup>341</sup> I contend that the right to convey or withhold information is also a matter affecting the development of a full person. The personal informational property analogy to the distinction between good or justifiable and bad or unjustifiable interests in property, which relies on the level of connection between the person and the thing,<sup>342</sup> is a focus on the level of connection between the person and information in order to gauge its worth. That information which is closely bound up with identity, or necessary to the development of the fully realized person, like certain types of property, is deserving of the most stringent protection. Information less bound up or not bound up with identity or personhood is not personal informational property, but (*a la* Radin) rather might be called fungible informational property and is less deserving or perhaps not deserving of constitutional protection.<sup>343</sup>

The propertized Fourth Amendment would therefore look roughly as follows: search and seizure law for cases involving things or tangible objects will protect the individual against government intrusion most aggressively when the thing subject to investigation is rightly considered personal property, and least so or not at all if the interest invaded deals with fungible property. However, even if the thing interfered with is fungible, it may be the repository, source, or locale for the production of information. Therefore, the second step in the propertized Fourth Amendment's framework would be to assess whether the search or seizure of a tangible thing, personal or fungible, interferes with informational property rights relevant to personhood that may emanate or flow from the tangible property. If the information is deemed personal informational property, it is aggressively protected and if it is better characterized as fungible informational property it will be less protected. A third aspect of the Fourth Amendment which embraces the personality theory of property would come into play when only intangible items are seized or virtual spaces are searched. Here, much like step two, the inquiry is whether the information seized constitutes personal informational property, fungible informational property, or perhaps is not property at all, and the level of protection would likewise

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341. *See id.* (stating that “[m]ost people possess certain objects they feel are almost part of themselves”).

342. *See id.* at 959-60 (separating personal from fungible property on the basis of whether one is bound up with the property or whether it is replaceable).

343. *See id.* at 979, 979 n.294 (arguing that dualist theories that offer greater and lesser protection to different kinds of property all center on indicia of personhood).

vary with the level of intimacy between the individual's sense of self (or personhood) and the information at risk.

This framework for the Fourth Amendment thus allows the Court to develop clear rules, declaring certain types of personal property and personal informational property absolutely protected, other types of personal property and personal informational property strongly but not absolutely protected, and fungible property and fungible informational property less protected or perhaps even unprotected altogether. At the most protective end of the spectrum you find Radin's personal property<sup>344</sup> and my related personal informational property. Personal property or personal informational property will be protected absolutely when the individual cannot tolerate any interference with such property without experiencing severe harm or loss of aspects of her personhood, or disruption of her development as a full person.<sup>345</sup> By my judgment, a useful nexus for absolute protection certainly exists where the property being deprived or molested is *personhood* itself.

Populating the space between the poles are personal property and personal informational property with which the government might interfere without causing severe hardship to or loss of aspects of the individual's personhood, or where the risk of harm or loss is substantially outweighed by overriding law enforcement obligations to engage in the challenged behavior. Generally speaking, these considerations will parallel or be resolved by resort to the remaining familiar aspects of the Fourth Amendment that this Article does not challenge, most importantly the notions of suspicion,<sup>346</sup> the warrant

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344. See *id.* at 986 (describing the continuum of property rights from personal to fungible).

345. *Id.* at 959. Radin states that:

[we] may gauge the strength or significance of someone's relationship with an object by the kind of pain that would be occasioned by its loss. On this view, an object is closely related to one's personhood if its loss causes pain that cannot be relieved by the object's replacement . . . . For instance, if a wedding ring is stolen from a jeweler, insurance proceeds can reimburse the jeweler, but if a wedding ring is stolen from a loving wearer, the price of a replacement will not restore the status quo—perhaps no amount of money can do so.

*Id.*

346. For an explanation of the probable cause standard of suspicion, see *Texas v. Brown*, 460 U.S. 730, 742 (1983) (quoting *Carroll v. United States*, 267 U.S. 132, 162 (1925); *Brinegar v. United States*, 338 U.S. 160, 176 (1949)). The Court in *Brown* states:

[P]robable cause is a flexible, common-sense standard. It merely requires that the facts available to the officer would "warrant a man of reasonable caution in the belief" that certain items may be contraband or stolen property or useful as evidence of a crime; it does not demand any showing that such belief be correct or more likely true than false. A "practical, nontechnical probability" that incriminating evidence is involved is all that is required.

preference<sup>347</sup> and exceptions doctrines,<sup>348</sup> and overriding concerns of reasonableness,<sup>349</sup> although each of these concepts would have to be modified slightly in order to incorporate personhood-related property in the place formerly held by privacy.<sup>350</sup>

Finally, on the least protected end of the spectrum, you have fungible property not giving rise to an interest in personal informational property, you have the least valuable forms of fungible informational property, and you have that information in which no property interest exists at all. The level of protection from official surveillance enjoyed

*Brown*, 460 U.S. at 742. For the less stringent standard of reasonable suspicion, see *United States v. Sokolow*, 490 U.S. 1, 7 (1989) (quoting *INS v. Delgado*, 466 U.S. 210, 217 (1984); *Terry v. Ohio*, 392 U.S. 1, 30 (1968)) (holding that reasonable suspicion entails “‘some minimal level of objective justification’ for making the stop,” that is, “something more than an ‘inchoate’ and unparticularized suspicion or ‘hunch,’” but less than level of suspicion required for probable cause).

347. This preference can be summed up as follows:

The point of the Fourth Amendment, which often is not grasped by zealous officers, is not that it denies law enforcement the support of the usual inferences which reasonable men draw from evidence. Its protection consists in requiring that those inferences be drawn by a neutral and detached magistrate instead of being judged by the officer engaged in the often competitive enterprise of ferreting out crime. Any assumption that evidence sufficient to support a magistrate’s disinterested determination to issue a search warrant will justify the officers in making a search without a warrant would reduce the Amendment to a nullity and leave the people’s homes secure only in the discretion of police officers . . . . When the right of privacy must reasonably yield to the right of search is, as a rule, to be decided by a judicial officer, not by a policeman or government enforcement agent.

*Johnson v. United States*, 333 U.S. 10, 13-14 (1948).

348. While all searches must be reasonable, the Supreme Court has recognized that reasonableness does not require the police to obtain search warrants before conducting every search. See *Illinois v. McArthur*, 531 U.S. 326, 330 (2001) (explaining that “[w]hen faced with special law enforcement needs, diminished expectations of privacy, minimal intrusions, or the like,” the Court has carved out exceptions to the warrant requirement). The Court has recognized numerous such exceptions. See, e.g., *Michigan v. Tyler*, 436 U.S. 499 (1978) (exigent circumstances—community caretaking exception); *United States v. Robinson*, 414 U.S. 218 (1973) (search incident to arrest exception); *Schneckloth v. Bustamonte*, 412 U.S. 218 (1973) (consent exception); *Coolidge v. New Hampshire*, 403 U.S. 443 (1971) (plain view exception); *Terry*, 392 U.S. at 1 (stop and frisk exception); *Warden v. Hayden*, 387 U.S. 294 (1967) (exigent circumstances—“hot pursuit” exception); *Schmerber v. California*, 384 U.S. 757 (1966) (exigent circumstances—evanescent evidence exception); *Carroll*, 267 U.S. at 132 (automobile exception).

349. *Pennsylvania v. Mimms*, 434 U.S. 106, 108-09 (1977) (quoting *Terry*, 392 U.S. at 19; *United States v. Brignom-Ponce*, 422 U.S. 873, 878 (1975)) (“The touchstone of our analysis under the Fourth Amendment is always ‘the reasonableness in all the circumstances of the particular governmental invasion of a citizen’s personal security.’ Reasonableness . . . depends ‘on a balance between the public interest and the individual’s right to personal security free from arbitrary interference by law officers.’”).

350. This is so only inasmuch as the various competing interests that are weighed or compared in each of these contexts must now include a consideration of the consequences of the challenged action in terms of the individual ability to become a fully realized person. See *supra* note 343 and accompanying text.

by property interests on this end of the spectrum could also be expressed in terms of the Fourth Amendment's three related assessment strategies (suspicion, warrant clause, and reasonableness),<sup>351</sup> but would in addition include things or information meriting no assessment whatsoever.

This personal property model for the Fourth Amendment produces a spectrum replicating that which is currently employed in Fourth Amendment jurisprudence, but it would draw lines or distinctions at different points because personal property as a normative framework grounds very different value judgments than privacy purports to. What follows are several examples of how different those lines would be if the personal property and personal informational property theories of the Fourth Amendment were deployed, and some suggestions as to why that deployment would be a very good thing.

### *C. Personal Informational Property and the Challenges of the Fourth Amendment*

The value of the theory proposed here depends on whether a propertized Fourth Amendment yields a workable moral standard for regulating police intrusions on people's freedom. The moral theory will be further developed and critically evaluated through a review of how a Fourth Amendment oriented towards personal property would deal with the threat of CCTs and also resolve a number of other very thorny doctrinal questions.

#### 1. Personal Informational Property and CCTs

In earlier sections of this Article<sup>352</sup> and previous writings on this topic,<sup>353</sup> I claim that the government's use of CCTs, and the development of CCTs in general, raise alarming possibilities for invading an individual's mind.<sup>354</sup> Sensing the depth of that intrusion, and on the basis of a perceived social moral consensus on the importance of cognitive liberty and mental solitude, I called for an absolute prohibition on the non-consensual use of CCTs by government actors.<sup>355</sup>

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351. *Supra* notes 346-349.

352. *See supra* Part I (introducing the problems associated with government use of CCTs and describing how this use is incompatible with principles on which the Framers built our government).

353. *See generally* Halliburton, *supra* note 3.

354. *See id.* at 310 (describing alarm as one of the primary responses to finding out about the existence and use of CCTs).

355. *See generally id.* at 313, 363-64.

My propertized theory of the Fourth Amendment does this, and it offers a normative legal justification for the interdisciplinary intuitive moral consensus that absolute protection of cognitive liberty is absolutely necessary. Using the guideposts offered by Radin,<sup>356</sup> I think it is easy to see (and rather difficult to dispute) that our thoughts, our internal mental processes, and the cognitive landscape of our ideas and intentions are so closely bound up with the self that they are essential to our ongoing existence and manifestation of a fully developed personal identity.<sup>357</sup> As such, they are inherently and uncontroversibly personal information property deserving absolutist protections because any interference with these informational assets cannot be tolerated by the individual.<sup>358</sup> Many would therefore argue that capturing thoughts, spying on mental processes, and invading cognitive landscapes with CCTs deprive the individual not only of property related to personhood, but of personhood altogether. If either is the case, then the personal property theory of Fourth Amendment rights provides the normative and analytical means necessary to strictly circumscribe non-consensus use of CCTs and, thankfully, keeps big brother out of an individual's head.

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356. See Radin, *supra* note 50, at 959 (setting out the basic idea that some forms of property can be so bound up with a person that they constitute part of personhood); see also *supra* notes 339-343 and accompanying text.

357. Albert Bandura, *Social Cognitive Theory*, in 6 ANNALS OF CHILD DEV. 1, 9 (R. Vasta ed., 1989), available at <http://www.des.emory.edu/mfp/Bandura1989ACD.pdf>. Bandura writes:

People process and transform passing experiences by means of verbal, imaginal and other symbols into cognitive models of reality that serve as guides for judgment and action. It is through symbols that people give meaning, form, and continuity to the experiences they have had. Symbols serve as the vehicle of thought. Cognitive representations of experiences in knowledge structures provide the substance for thinking. And rules and strategies provide the cognitive operations for manipulating knowledge for different purposes. By symbolically manipulating the information derived from personal and vicarious experiences, people gain understanding of causal relationships and expand their knowledge.

*Id.*

For similar opinions on this subject, see Margaret S. Mahler & John B. McDevitt, *Thoughts on the Emergence of the Sense of Self, with Particular Emphasis on the Body Self*, 30 J. AM. PSYCHOANALYTIC ASS'N 827 (Am. Psychoanalytic Ass'n ed., 1982) (explaining the process of development of the sense of self as exhibited by disturbances studied by clinical psychologists); Leo A. Spiegel, *The Self, the Sense of Self, and Perception*, in 14 THE PSYCHOANALYTIC STUDY OF THE CHILD 81-82 (Ruth S. Eissler et al. eds., 1959) (describing the study of disturbances in one's self-feeling, especially disturbances in one's feeling of personal identity, and discussing how one carries one's sense of self around with him).

358. See generally Christine M. Korsgaard, *Personal Identity and the Unity of Agency: A Kantian Response to Parfit*, 18 PHIL. & PUB. AFF. 101, 101 (1989) (claiming that "[a]ny acceptable moral philosophy must take both sides of our nature into account, and tell us both how people ought to be treated and what we ought to do").

I do find, however, that I am forced to admit of one caveat to this absolutist position. It appears that even a Fourth Amendment embracing the personal property norm leaves the door open to an emergency exception to the restriction on CCTs. Perhaps because it is such a wonderfully hypothetical foil, one that almost certainly cannot occur in the real world due to the fantastic nature of the assumed ideal circumstances, the “ticking time bomb” thought experiment is almost invincible.<sup>359</sup> But assuming all those ideal circumstances—a certain threat of massive harm, complete confidence in the identity of the person possessing information that would in fact avert disaster, and no other avenues for discovery of that vital information—forcible application of CCTs for the purpose of preventing an impending calamity would be tolerable even under this proposed Fourth Amendment theory. The theoretical commitments of personal property under the Fourth Amendment would still be useful because they provide clarity to our understanding of the individual interest at stake in such a situation and will allow for more accurate balancing against the public interest in safety and security. Even if one individual’s personhood is disturbed or destroyed, a balance of harms argument may permit this to literally preserve the persons and personhood of thousands of others. That said, I am confident enough that the ticking time bomb challenge is exceptional enough (and so ubiquitously employed) that it does not otherwise undermine the positions taken here.

## 2. A Personal Property Perspective on the Fourth Amendment’s Weak Spots

In order to consider the value of the personal property model of the Fourth Amendment outside the narrow context of CCTs, while still setting some reasonable limits on the scope of the consideration that avoids revisiting and rewriting every Fourth Amendment decision on the

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359. The “ticking time bomb” scenario is a thought experiment undoubtedly familiar to most law students educated in the United States or United Kingdom. It is a hypothetical factual circumstance designed to allow an abstract discussion of the legal and moral prohibitions on the official use of torture, as well as potential exceptions to those prohibitions. The essence of the hypothetical involves government agents who possess reliable information regarding the existence of a ticking time bomb, but not its location, and have in custody a suspect who they believe can provide the information necessary to avoid a public disaster. The essence of the question is whether it would be preferable to use undesirable interrogation techniques, like torture, if doing so would prevent the impending loss of life. For more on this scenario and its various implications, see ALAN M. DERSHOWITZ, *WHY TERRORISM WORKS: UNDERSTANDING THE THREAT, RESPONDING TO THE CHALLENGE* 131-63 (Yale Univ. Press 2002).

books, I want to confine this section to evaluation of how personal property and personal informational property would resolve three specific doctrinal questions previously considered from a privacy standpoint. This strategy is chosen because of the reality that the heartland cases under the Fourth Amendment, either of the privacy-driven or the property-driven species, are easy calls to make. The warrantless invasion of the home, for example, is unconstitutional using either privacy or personal property, and this is not going to help elucidate the substantive differences between the two. So what follows is a review of how a personal property Fourth Amendment norm would resolve the thorny cases at the margins, and some arguments as to why these outcomes are superior to what *Katz* and privacy have to offer.

#### a. The Open Fields Doctrine

In *Oliver v. United States*,<sup>360</sup> the Court reaffirmed what had long been known as the open fields doctrine.<sup>361</sup> According to this manner of thinking about the scope of the Fourth Amendment, non-public land outside of the house that can be labeled an open field, as opposed to the complimentary notion of curtilage, is wholly unprotected against uninvited observation and intrusion.<sup>362</sup> The foundation of the open field doctrine is actually the 1924 Supreme Court decision in *Hester v. United States*,<sup>363</sup> which of course predates *Katz* and its introduction of the privacy rationale into Fourth Amendment jurisprudence.<sup>364</sup> *Hester* presented the same question as *Oliver*,<sup>365</sup> and rendered the rule on which *Oliver* would later rely: open fields are not deserving of Fourth Amendment protection of any sort.<sup>366</sup> According to Justice Powell, who wrote for the *Oliver* majority:

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360. 466 U.S. 170 (1984).

361. The Court expressed this position in *Hester v. United States*:

The defendant's own acts, and those of his associates, disclosed the jug, the jar and the bottle—and there was no seizure in the sense of the law when the officers examined the contents of each after it had been abandoned. . . . [T]he special protection accorded by the Fourth Amendment to the people in their "persons, houses, papers and effects," is not extended to the open fields, [which is where the police discovered the whiskey].

265 U.S. 57, 58-59 (1924).

362. *Oliver*, 466 U.S. at 180.

363. 265 U.S. 57 (1924).

364. See *Katz v. United States*, 389 U.S. 347, 361 (1967) (Harlan, J., concurring) (articulating a test for when the Fourth Amendment would apply based on subject and objective expectations of privacy).

365. *Hester*, 265 U.S. at 58; see *Oliver*, 466 U.S. at 173 (addressing the vitality of the "open fields" doctrine).

366. *Hester*, 265 U.S. at 59.

[t]he rule announced in *Hester v. United States* was founded upon the explicit language of the Fourth Amendment. That amendment indicates with some precision the places and things encompassed by its protections. As Justice Holmes explained for the Court in his characteristically laconic style: “[T]he special protection accorded by the Fourth Amendment to the people in their ‘persons, houses, papers and effects,’ is not extended to open fields. The distinction between the latter and the house is as old as the common law.”<sup>367</sup>

This strict textualist construction of the Fourth Amendment was typical of the Court in the first half of the twentieth century,<sup>368</sup> but it was explicitly rejected when *Katz* moved beyond this literalist treatment to protect an interest clearly not enumerated in the text.<sup>369</sup> Justice Black dissented from the *Katz* opinion on these very same textualist grounds,<sup>370</sup> and the Court has never looked back at this narrow, crabbed view of the amendment as a viable analytical approach.<sup>371</sup> In spite of this, *Oliver* revisited and reaffirmed the *Hester* rule seventeen years after *Katz* was decided, and refused to apply the Fourth Amendment to open fields primarily because of their a-textual status.<sup>372</sup> Only upon reaching that aspect of the holding did the Court begin to consider privacy as an independent basis of decision,<sup>373</sup> and when it did so, it pronounced the meaning of privacy in purely subjective and conclusory terms.

[O]pen fields do not provide the setting for those intimate activities that the Amendment is intended to shelter from government interference or surveillance. There is no societal interest in protecting

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367. *Oliver*, 466 U.S. at 176 (citing *Hester*, 265 U.S. at 59).

368. *Robbins v. California*, 453 U.S. 420, 426 (1981) (plurality opinion); *Payton v. New York*, 445 U.S. 573, 589-90 (1980); *Alderman v. United States*, 394 U.S. 165, 178-80 (1969). As these cases decided after *Katz* indicate, *Katz*'s “reasonable expectation of privacy” standard did not sever Fourth Amendment doctrine from the Amendment’s language. See, e.g., Thomas Y. Davies, *Recovering the Original Fourth Amendment*, 98 MICH. L. REV. 547, 668-93 (1999) (tracing the appearance of “unreasonable searches and seizures” in the textual evolution of the state search and seizure provisions as well as the framing of the Fourth Amendment itself); Lawrence M. Solan, *Learning Our Limits: The Decline of Textualism in Statutory Cases*, 1997 WIS. L. REV. 235, 272-75 (1997) (criticizing a contextual interpretation of statutes based on the “ordinary” meaning of words).

369. *Supra* notes 92-96 and accompanying text.

370. In his dissenting opinion in *Katz*, Justice Black took a strong position against this more expansive reading of the Fourth Amendment. See *supra* note 124 (quoting *Katz v. United States*, 389 U.S. 347, 373 (1967) (Black, J., dissenting)).

371. See *Oliver*, 466 U.S. at 176-77; see also JACOB W. LANDYNSKI, *SEARCH AND SEIZURE AND THE SUPREME COURT: A STUDY IN CONSTITUTIONAL INTERPRETATION* 19-20 (1966) (discussing interpretations of the Fourth Amendment based on history).

372. See *Oliver*, 466 U.S. at 176-77 (reasoning that the text of the Fourth Amendment cannot possibly be read to include open fields).

373. See *id.* at 177-78 (analyzing “open fields” under the privacy doctrine established in *Katz*).

the privacy of those activities . . . . Moreover, . . . [i]t is not generally true that fences or “No Trespassing” signs effectively bar the public from viewing open fields in rural areas. And [the parties] concede that the public and police lawfully may survey lands from the air. For these reasons, the asserted expectation of privacy in open fields is not an expectation that “society recognizes as reasonable.”<sup>374</sup>

This passage encapsulates the flawed nature of the doctrine and demonstrates the clear causative connections between those flaws and the Court’s privacy basis for interpreting the Fourth Amendment. At the outset, the Court purports to limit the Fourth Amendment explicitly to houses, persons, papers, and effects when this is irreconcilable with *Katz* and all *Katz*-based precedent.<sup>375</sup> By seeking to so limit the Fourth Amendment so late in the game, the Court is implicitly demonstrating the weakness of the privacy rationale by its inability to overcome or displace a form of textualism antithetical to privacy norms.

The *Oliver* opinion also typified how privacy discussions allow the Court to define societal norms and values without any reference to established objective standards or actual public opinion, even though “our societal understanding that certain areas deserve the most scrupulous protection from government invasion”<sup>376</sup> is a factor this very same Court declares to be relevant “[i]n assessing the degree to which a search infringes upon individual privacy.”<sup>377</sup> The arbitrary and unsupported conclusion about the customary setting for intimate activities worthy of Fourth Amendment protection, and regarding the societal interest in open fields as such a setting, are consequences of the fact that the privacy theory of the Fourth Amendment does not demand reference to society’s *actual* normative commitments.<sup>378</sup>

374. *Id.* at 179.

375. *Katz v. United States*, 389 U.S. 347, 351–52 (1967) (“What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment Protection. But what he seeks to preserve as private, even in an area accessible to the public may be constitutionally protected.”) (citations and internal quotation marks omitted); see *Florida v. Riley*, 488 U.S. 445, 451 (1989) (discussing Fourth Amendment protections in the context of surveillance effected by use of helicopter); *Dow Chemical Co. v. United States*, 476 U.S. 227, 237 (1986) (discussing Fourth Amendment protections in the context of surveillance involving high-resolution long range photographic devices); *California v. Ciraolo*, 476 U.S. 207, 213 (1986) (discussing Fourth Amendment protections in the context of surveillance effected by use of fixed-wing aircraft); *United States v. Karo*, 468 U.S. 705, 714–16 (1984) (discussing Fourth Amendment protections in the context of surveillance employing electronic “beepers”).

376. *Oliver*, 466 U.S. at 178.

377. *Id.*

378. See Colb, *supra* note 198, at 130 (doubting the Court’s assertion that “no trespassing” signs have no effect on society’s privacy expectations in open fields).

Both the assertion that fences and no trespassing signs are not always effective to block the public's view of open fields, and the importance attributed to the fact that land can be surveyed from the air, are iterations of another conceptual flaw in the Fourth Amendment.<sup>379</sup> The Court seeks to show with this discussion that privacy expectations are unreasonable because (1) people other than the police might have viewed the defendants' open fields, and (2) the defendants arguably assumed some risk that their fields would be viewed by others.<sup>380</sup> The fallacies of these two assertions are myriad and they are the product of privacy.<sup>381</sup> Relying on the ineffectiveness of fences and signs allows the Court to treat a speculative and distinguishable partial loss of confidentiality as an excuse for imposing a constructive loss of all confidentiality in all things. This is because privacy is construed as an all-or-nothing proposition.<sup>382</sup>

Moreover, by premising the propriety of law enforcement conduct upon the possibility of anti-social and unlawful private behavior, the Court uses privacy to facilitate complete disregard for well established social moral beliefs even when they are clearly expressed in the positive law.<sup>383</sup> This of course cuts the privacy-based Fourth Amendment loose from any links to the shared social values that define a system of ordered liberty and which are supposedly at the heart of the privacy expectations it protects.<sup>384</sup>

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379. See *Oliver*, 466 U.S. at 179 (holding that there is no reasonable expectation of privacy in open fields because they can be surveyed from the air and "no trespassing" signs do not stop the public from viewing them).

380. *Id.*

381. *Id.* Colb criticizes this line of reasoning:

Significantly, the Court in *Oliver* reasoned against the privacy of the open field by appealing to social norms about trespass. Even on such reasoning, it is almost certainly not the case that everyone feels free to violate the law against trespass. The Court's observation that people blithely trespass on open fields, moreover, might not extend to land as enclosed as *Oliver's* was. The fact that such trespass was criminal ought likewise to have undermined the idea that police did not engage in wrongdoing—that the public (and therefore the police as well) had somehow been invited to walk around in *Oliver's* field. By doing private things in his field, *Oliver* might well have taken a risk of exposure, much as the subway-train sleeper risks the theft of his wallet. *Oliver's* taking this risk, however, should not entitle a trespasser to enter onto his field any more than it would entitle a thief to pick a passenger's pocket.

Colb, *supra* note 198, at 130.

382. Searches were formerly measured by the existence of probable cause in an all-or-nothing fashion. Amsterdam, *supra* note 208, at 388.

383. See *Oliver*, 466 U.S. at 191 (Marshall, J., dissenting) (arguing that the positive law outlawing trespass creates a reasonable expectation of privacy in open fields).

384. See *id.* at 196-97 (Marshall, J., dissenting) (suggesting that the Court's majority approach would not protect privacy interests that all could agree were worth protecting).

Finally, in relying on the possibility of observation by air to undermine Fourth Amendment privacy expectations—without determining the frequency of such over flights, the defendants’ actual awareness of such flights, or the extent to which over flights commonly gave those flying access to the same information or vantage point as did the physical trespassory search on foot that actually took place<sup>385</sup>—the Court reveals the paucity of the privacy theory. Under any rational conception of knowing exposure or assumption of risk principles, whether the exposure was in fact knowing (as opposed to reckless, negligent, or even unwitting) and whether the risk of exposure was in fact assumed would be analytically important considerations,<sup>386</sup> and these facts that the Court ultimately finds unnecessary to its decision would go a long way towards informing those considerations. This is privacy’s fault. Starting with *Katz* and going forward, the Court has never found it necessary to construe knowledge and risk assumption in either their ordinary or specialized legal sense, and it completely ignores differences in degree between different types of privacy infringements.<sup>387</sup>

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385. See *id.* at 179 n.9 (“In practical terms, petitioner Oliver’s and respondent Thornton’s analysis merely would require law enforcement officers . . . to use aerial surveillance to gather the information necessary to obtain a warrant or to justify warrantless entry onto the property. It is not easy to see how such a requirement would advance legitimate privacy interests.”).

386. As one commentator has explained:

Participation in modern life necessitates exposure of one’s affairs to others. Under the Supreme Court’s current “risk assessment/known exposure” doctrine the fourth amendment is eliminated from a great many aspects of modern life. The Court requires the individual who seeks full fourth amendment protection to live an isolated life within his house with the shades drawn. This is a choice that most of us are unwilling or unable to make. Long ago an individual could get by without exposing any information to others because he lived largely within the four corners of his own land. But times have changed greatly. We work for others and purchase the goods we need instead of making them for ourselves. We communicate by telephone and live on small tracts of urban land. Modern living compels the exposure of large portions of our lives to others in a way that could not be contemplated by the framers of the fourth amendment. Risk assessment analysis leads to a harsh outcome in this modern environment. It results in the denial of fourth amendment coverage to most aspects of modern life simply because they take place outside of our homes. The result is that participation and involvement in modern life is incompatible with modern fourth amendment protection. In the face of this approach, the security which the amendment was written to promote disappears.

Lewis R. Katz, *In Search of a Fourth Amendment for the Twenty-First Century*, 65 IND. L.J. 549, 567-68 (1990).

387. By treating exposure to a limited audience as identical to exposure to the world, the Court has failed to recognize degrees of privacy in the Fourth Amendment context:

A person going on vacation, for example, might give a neighbor the key to her house and ask him to water her plants while she is gone. The neighbor now has explicit permission to observe what would otherwise be hidden from view, namely, the inside of the

A Fourth Amendment embracing property for personhood would produce not only different results, but also would suggest very different lines of analysis, and the propertized Fourth Amendment would be superior in both respects. First, personal property models explicitly recognize that personhood can be bound up in external things, and thus open fields would not automatically be excluded by operation of some semantic exercise. Second, while the extent to which a person's identity is bound up with a thing varies with the person and with the thing,<sup>388</sup> open fields would only be categorically beyond the reach of the Fourth Amendment if they were completely fungible, and not personal, property. Some open fields may in fact be fungible, like the land being used to grow commercial crops, while other open fields may be more proximate to personhood, like the land used to "meet lovers, . . . gather together with fellow worshippers, [or] engage in sustained creative endeavor."<sup>389</sup> The strength of personal property theories over privacy in this regard is that personal property models force explicit consideration of those differences between different types of open fields, and provides a normative mechanism for making fine distinctions in the level of legal protection they deserve. Even though this more often will necessitate a case-by-case determination, which was a concern to the Court in *Oliver*,<sup>390</sup> such an ad hoc approach would not produce any of the ambiguity or arbitrary variation in enforcement of which the Court complained.<sup>391</sup>

This is because the propertized Fourth Amendment would be obligated to express a moral judgment on the worth of the interests being asserted in open fields, and would have to squarely address affirmative

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vacationer's home (at least those parts visible from areas through which he must travel to reach the plants). By granting this permission, the vacationer has forfeited a measure of privacy and has thus knowingly exposed part of her home to her neighbor. Still, if the neighbor were to invite his friends or family into the apartment to see the vacationer's personal items, even just those things visible from where the plants are located, that act would go beyond the scope of the vacationer's permission and therefore represent an invasion of her privacy. There are degrees of privacy and, accordingly, degrees of exposure, and one might choose to forfeit some of her freedom from exposure without thereby forfeiting all of it.

Colb, *supra* note 198, at 122-23.

388. See Radin, *supra* note 50, at 959 (suggesting that we can gauge how much a person is attached to an object by the emotions felt when it is lost).

389. *Oliver v. United States*, 466 U.S. 170, 192 (1984) (Marshall, J., dissenting).

390. See *id.* at 181-82 ("Nor would a case-by-case approach provide a workable accommodation between the needs of law enforcement and the interests protected by the Fourth Amendment.").

391. *Id.*

manifestations of the social moral judgment on the value of specific open fields by considering the legal and customary standards of the community. A personal property theory of the Fourth Amendment is thus superior to privacy if only because it would not allow the Court to make pronouncements about societal values while ignoring their concrete and positive expression.

Greater protection of open fields would also be necessary under a property-centered Fourth Amendment because, unlike privacy, the uninvited frustration of property entitlements do not generally (with the exception of adverse possession) diminish those entitlements but rather routinely lead to remedial action.<sup>392</sup> Even though fences and no trespassing signs might not always be effective at keeping the public out, their ineffectiveness would never lead to an alteration of the right in the property itself. This is an appealing advantage over the privacy model insofar as privacy rights can be destroyed entirely and with respect to all parties as soon as they are even partly compromised by one person. Using Professor Heffernan's descriptors, the open fields doctrine is an example of the Court's vigilance approach to defining privacy and for making assumptions about private behavior.<sup>393</sup> By contrast, the property approach to open fields would excel in measuring and justifying social conditions relevant to the Fourth Amendment in part because it correlates far better with the forbearance model of societal expectations than privacy does.<sup>394</sup>

As a final comparison to privacy, it appears that using property for personhood as a Fourth Amendment framework would produce no tension between the knowledge state underlying knowing exposure and its other legal uses, nor would it conflate assumption of the risk principles with strict liability, and it would therefore facilitate far more orderly treatment of these two specialized Fourth Amendment rules.

392. See generally Ian Ayres & J.M. Balkin, *Legal Entitlements as Auctions: Property Rules, Liability Rules, and Beyond*, 106 YALE L.J. 703 (1996) (disagreeing with the Calabresi-Melamed model, arguing that the only difference between liability and property rules is the price of exercising the option—the damages to be paid for the nonconsensual taking—and such conceptualization does not promote true efficiency); Radin, *supra* note 50, at 984-85 (stating that the Calabresi-Melamed distinction between protecting entitlements with “property rules” or “liability rules” is now a widely recognized tool of economic analysis).

393. See Heffernan, *supra* note 221, at 61 (“Under the full vigilance model, *everything* is legitimately subject to surveillance. Full vigilance makes no allowance for privacy cues, nor does it treat anything as a private fact. Prison life provides a helpful example of full vigilance in action.”) (emphasis added).

394. See *id.* at 61 (“Under the forbearance model, a person expects others to exercise restraint, once modest efforts have been taken to avoid exposure, concerning matters generally understood to be private. A person similarly expects others to exercise restraint.”).

### b. Aerial Surveillance

The Court's rules on aerial surveillance by government actors are analytically related to, and suffer from many of the same flaws as, the open fields doctrine. The aerial surveillance cases, *California v. Ciraolo*<sup>395</sup> and *Florida v. Riley*,<sup>396</sup> together establish the proposition that there is no expectation of privacy, even in the curtilage of the home, in that which can be viewed from above during legal passage by aircraft.<sup>397</sup>

In the more recent of the two cases, Mr. Riley challenged the warrantless discovery of contraband growing in his greenhouse as a violation of the Fourth Amendment.<sup>398</sup> Unfortunately for Mr. Riley, while he had effectively screened the greenhouse from street-level view, he did not preclude members of the public from seeing into the greenhouse from an elevated position.<sup>399</sup> The Court found that his expectation of privacy did not extend to any elevated observations because he was found to have knowingly exposed this portion of his curtilage to such hypothetical viewers.<sup>400</sup> Perhaps even more damning in the circumstances of this case, Mr. Riley also left several panels off the roof of his greenhouse, which amounted to approximately ten percent of the surface area,<sup>401</sup> so that he was found to have assumed the risk that what was growing inside would be viewed by people traveling in airplanes in lawful airspace.<sup>402</sup>

The flaws in this approach, again, are much like those in the open field area. The Court declares any expectations of privacy unjustified without any basis in, and likely in opposition to, actual opinion; it forces the surrender of privacy expectations whenever some partial incursion into the allegedly protected space could be hypothesized; it relies on risk assumption and knowing exposure without substantiating facts relevant

395. 476 U.S. 207 (1986).

396. 488 U.S. 445 (1989).

397. *See Riley*, 488 U.S. at 450-52 (finding that if one leaves activities open for observation from an above-passing plane, so long as such a flight is lawful, this act would be construed as knowingly exposing those activities and surrendering any expectation of privacy); *Ciraolo*, 476 U.S. at 215 (holding that naked-eye aerial observation from an altitude of 1000 feet of a backyard within the curtilage of a home does not constitute a search under the Fourth Amendment).

398. *Riley*, 488 U.S. at 449.

399. *See id.* at 448 (describing Riley's greenhouse as being blocked from view by trees, shrubs, and his mobile home, while noting that some of the greenhouse was exposed to a police officer viewing it from the air).

400. *See id.* at 450-51 (holding that since helicopter flights were not uncommon at the altitude police viewed the greenhouse, Riley had no reasonable expectation of privacy in the greenhouse).

401. *Id.* at 448.

402. *See id.* at 450-51 (finding no reasonable expectation of privacy in areas viewable to the public with the naked-eye while flying).

to those concepts; and it excuses official non-compliance with important social norms.

It should therefore not be a surprise that a personal property model of the Fourth Amendment is more effective in producing outcomes consistent with our intuitions and social judgment, and it is capable of avoiding the various pitfalls of open fields and aerial surveillance cases. In addition, because the personality theory of property under the Fourth Amendment provides a consistent theoretical justification and specific delineation of rights and interests, the analytical robustness of this approach to open fields would also pertain to the aerial surveillance arena.

### c. Dog Sniffs and Thermal Imaging

In a slight shifting of gears, this final section simultaneously addresses two doctrinal aspects of the privacy theory that would not likely change drastically if the Fourth Amendment were instead informed by notions of property and personhood. Still, application of the propertized Fourth Amendment to dog sniffs<sup>403</sup> and thermal imagers<sup>404</sup> is useful to show how what may appear to be intuitively correct outcomes are better explained and justified by the property model than they are by privacy norms.

When presented with a claim that the warrantless inspection of an individual's luggage by a specially trained narcotics detection dog violated the Fourth Amendment,<sup>405</sup> the Court in *United States v. Place*<sup>406</sup> declined to decide whether the failure to secure a warrant was justified, or even if the officers had probable cause to engage in the intrusive behaviors.<sup>407</sup> Instead, the Court held that a dog sniff is not a search under the Fourth Amendment—without explicitly dealing with privacy expectations—based on the nature of the information collected and the level of intrusiveness entailed in the examination.<sup>408</sup> The information

403. See generally *United States v. Place*, 462 U.S. 696 (1983).

404. See generally *Kyllo v. United States*, 533 U.S. 27 (2001).

405. *Place*, 462 U.S. at 698-99.

406. *Id.* at 696.

407. See *id.* at 707 (failing to address probable cause because the police's actions did not constitute a search).

408. The Court reasoned that

A "canine sniff" by a well-trained narcotics detection dog . . . does not require opening the luggage. It does not expose non-contraband items that otherwise would remain hidden from public view, as does, for example an officer's rummaging through the contents of the luggage. Thus, the manner in which information is obtained through this investigative technique is much less intrusive than a typical search. Moreover, the sniff

collected counseled against declaring the sniff a search because it was limited to the presence or absence of contraband and revealed no other intimate details about the contents of the luggage.<sup>409</sup> The level of intrusiveness likewise militated against declaring the sniff a search because it was less invasive than opening the individual's luggage in order to search for the information available to the specially trained dog.<sup>410</sup>

While the outcome in this case may not be of pressing concern, the privacy-laden route the Court chose to take is. Only by reducing a privacy interest in luggage to a privacy interest in the odors that emanate from the luggage could the Court reject this Fourth Amendment claim outright.<sup>411</sup> The problem with privacy in this regard is that it focuses on reasonable expectations of privacy without offering any consistent analytical framework for determining the locus of privacy interests. Similarly, it is only because the dog sniff is arguably (although not necessarily) less intrusive than opening the luggage, which would certainly be a Fourth Amendment search, that it escapes constitutional regulation.<sup>412</sup> But the way the Court applies its privacy rationale allows intrusiveness analysis to obscure meaningful parallels between the actual dog sniff and the more intrusive means that would trigger Fourth Amendment scrutiny, and it allows the Court to treat the examination as a non-search just because the circumstances of the invasion could have been more severe.<sup>413</sup>

The Court's lone thermal imaging decision, *Kyllo v. United States*,<sup>414</sup> while invalidating the police practice as an impermissible warrantless search, proceeds upon the same two unhelpful privacy-based premises as *Place*.<sup>415</sup> First, the Court declared that thermal imaging applied to the home constitutes a search because of the intimate nature of

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discloses only the presence or absence of narcotics, a contraband item.

*Id.*

409. *See id.* at 707 ("This limited disclosure also ensures that the owner of the property is not subjected to the embarrassment and inconvenience entailed in less discriminate and more intrusive investigative methods.")

410. *Id.* at 707.

411. *See* *United States v. Place*, 462 U.S. 696, 707 (1983) (noting that the privacy interest in the bag was not violated by a drug sniffing dog).

412. *See id.* (focusing on the fact that police did not have to open the bag to detect the presence of narcotics).

413. *Id.*

414. 533 U.S. 27 (2001).

415. *See id.* at 32-40 (using a *Katz*-based privacy analysis to determine whether the police actions constituted a search).

the information collected.<sup>416</sup> Given that the imager gave officers access to information about the inside of the home, which they would not otherwise have had, and in light of the presumptive protection a home receives under the privacy approach to the Fourth Amendment, the information was deemed so sensitive and potentially intimate that the Fourth Amendment must come into play.<sup>417</sup> Second, the Court reasoned that the method of surveillance was so intrusive that it necessarily crossed the privacy line and would be considered a search.<sup>418</sup> The thermal imaging devices used in *Kyllo* affect such a deep intrusion in part because they were directed at a home.<sup>419</sup> But the Court also found that this type of intrusion is inconsistent with the Fourth Amendment privacy principle because it was achieved by reliance on technology not generally used by or available to the public and thus violated reasonable societal expectations.<sup>420</sup>

The use of privacy to deal with thermal imagers, while producing appealing results in the only decided case, is subject to the same analytical impeachment as it is when used to evaluate dog sniffs. The nature of the information inquiry is not conceptually rigorous enough to determine with precision the nature or locus of the privacy interest being protected. Just as in *Place*, where the Court attributed the privacy claim not to the luggage but to the odors,<sup>421</sup> the *Kyllo* Court could have ascribed the privacy interest not to the home, but to the waste heat it radiated.<sup>422</sup> The dissenting Justices in *Kyllo* argued this,<sup>423</sup> and obviously this analytical move would have caused the Court to rule the other way. The Fourth Amendment should not be so susceptible of such

416. *See id.* at 34 (“We think that obtaining by sense-enhancing technology any information regarding the interior of the home that could not be otherwise obtained without physical ‘intrusion into a constitutionally protected area,’ . . . constitutes a search . . .”).

417. *See id.* at 37 (“In the home, our cases show, *all* details are intimate details, because the entire area is held safe from prying government eyes.”).

418. *See id.* at 38 (“Limiting the prohibition of thermal imaging to ‘intimate details’ would not only be wrong in principle; it would be impractical in application, failing to provide ‘a workable accommodation between the needs of law enforcement and the interests protected by the Fourth Amendment.’”) (quoting *Oliver v. United States*, 466 U.S. 170, 181 (1984)).

419. *See id.* at 37 (citation omitted) (distinguishing between aerial photography of an industrial complex and aerial photography of a home, with the latter constituting “detecti[on of] private activities occurring in private areas”).

420. *Kyllo v. United States*, 533 U.S. 27, 34 (2001) (noting that the thermal image scanner used by police was not in use by the general public).

421. *See United States v. Place*, 462 U.S. 696, 707 (1983) (reasoning that the privacy interest in the luggage itself was not violated when the narcotics dog sniffed the bag).

422. *Cf. Kyllo*, 533 U.S. at 37-38 (refuting the government’s argument that heat radiating outside the home does not disclose significant information about the home).

423. *Id.* at 41.

manipulation and uncertainty in enforcement, but privacy actually invites its own abuse.

The level of intrusiveness prong is similarly no more defensible here than in *Place*. While thermal imagers are, at least until the Court takes the next imaging case, perceived to be so uncommon as to be beyond the scope of reasonable privacy expectations, their public ubiquity in the future would be enough to undermine the Court's rule to that effect.<sup>424</sup> But just as in *Place*,<sup>425</sup> that change or difference in the perceived depth of the intrusion would not automatically explain why the threat to privacy has diminished, nor why a fundamental right should be so conditioned on coincidental practical factors rather than explicit normative values.

The value of the personal property alternative to Fourth Amendment privacy in the context of dog sniffs and thermal imagers is that it better explains the outcomes we might intuitively prefer, and would lead to those outcomes by a less circuitous and analytically more coherent route. At the outset, one advantage of the property approach is that the personal informational property component of property for personhood under the Fourth Amendment is specifically designed to deal with intangible seizures of information such as these. It would therefore be easy to explicate the connections between the Fourth Amendment and the surveillance methods challenged, and a reviewing court would not have to stretch analogies between physical and non-physical invasions in a way that unduly narrows the rights respected in the latter scenario.

The personal informational property model of the Fourth Amendment does not rely on imprecise categories of information in order to decide which types of information represent protected interests, and general distinctions between degrees of intrusiveness are not conceptually relevant. Instead, the personal informational property model of the Fourth Amendment will rely on specific and verifiable considerations of the proximity of the information to matters of personhood, and will sidestep the intrusiveness inquiry in favor of assessing the impact on or harm to the individual's sense of self and her

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424. *See id.* at 34 (basing the rationale for finding a search unconstitutional partly on the use of thermal imaging equipment unavailable to the public at large).

425. *Compare* *United States v. Place*, 462 U.S. 696, 707 (1983) (finding no privacy interest in contents of bag violated when drug sniffing dog sniffed criminal defendant's bag), *with* *Kyllo*, 533 U.S. at 40 (finding privacy interest violated when police used a thermal imaging camera to detect heat emanating from defendant's home).

ability to project a continuing pattern of personal identity into the external world.<sup>426</sup>

If called on to decide the question presented in *Place*, using the personal informational property perspective, a court would have to ask whether luggage or information pertaining to luggage is the kind of thing or the kind of information with which a person's identity can be intimately associated, or whether luggage is itself important to constituting the self. It is rather clear that, unless the luggage contains separate and specific personal property, the luggage itself and its contents are ordinarily considered fungible property and thus less deserving of legal protection. Even with designer luggage, fancy outfits, and salon cosmetics, suitcases and the clothes and toiletries they typically contain are not in general considered matters essential to realizing personhood. While this is not invariably true, personal informational property both supports this as the default position and provides a basis for identifying the rare and exceptional case, whereas with privacy the categorization of the information leads to an all-or-nothing distributive allocation of interests.

Likewise, personal informational property's focus on harm to the individual as a consequence of interference with property, instead of abstract comparisons of relative intrusiveness, supports the outcome in *Place* because the interference with or loss of luggage rarely damages an individual's core identity or prevents his or her attainment of personhood status. I contend that no rational member of society would describe one whose luggage was lost by an air carrier as being less than a full person because of that loss, and we can glean from this an understanding that depriving a person of this kind of property does not invade the property of personhood. While avoiding all the complexity of the privacy model, personal informational property can resolve the dog sniff question in an explicit and theoretically coherent fashion.

If called upon to decide the question presented in *Kyllo* using the personal informational property perspective, a court would engage in these same two steps. It would assess the strength of the connection between the "thing," or information emanating from the "thing," and individual identity or self realization, and it would gauge the harm to the person that would result if the interest in property is invaded.

Personal informational property replicates the privacy-based Fourth Amendment's outcome in *Kyllo* because the house is one of the central

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426. See *supra* Part III.C.1-2 (describing personal informational property and its application to address weaknesses in Fourth Amendment jurisprudence).

objects that can define who we are as persons, and it is often the location of information and behaviors affecting our personal development and unfolding life history.<sup>427</sup> In the same vein, it is very easy to appreciate the severe impact on personhood entailed in taking away an individual's home, however modest or grand it may be, or in acquiring information produced therein. Thus, the personal informational property or the personhood model of the Fourth Amendment provides the same scope of protection as does privacy because the house and related information are central to personhood, but the protection is not conditioned upon such an impermanent factor as the public availability of sense-enhancing technologies and the analysis necessary to reach this conclusion is far less convoluted.

## V. CONCLUSION

This Article represents a concerted effort to substantiate a cascade of related claims. The Article proposes to show that a deep and immediate threat to cognitive liberty is posed by the non-consensual use of CCTs, and that a privacy-driven Fourth Amendment cannot maintain the cerebral zone of exclusion that our humanity, or our personhood, requires. An effort was then made to show that privacy was neither the first, nor the best, answer to the Fourth Amendment's considerable interpretive challenge and to suggest that a property-centered model of the Fourth Amendment, one which builds upon Professor Radin's theory of property for personhood and respects personal informational property, provides more consistent and more just protection in a wide range of surveyed circumstances. The point is that property norms produce better results, supply superior moral decision-making frameworks, and have stronger claims to constitutional heritage than the privacy model announced in *Katz*.

And it is upon striking that last blow, I hope, that *Katz* breathes its last breath. I launched this assault on the *Katz* doctrine because, in spite of some important and valuable revolutionary steps, privacy killed *Katz* and all else it offered the legal system because privacy proved capable of functionally undoing all of *Katz*'s progressive reform. It is because of privacy the fetish into which *Katz* has been transformed that there is an increasingly real possibility that the government can and will invade the solitude of the human mind and thereby destroy the sense of personhood that flows from identification with this inner cognitive landscape.

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427. Radin, *supra* note 50, at 978.

Respect for the value of that mental solitude and cognitive freedom led me to pursue the new personal property theory of the Fourth Amendment offered here as a way to defeat or disarm CCTs, but what I found along the way was a method for revitalizing the Fourth Amendment as an individual liberty provision, and a way to return the Fourth Amendment to its preferred position within the constitutional framework by restoring the links between the Fourth Amendment's freedom guarantees and our fundamental liberty interest in being persons who associate with and express ourselves through property. It is my great hope that this theoretical endeavor helps us become and remain complete, fully realized, and fundamentally free persons living in a society organized around a normatively and intellectually honest system of law.