

Naked in Front of the Machine: Does Airport Scanning Violate Privacy?

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I. INTRODUCTION

There is a fierce battle going on over the social and legal construction of new surveillance technologies that are rapidly becoming part of our daily lives. One such surveillance technology is full-body scanners, officially known as Advanced Imaging Technology (AIT).¹ Body scanners were deployed in airports across the United States in 2007.² By June 2013, the Transportation

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¹ We perceive the official name given to the technology as a discursive attempt to diffuse the privacy-related harms of body scanners and neutralize them. Accordingly, we use the popular reference to the technology as body scanners.

² At the time of writing there are approximately 800 body scanners in use in nearly 200 American airports. *See infra* Part II. Scanners were placed in additional locations, such

Security Administration (TSA) removed out of operation one type of scanner (the backscatter), which produces an x-ray image of the passenger's body.³ The remaining scanners produce a generic image of the body and of external objects attached thereto.⁴ The mass installation of body scanners means that our bodies are increasingly subject to a technologized gaze. This Article searches for the privacy implications of scanning technologies.⁵ We offer a novel approach that intertwines theories of privacy with theories of the human body. We locate the discussion at the intersection of emerging new technologies, national security, the social meaning of the human body, and privacy. While our analysis focuses

as courthouses in Colorado and Illinois, and several correctional facilities. *See AIT: Frequently Asked Questions*, TSA, <http://www.tsa.gov/ait-frequently-asked-questions> (last updated July 23, 2013). Outside the United States, scanners are used in some countries, such as Canada, the UK, Germany, and France, but their use was rejected in others, such as Italy, Finland, and the United Arab Emirates. *See Olga Mironenko, Body Scanners Versus Privacy and Data Protection*, 27 *COMPUTER L. & SECURITY REV.* 232, 233–35 (2011). For an official privacy analysis of body scanners in the European Union, see *Commission Communication to the European Parliament and the Council on the Use of Security Scanners at EU Airports*, ¶¶ 1, 50–59, COM (2010) 311 final (June 15, 2010) [hereinafter *EU Communication*].

³The TSA explained that the decision came after the supplier of the backscatter machines did not meet a congressional deadline to install a technological fix that would show only the generic image. *See Bob Burns, Rapiscan Backscatter Contract Terminated—Units To Be Removed*, TSA BLOG (Jan. 18, 2013, 8:07 PM), <http://blog.tsa.gov/2013/01/rapiscan-backscatter-contract.html>. The notice did not cite privacy or health concerns, but media reports added such reasoning. *See, e.g., Scott McCartney, TSA Pulls Plug on X-Ray Body Scanners amid Privacy, Health Concerns*, WALL ST. J. BLOG (Jan. 22, 2013, 12:02 PM) <http://blogs.wsj.com/middleseat/2013/01/22/tsa-pulls-plug-on-x-ray-body-scanners-amid-privacy-health-concerns/>. For a detailed account of the TSA's use of airport body scanners see generally *Passenger Screening Using Advanced Imaging Technology*, 78 Fed. Reg. 18,287 (Mar. 26, 2013) (to be codified at 49 C.F.R. pt. 1540), available at <http://www.regulations.gov/#!documentDetail;D=TSA-2013-0004-0001>.

⁴Burns, *supra* note 3.

⁵Body scanners raise additional social and legal issues, such as their health and safety implications. *See* discussion in the *EU Communication*, *supra* note 2, ¶¶ 60–75. For a critical discussion of health concerns framed within a Fourth Amendment analysis, see generally Rebekka Murphy, Note, *Routine Body Scanning in Airports: A Fourth Amendment Analysis Focused on Health Effects*, 39 *HASTINGS CONST. L.Q.* 915 (2012).

Another concern is religious sensitivities. For discussion, see, e.g., Colleen Deal, Comment, *Faith or Flight?: A Religious Dilemma*, 76 *J. AIR L. & COM.* 525, 544–45, 556 (2011) (analyzing the scanners' implications on the free exercise of religion, arguing that the government should consider less intrusive alternatives); Rohen Peterson, Note, *The Emperor's New Scanner: Muslim Women at the Intersection of the First Amendment and Full-Body Scanners*, 22 *HASTINGS WOMEN'S L.J.* 339, 349–58 (2011) (arguing that the government has not sufficiently considered the scanners' implications on Muslim women, which is framed as a privacy interest in adhering to modesty requirements). For a discussion of objections by Sikhs in the UK, see Dil Neiyar, *Sikh Concerns Delay Hand Search Plans at UK Airports*, BBC NEWS (June 30, 2010), <http://news.bbc.co.uk/go/pr/fr/-/1/hi/uk/8776146.stm>. We do not address these aspects here; neither will we discuss the decision-making process or the issue of costs of deploying the scanners.

on the specific case of airport body scanners, the principles are applicable to other data-gathering technologies which raise privacy concerns.

There are two main technologies for body scanning: millimeter wave and backscatter.⁶ Their intended function is to detect external objects attached to the body. The technologies have undergone some adjustments; for example, millimeter wave scanners now use Automated Target Recognition (ATR) software that produces a generic figure rather than the actual image of the passenger's naked body. The backscatter scanners, which do not have the ATR installed, were removed from operation in June 2013. Airport security authorities use the scanners to examine images of passengers for detecting explosives and weapons.

In a post-9/11 world, scanners are a technology at the service of national security. However, scanners not only expose nonmetallic objects that can be used as weapons, but also benign objects and bodily traits that passengers often wish to keep to themselves. The machines with the ATR, namely millimeter wave scanners that produce a generic image, mark amputations, prostheses, implants, piercings, and medical devices that are attached to the body, while the machines without the ATR, namely the backscatter scanners, show all of the above, plus surgery scars and genitalia. However, the ramifications of using body scanners are broader than these cases. The imaging technology examines our bodies in an equivocal way: it enables us to remain dressed while undressing us; the use of scanners redraws lines between a normal body and an abnormal body. Once it is the government that views its citizens' bodies,⁷ privacy is immediately at stake.

Current judicial and scholarly discussions of body scanners tend to assume that their use violates privacy, and then turn—too quickly, as we shall argue—to a balancing exercise under a Fourth Amendment analysis. In the course of this analysis, the harm to privacy is taken for granted but not articulated. However, serious balancing is futile when we lack the understanding of what is at stake on one side of the equation—that of privacy. The rush to balance is evident in a 2011 opinion by the District of Columbia (D.C.) Circuit Court of Appeals, which is currently the only case that has directly discussed body scanners. The case involved an administrative and constitutional challenge brought by the Electronic Privacy Information Center (EPIC) against the Department of Homeland Security (DHS) and the TSA.⁸ The court balanced the

⁶ See discussion *infra* Part II.A.

⁷ The scanners are currently applied to citizens and foreigners alike; hence we will leave aside the question of whether foreigners enjoy the same level of privacy protection as citizens.

⁸ See Elec. Privacy Info. Ctr. v. U.S. Dep't of Homeland Sec., 653 F.3d 1, 6 (D.C. Cir. 2011) [hereinafter EPIC v. DHS]; see also discussion *infra* Part II.D. There were some preliminary Freedom of Information Act petitions in the case, which we do not discuss here. For a critical comment, see generally David Gusella, *Violating Privacy in Private: How EPIC v. DHS Creates an Impossible Burden on Plaintiffs Trying To Demonstrate a Privacy Act Violation*, 53 B.C. L. REV. E. SUPP. 169 (2012).

interest in national security with an assumed harm to privacy, easily concluding that governmental measures outweigh the harm to privacy.⁹ Following the decision, the TSA initiated a rulemaking process.¹⁰ The unarticulated, *a priori* assumption of harm to privacy, we shall argue, renders a balancing exercise unconvincing. It is important to understand the nature of privacy violation even if the ultimate outcome of balancing between national security and privacy would grant more weight to national security. Such understanding might also enable more creative solutions to the privacy concerns at stake.

This Article wishes to pause where others rush. We argue that before turning to balancing and other doctrinal mechanisms to evaluate the

There is no consensus among scholars and commentators as to the conclusion of the legal analysis. For arguments that the use of scanners is constitutional, see, e.g., Douglas A. Fretty, *Face-Recognition Surveillance: A Moment of Truth for Fourth Amendment Rights in Public Places*, 16 VA. J.L. & TECH. 430, 440 (2011) (emphasizing passengers' consent to being scanned: "so long as travelers endure the process, the Fourth Amendment is not implicated"); Joshua S. Levy, *Towards a Brighter Fourth Amendment: Privacy and Technological Change*, 16 VA. J.L. & TECH. 502, 540 (2011) (arguing that "[u]nder current law, the constitutionality of body scanners in airports under the Fourth Amendment is an easy case," then arguing that this should not be the case, and suggesting a novel interpretation of the Fourth Amendment); William M. Bradshaw, Note, *Borderline: Why the Federal Government May Use Backscatter Technology To Search Vehicles and Containers at International Borders, but the Fourth Amendment May Block Its Use on Persons*, 44 CREIGHTON L. REV. 1357, 1358 (2011) (discussing the use of various scanning technologies at international borders, concluding that so long as the searches are routine, they are constitutional); Jennifer LeVine, Note, *Over-exposed? TSA Scanners and the Fourth Amendment Right to Privacy*, 16 J. TECH. L. & POL'Y 175, 188 (2011) (concluding that "it is most likely that the new technology does not violate the Fourth Amendment and will be found constitutional").

For arguments that the use of scanners is unconstitutional, see, e.g., Tobias W. Mock, *The TSA's New X-Ray Vision: The Fourth Amendment Implications of "Body-Scan" Searches at Domestic Airport Security Checkpoints*, 49 SANTA CLARA L. REV. 213, 248–49 (2009) (concluding that the use of bodyscanners as a primary search is unconstitutional, whereas their use as a secondary search is constitutional); Alexander A. Reinert, *Revisiting "Special Needs" Theory via Airport Searches*, 106 NW. U. L. REV. 207, 220–21 (2012) (concluding that the TSA's current policy violates the Fourth Amendment, but nevertheless, that such arguments are likely to fail in court); M. Madison Taylor, *Bending Broken Rules: The Fourth Amendment Implications of Full-Body Scanners in Preflight Screening*, 17 RICH. J.L. & TECH. 1, 33 (2010) (arguing that the TSA should use body scanners only upon an individualized suspicion); Brittany R. Stancombe, Comment, *Fed Up with Being Felt Up: The Complicated Relationship Between the Fourth Amendment and TSA's "Body Scanners" and "Pat-Downs,"* 42 CUMB. L. REV. 181, 210 (2012) (concluding that the use of scanners as a primary screening is unconstitutional, but that the use of ATR renders them constitutional); Andrew Welch, Note, *Full-Body Scanners: Full Protection from Terrorist Attacks or Full-On Violation of the Constitution?*, 37 TRANSP. L.J. 167, 184–98 (2010) (questioning the efficacy of the scanners and arguing that the government needs to apply less intrusive solutions).

⁹ *EPIC*, 653 F.3d at 10.

¹⁰ See Passenger Screening Using Advanced Imaging Technology, 78 Fed. Reg. 18,287 (Mar. 26, 2013) (to be codified at 49 C.F.R. pt. 1540).

constitutionality of the use of body scanners in airports, we ought to examine the unstated preliminary assumption that privacy is violated. We should better define the privacy interests that are at stake when we are instructed to raise our arms and pose between two giant blue boxes (backscatter scanner) or step inside a special booth (millimeter wave scanner), before entering an aircraft. This analysis is still valid after the TSA's announcement that it would be pulling the backscatter scanners out of airports, a decision that did not elaborate on the privacy implications of the scanners, thus leaving future policymakers without clear guidance. Accordingly, the discussion of the technology of body scanners also serves as a case study for figuring out the socio-legal context of new technological systems. In this sense, we follow the theoretical framework offered by Helen Nissenbaum, of "contextual integrity."¹¹ Contextual integrity seeks to identify the impact of a new sociotechnical system on existing, entrenched norms (social and legal) relating to the transmission of personal information within a specific context. However, we add an additional layer that emphasizes that unpacking theories of privacy is essential for such a task, alongside a contextual analysis.¹²

Part II locates the discussion within a *law and technology* research paradigm, briefly introduces the technology at stake, and sketches the timeline of the regulatory framework. We discuss the legal challenges brought against the TSA's policy thus far, with a focus on *EPIC v. DHS*.¹³ We show how the court assumed the privacy harm without articulating it, and argue that this is a flawed constitutional methodology.

In Part III, we attempt to articulate the privacy harm. We argue that passengers experience two dissonances when they are instructed to undergo scanning. The first, which we call the *dress/undress dissonance*, results from the conflicting messages that the State conveys as to bodily privacy: ordinarily, the State expects us to conceal our bodies, at least to some extent. This is the case, for example, with anti-nudity laws or with legal limitations on unwarranted searches.¹⁴ Via such rules, the law constructs, reflects, and reinforces social norms regarding bodily propriety. The airport context, by contrast, seeks to suspend these conventions: it is the State itself that requires us to expose our bodies to its gaze and subject ourselves to its visual inspection.

¹¹ See generally HELEN NISSENBAUM, *PRIVACY IN CONTEXT: TECHNOLOGY, POLICY, AND THE INTEGRITY OF SOCIAL LIFE* (2010) (offering a comprehensive model to assess the privacy implications of sociotechnological systems). For a political-contextual analysis of body scanners, see Eric Kula, Full-Body Scanners, Live Information and Rights in the Airport: A Theoretical Perspective on Information Circulation (presented at the 2011 American Political Science Annual Meeting, Sept. 1–4, 2011), available at <http://ssrn.com/abstract=1901878>.

¹² See Michael D. Birnhack, *A Quest for a Theory of Privacy: Context and Control*, 51 JURIMETRICS J. 447, 449 (2011) (reviewing NISSENBAUM, *supra* note 11).

¹³ 653 F.3d 1 (D.C. Cir. 2011).

¹⁴ See discussion *infra* Part III.A.

The second dissonance that passengers experience when their bodies are scanned is the *normal/abnormal dissonance*. In most contexts, the State conveys a message that it does not take account of its citizens' bodies, in the sense that it is blind to bodily diversity: physical shape and size, disability, race, gender, or sexuality are decidedly unnoticed and unrecorded by the government, due to egalitarian legal principles, as embedded in the Equal Protection Clause of the Fifth and Fourteenth Amendments and in specific pieces of legislation.¹⁵ Body scanners, by contrast, amplify physical differences. The scanning technology is based on detecting bodily anomalies. When scanners detect breast prostheses,¹⁶ implants,¹⁷ amputations, adults' diapers, urinal bags, intimate piercings, or body folds resulting from obesity, the passenger is required to undergo a further search, this time a physical one in the form of a thorough pat-down.¹⁸ Thus, these passengers are marked as abnormal and deviant. Although the technology is not meant to discriminate between bodies and people, its technological design and its use produce differential treatment that requires a nuanced analysis.

To this contextual analysis we add privacy theory. We conclude that body scanning harms privacy because it requires people to surrender their control over their own body. Unlike some accounts that focus on human gaze (the TSA agents') at our naked body or on the risk that the visual image produced by scanners will leak without the subject's consent,¹⁹ we argue that it is the very moment of a person's knowing that she is examined in a way that defies social conventions on body exposure and body normality that harms her privacy.²⁰

¹⁵ See discussion *infra* Part III.B.

¹⁶ See *Durso v. Napolitano*, 795 F. Supp. 2d 63, 65 (D.D.C. 2011). *Durso* involved a petition brought by a woman who had undergone a mastectomy following breast cancer treatment. *Id.* The petition was denied for lack of jurisdiction. See *infra* note 83.

¹⁷ See, e.g., *Ventura v. Napolitano*, 828 F. Supp. 2d 1039, 1039 (D. Minn. 2011) (involving a petition brought by Minnesota's former governor); *Roberts v. Napolitano*, 798 F. Supp. 2d 7, 9 (D.D.C. 2011) (involving a petition brought by a pilot with an artificial hip). Both petitions were denied for lack of jurisdiction. See *infra* note 83.

¹⁸ Pat-downs may also have the effect of marking bodies as abnormal—for example, on the basis of race. The *Chicago Sun-Times* reported that extra scrutiny is being dedicated to black women's hair. See Mary Mitchell, *When the TSA Wants To Check Your Afro for Security Reasons*, CHI. SUN-TIMES, Oct. 20, 2012, <http://www.suntimes.com/news/mitchell/15852017-452/when-the-tsa-wants-to-check-your-afro-for-security-reasons.html>.

¹⁹ See, e.g., LeVine, *supra* note 8, at 186–87 (“[T]he privacy violation occurs when the scan captures the images of a passenger's body.”).

²⁰ Eric Kula made a similar argument in analyzing EPIC's petition (prior to the decision). He pointed to the emphasis of both the TSA and EPIC on the final form of representation. See Kula, *supra* note 11, at 13. Other commentators pointed to harms such as humiliation in the examination itself and the subjective judgment of the TSA agents, especially when compared to the objective inspection of magnetometers. See, e.g., Mock, *supra* note 8, at 238–39. Yet another scholar observed that the actual intrusion of privacy is not the retention of the image, but the actual production of the image. See Taylor, *supra* note 8, at 15.

The external gaze is forced upon us and is internalized, so that for a few seconds, we no longer have control over our person.

The State attempts to diffuse these dissonances by technological, operational, discursive, and legal means. *Technologically*, the scanners blur faces, and now use only a generic outline of a human body. *Operationally*, the agent reviewing the image sits in a remote location and does not see the passenger; the State allows opting out from being scanned, though the alternative is to undergo a thorough—and often intrusive—pat-down. *Discursively*, the language that is applied to describe scanning presents it as an automatic, anonymized, universal, neutral, routine, and professional process. Scanners were euphemistically renamed Automated Image Technology to downplay the centrality of the visual inspection of the naked body. Additionally, the debate on the legitimacy of scanning is framed as a binary choice between national security and privacy. *Legally*, scanning is classified as an administrative search or as an exception, and in any case, national security easily trumps privacy. We conclude that the integrated measures indeed appease some of the privacy harms and other concerns, but they do not resolve the two dissonances we identify and discuss here, and thus do not undo the privacy harms.

II. THE TECHNOLOGY AND ITS LEGAL ENVIRONMENT

By the time this Article sees daylight, many readers will have already experienced their bodies being scanned as part of their air travel. In this case, we have the unusual opportunity to observe the process of technological deployment and the social and legal reception of the technology as it takes place. This intermediate period, until the use of body scanners reaches wide acceptance, if so, is a crucial one. We are now amidst a political and semiotic battle that takes place both behind the scenes and on stage: congressional hearings, legal processes, an administrative rulemaking process, media discussions, and perhaps most important—passengers' personal experiences in airports. The main process of the social construction of the technology (SCOT) takes place within this timeframe. SCOT is an analytical framework that insists on the social dimension of technology—its development, use, and reception.²¹

Viewing body scanners within this analytical framework rejects a deterministic approach of technology, according to which technology develops within a mysterious autonomous sphere, to the point that it can be personified and treated as if it were some independent entity.²² The analytical framework of SCOT holds that technology is not value-neutral: to the contrary, it holds that technology is loaded with values. Social values are an inseparable part of the

²¹ See, e.g., SHAPING TECHNOLOGY/BUILDING SOCIETY: STUDIES IN SOCIOTECHNICAL CHANGE 76–77 (Wiebe E. Bijker & John Law eds., 1992); THE SOCIAL SHAPING OF TECHNOLOGY 3–16 (Donald Mackenzie & Judy Wajcman eds., 2d ed. 1999).

²² See, e.g., KEVIN KELLY, WHAT TECHNOLOGY WANTS 269–74 (2010).

technology: values are designed into the technology to begin with,²³ or injected into the technology by a process of an ongoing social engagement with the technology.²⁴ The result is that technologies bear a normative meaning. The particular meaning of a certain technology might change over time, although once an initial closure is reached, in most cases, the battle is over.²⁵

Once we accept the premise that technological design is not only a technical process but has an important and inevitable social dimension, the door is open to insist on a technological design that takes into account the values that we cherish. This is one case of what Joel Reidenberg called *Lex Informatica*,²⁶ and Lawrence Lessig famously called *Code*.²⁷ Applied to privacy, this is the notion of Privacy by Design (PbD).²⁸ PbD is the rather simple idea—though not necessarily easy to apply—that privacy guarantees should be designed into the technology to begin with, *ex ante*, rather than trying to fix a technology by adding privacy patches, *ex post*, at which point it is more difficult and expensive. PbD has now won global attention;²⁹ it is encouraged by the Federal Trade Commission,³⁰ and the European Union is considering it (or more accurately, data protection by design, in European parlance) as a legal requirement.³¹

²³ For the value-based characteristic of technology, see HUMAN VALUES AND THE DESIGN OF COMPUTER TECHNOLOGY 1–6 (Batya Friedman ed., 1997); and in the context of the privacy implications of technology, see NISSENBAUM, *supra* note 11, at 4–6.

²⁴ Accordingly, we will pay attention also to the reception of the scanners and passengers' experiences. See *infra* Part II.C.

²⁵ Body scanners provide an interesting test for closure: passengers seem to have accepted the scanners, but as acceptance grew and opposition diminished, the government decided to pull out of airports the more invasive scanners. In other words, we were getting close to a social closure, but then the cards were reshuffled anew.

²⁶ See Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553, 555 (1998).

²⁷ See LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 6 (1999).

²⁸ The idea is usually attributed to Dr. Ann Cavoukian, Ontario's Information and Privacy Commissioner. See *About PbD*, PRIVACY BY DESIGN, <http://privacybydesign.ca/index.php/about-pbd/> (last visited June 23, 2013).

²⁹ See "Privacy: Generations," the 32nd International Conference of Data Protection and Privacy Commissioners Closes with a New Executive Committee and New Members, ILITA, <http://www.justice.gov.il/PrivacyGenerations/News/news18.htm> (last visited June 23, 2013); see also 32nd International Conference of Data Protection and Privacy Commissioners, Resolution on Privacy by Design, 2 (Oct. 27–29, 2010), <http://www.justice.gov.il/NR/rdonlyres/F8A79347-170C-4EEF-A0AD-155554558A5F/26502/ResolutiononPrivacybyDesign.pdf> (proposing to promote PbD initiatives globally).

³⁰ See FED. TRADE COMM'N, PROTECTING CONSUMER PRIVACY IN AN ERA OF RAPID CHANGE: RECOMMENDATIONS FOR BUSINESSES AND POLICYMAKERS 22–34 (2012), available at <http://www.ftc.gov/os/2012/03/120326privacyreport.pdf>.

³¹ See *Commission Proposal for a Regulation of the European Parliament and of the Council on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data (General Data Protection Regulation)*, art. 23, COM (2012) 11 final (Jan. 25, 2012).

Furthermore, once we acknowledge that technological design has a social dimension, the law, often ridiculed as desperately lagging behind technology, is re-empowered to address the technology. The law, both legislation and adjudication, reflects a nation's value judgment (at least this is the ideal of democratic countries). Thus, the law can insist on subjecting the use of new technologies to its scrutiny and it can impose limitations thereupon. As with all regulation, such intervention should be based on a careful evaluation; it is not always a wise avenue, and in some cases, it might fail. For example, online regulation is notoriously difficult due to the global dimension of the network and the ease with which malicious parties can relocate their activities.³² Accordingly, before instigating a new policy, we should carefully understand the technology, its design, and its operation.

Applying this analytical framework with the additional layer of the law to body scanners, we refuse to accept the technology as is, and search for the values that are reflected and reinforced by it, and for the interaction of the technology and the law. Importantly, the law's attitude to the technology is itself another element that shapes the social meaning of technology; it can approve or delegitimize it.

Accordingly, we begin with a brief introduction of the technology at stake and its capabilities, along with some indications of how it was received, and then turn to outline the legal authority to install the scanners in airports, and the timeline of the deployment itself. We summarize the few legal challenges thus far, and focus on the judicial balancing exercise, which, we argue, is partial, structurally biased, and hence flawed.

A. *The Technology and Its Design*

This Section briefly introduces the technologies at stake and their capabilities, and, applying the insights about the social meaning of technology, points to the sociotechnological decisions that are made in the process of the body scanners' design and use.

Two kinds of technologies have been deployed in airports and used as body scanners: millimeter wave and x-ray backscatter. Millimeter wave systems utilize nonionizing millimeter radio wavelengths in one of two forms. The first, a passive system, forms an image from natural radiation emitted by the body, with a rough body image and a clearer image of external objects.³³ An active system illuminates the human body with radio waves (short wavelength), which then bounce back to form a high resolution image of the body and external

³² See Peter P. Swire, *Of Elephants, Mice, and Privacy: International Choice of Law and the Internet*, 32 INT'L LAW. 991, 991–93 (1998). See generally Omer Tene, *Privacy Law's Midlife Crisis: A Critical Assessment of the Second Wave of Global Privacy Laws*, 74 OHIO ST. L.J. 1217 (2013).

³³ The TSA likens the image to a "fuzzy photo negative." See Brief for Respondents at 10, *EPIC v. DHS*, 653 F.3d 1 (2010) (No. 10-1157), available at http://epic.org/privacy/body_scanners/Body_Scan_DHS_Opposition_Brief.pdf.

objects.³⁴ The latter is used in American airports. The images produced are three-dimensional. Passengers are directed to step in a special booth, where the radio waves are emitted.

X-ray backscatter systems use a low level of x-ray beams that are projected onto the human body and measure the backscattered radiation.³⁵ The result is a two-dimensional image,³⁶ revealing details of the surface of the body and a high resolution image of any external objects.³⁷ Passengers are directed to stand between two large boxes and raise their arms above their head. The backscatter scanners were in use until mid-2013.³⁸

Both technologies are designed to detect external objects that are attached to the human body, close to the surface. The capability to detect nonmetal objects is the main advantage of body scanners over the familiar walk-through magnetometer metal detector gates. Importantly, the scanners see through clothes: an object in a pocket or underneath one's shirt or trousers will be spotted. The person is scanned without taking off his or her clothes. There is some dispute as to whether the scanners can detect liquid or powder.³⁹ The image produced by the backscatters shows the naked body, its size and shape. This image includes elements that are usually visible such as height or general physique, but can also show less visible features, such as amputations, body folds, or the kind, size, and shape of breasts and genitalia. For example, a transsexual person who has not undergone a sex reassignment surgery who appears to the human eye as a woman, will be seen by the scanners with male genitals.

At this point of technological development, the scanners only identify bodily anomalies and cannot interpret the nature of the external object, e.g., whether it is a gun, an electronic device, or an artificial hip, and a human review

³⁴ See DEP'T OF HOMELAND SEC., PRIVACY IMPACT ASSESSMENT UPDATE FOR TSA ADVANCED IMAGING TECHNOLOGY 3 (2011) [hereinafter TSA PIA], available at <http://www.dhs.gov/xlibrary/assets/privacy/privacy-pia-tsa-ait.pdf>; *Advanced Imaging Technology (AIT)*, TSA, <http://www.tsa.gov/traveler-information/advanced-imaging-technology-ait> (last updated July 23, 2013).

³⁵ See TSA PIA, *supra* note 34, at 3; *EU Communication*, *supra* note 2, ¶ 35(3); *Advanced Imaging Technology (AIT)*, *supra* note 34.

³⁶ The TSA describes the image as one that "resemble[s] chalk etchings." See Brief for Respondents, *supra* note 33, at 10.

³⁷ See an example provided by the TSA: *AIT: How It Works*, TSA, <http://www.tsa.gov/ait-how-it-works> (last updated May 22, 2013).

³⁸ See Burns, *supra* note 3.

³⁹ This capability implicates the efficacy of the scanners to detect raw materials of explosives, and is an important factor in a balancing or trade-off analysis. The D.C. Circuit Court of Appeals found that the scanners do detect liquids and powder. See *EPIC v. DHS*, 653 F.3d 1, 3 (D.C. Cir. 2011). *EPIC* disputed this finding. See Petition for Rehearing at 10, *EPIC*, 653 F.3d at 1 (No. 10-1157), available at http://epic.org/privacy/body_scanners/Petition%20for%20Rehearing.pdf.

is required.⁴⁰ Common objects that cannot be removed and are identified include prostheses, implants, medical devices such as a urinal bag, or piercings. According to a Privacy Impact Analysis (PIA) conducted by the TSA, the backscatter system can see also under the skin in some areas of the body.⁴¹ These capabilities mean that objects or materials hidden under body folds of fat people⁴² and in cavities are beyond the reach of the scanners, at least in their current stage of development.⁴³

This general description indicates that there are several crucial technological—and social—decisions to be made during the design and use of the scanners. Such decisions reveal the malleability and indeterminacy of technological design. Importantly, they also reveal the ways in which design can be used to either amplify or diffuse passengers' sense of harm to their privacy. One such decision is the *quality* of the image that the machine produces. The quality of the presentation can be downgraded so as to minimize the details presented on the screen, without compromising the actual detection of external objects. For example, after public criticism, the TSA added a fix that blurs faces.⁴⁴

A second sociotechnological decision is the *presentation* of image that the machine produces. One option, which was used in most of the scanners until they were withdrawn in June 2013, was to show the TSA agent the image of the passenger's body. A second option, applied in some scanners as of 2011,⁴⁵ is to use the ATR software, which produces an image of a generic person. If there is an external object, the image will show, for example, a spot on the generic leg.⁴⁶ The choice of the technological design has an operational implication. The TSA instructed that the agents reviewing the naked images should be in a remote location, so that they did not have direct contact with the person whose naked body they view on screen, but when the scanners have the ATR

⁴⁰Newer technologies have developed. *See, e.g.*, the so-called sniffing technology: Jenny Parker Smith, Comment, *Threatsense Technology: Sniffing Technology and the Threat to Your Fourth Amendment Rights*, 43 TEX. TECH L. REV. 615, 631–32 (2010) (discussing technology meant to detect biological, chemical, and nuclear threats by sniffing the air around passengers in the airport).

⁴¹*See* TSA PIA, *supra* note 34, at 3 (explaining that the backscatter technology “may in some cases reveal matter underneath and near the surface of the skin (for example, the bones of the shin or forehead”).

⁴²We consciously use the adjective “fat” rather than terms such as “obese,” because fat is the term that has been accepted in the field of fat studies as nonmedical and non-euphemistic. For elaboration see Yofi Tirosh, *The Right To Be Fat*, 12 YALE J. HEALTH POL'Y L. & ETHICS 264, 270 & n.11 (2012).

⁴³*See* Étienne Lombard, Comment, *Bombing Out: Using Full-Body Imaging To Conduct Airport Searches in the United States and Europe Amidst Privacy Concerns*, 19 TUL. J. INT'L & COMP. L. 337, 358–59 (2010) (listing vulnerabilities of body scanners). This is yet another relevant factor to assess the efficacy of the scanners to detect terrorists.

⁴⁴For the TSA's description of the blurring feature, see TSA PIA, *supra* note 34, at 6.

⁴⁵*See id.* at 2.

⁴⁶*See id.* at 5 (illustrations).

component, the reviewing agents are located near the machines and the passengers.⁴⁷ Additionally, the image or information produced by the scanners is not accessible to passengers. It is reasonable to assume that many of the passengers are unaware of the nature of the inspection that the scanners make possible or of the high resolution of the images. The result is that passengers are gradually accustomed to (yet another) technology whose use and operation they do not fully know or understand.

A third sociotechnological design decision relates to the *storage* of the image. The scanners can be designed so that the image is stored locally, stored in a central database, or not stored at all. Indeed, in 2010, the U.S. Marshals Service admitted it recorded images of 35,000 people who were scanned in a Florida courthouse (with blurred faces), and explained that this was done for training purposes.⁴⁸ The storage option has since been disabled from the scanners currently in use.⁴⁹ Moreover, the TSA explained to Congress that the machines are not networked,⁵⁰ and the TSA agents who review the images are not allowed to hold a camera or other recording devices.

The *semiotic* domain also plays a role in shaping the way scanning is perceived and experienced. Body scanners were euphemistically renamed Automated Imaging Technology, a term that downplays the centrality of the visual inspection of the naked body. This language presents scanning as an automated, anonymized, universal, neutral, routine, and professional process.

The social meaning of the technology does not take place in a void. The public debate about the legitimacy of scanning has been framed as a binary choice between national security and privacy.⁵¹ Such a binary formulation downplays the possibility of protecting both privacy and national security through different technological designs. This framing also leads to the seemingly self-evident conclusion that national security should trump privacy in this case.

Finally, the *legal* conceptualization of scanners also plays a role in diffusing the passengers' potential sense of harm to privacy. Scanning is classified as an administrative search because it is applied equally and routinely on all passengers. As such, it is considered an exception to the Fourth Amendment probable cause analysis.⁵²

The face blurring, use of generic figure, lack of passengers' access to their images, storage options, and the semiotic, discursive, and doctrinal framing of this technology are but a few of the more salient design decisions. Creative designers and the institutions that procure and deploy the scanners make many

⁴⁷ See *id.*

⁴⁸ See Declan McCullagh, *Feds Admit Storing Checkpoint Body Scan Images*, CNET NEWS (Aug. 4, 2010, 4:00 AM), http://news.cnet.com/8301-31921_3-20012583-281.html.

⁴⁹ See TSA PIA, *supra* note 34, at 5.

⁵⁰ See Reply Letter from TSA to Comm. of Homeland Sec. § 8 (Feb. 24, 2010), available at http://epic.org/privacy/airtravel/backscatter/TSA_Reply_House.pdf.

⁵¹ See, e.g., Smith, *supra* note 40, at 617; Welch, *supra* note 8, at 183–85.

⁵² See *infra* Part II.D.2 for an elaboration of the doctrinal analysis.

more minute decisions that accumulate to shape the machine as it is used and experienced. Thus, body scanners do not develop out of thin air. Rather, the scanners are planned and produced by human beings to meet governmental instructions. The commissioning party and the designers embed their values in every bit of software and hardware, and no less important, the scanners are experienced by human beings who have feelings, needs, and bodies.

B. *Timeline and Legal Authority*

Airport security has deserved much attention since the 1960s global wave of airplane hijacking.⁵³ Airport authorities have undertaken various security measures, often applying a multilayered approach.⁵⁴ A central component of such measures is the assurance that terrorists, explosives, or both will not enter a sterile area before boarding. Here, our focus is on the passengers rather than their luggage. A common security measure is to search the passengers, i.e., screening. Screening can be conducted in several ways⁵⁵: using the familiar metal detectors (the walk-through gate or the handheld wands), or a manual search, i.e., a physical inspection, with options ranging from a light frisk to a pat-down of various degrees of intensity, and ultimately a full-body strip search. Body scanners are the latest measure in this arsenal.

In the aftermath of 9/11, the Homeland Security Act of 2002 set the responsibility for civil aviation security with the TSA,⁵⁶ explicitly authorizing and requiring the screening of all passengers.⁵⁷ Accompanying federal regulations require that the screening take place before entering a sterile area.⁵⁸

In 2004, Congress empowered the TSA to develop detectors for nonmetal, chemical, biological, and radiological weapons.⁵⁹ The challenge was met. In 2007, the first body scanners were installed in several airports and applied as a secondary screening method (the primary method being metal detection, using magnetometers). The government then conducted a procurement process followed by field tests (pilot projects) in 2008–2009.⁶⁰ In 2008, the TSA

⁵³ See Welch, *supra* note 8, at 170–75 (surveying the history of airplane hijacking and governmental response).

⁵⁴ See *EU Communication*, *supra* note 2, ¶ 84 (“Security can be achieved only through a combination of approaches, supported by strong international cooperation and high quality intelligence.”); *Layers of Security*, TSA, <http://www.tsa.gov/about-tsa/layers-security> (last updated Jan. 26, 2013).

⁵⁵ For a concise survey of several methods, see Mock, *supra* note 8, at 217–22.

⁵⁶ See 6 U.S.C. § 202(1) (2012); 49 U.S.C. § 114(d) (2006); *id.* § 44901(a).

⁵⁷ See 49 U.S.C. § 114(e)(1) (authorizing screening); *id.* § 44901(a) (requiring screening).

⁵⁸ 49 C.F.R. § 1540.107(a) (2012).

⁵⁹ Intelligence Reform and Terrorism Prevention Act of 2004, Pub. L. No. 108-458 § 4013(a) (codified at 49 U.S.C. § 44925(a), (c)). The latter subsection authorized \$250 million for research, development, and the installation of such systems.

⁶⁰ See Brief for Respondents, *supra* note 33, at 4, 17.

conducted a PIA, which was later updated.⁶¹ The security need to detect nonmetal explosives deserved a boost in late 2009, after Umar Farouk Abdulmutallab (commonly referred to as the Christmas Day bomber or the “underwear bomber”) attempted to activate explosives hidden in his underwear on board a flight from Amsterdam to Detroit.⁶² In late 2010, the TSA implemented a new policy: body scanners moved to the front as a primary scanning method and the alternative manual search escalated from a light frisk to an enhanced pat-down.⁶³ In 2011, the TSA implemented the ATR technology in the millimeter scanners, which produces a generic image instead of the actual human figure. In January 2013, the TSA decided to cease the use of backscatters by mid-2013, and at the same time, initiated a rulemaking process, soliciting comments from the public.⁶⁴

The numbers have grown fast. In January 2011, there were 486 scanners in 78 airports throughout the United States.⁶⁵ By October 2012, approximately 800 scanners were installed in about 200 airports.⁶⁶ Interestingly, the quick installation of the scanners was accompanied by a change of name. The technology was initially referred to in a functional manner, as Whole Body Imaging, but later replaced with the more technical term of Advanced Imaging Technology, which, importantly, omits the reference to the body.

C. Experiencing the Scanners

The TSA’s 2010 policy, moving body scanners to the forefront as the primary search method and offering passengers the choice to opt out and be subject to an enhanced pat-down, met some public objection and extensive media coverage. There have been a few high profile acts of protest, including several online groups,⁶⁷ a National Opt Out Day on Thanksgiving in 2010,⁶⁸ a

⁶¹ See TSA PIA, *supra* note 34, at 2. The legal anchor for the PIA is 6 U.S.C. § 142(a) (appointment of a Privacy Officer), and § 142(a)(4) (power to conduct a PIA).

⁶² The reaction was global. See *EU Communication*, *supra* note 2, ¶ 5 (noting that several states speeded up the development of technologies capable of detecting nonmetallic and liquid explosives).

⁶³ The policy is set in unpublished instructions, under the title TSA Screening Checkpoint Standard Operating Procedures (SOP). See the district court’s comments in *Redfern v. Napolitano*, No. 10-12048-DJC, 2011 WL 1750445, at *4 (D. Mass. May 9, 2011).

⁶⁴ See Passenger Screening Using Advanced Imaging Technology, 78 Fed. Reg. 18,287 (Mar. 26, 2013) (to be codified at 49 C.F.R. pt. 1540).

⁶⁵ *Redfern*, 2011 WL 1750445, at *1.

⁶⁶ See *Advanced Imaging Technology (AIT)*, *supra* note 34.

⁶⁷ See, e.g., FLY WITH DIGNITY, <http://flywithdignity.org/> (last visited June 23, 2013); WE WON’T FLY, <http://wewontfly.com/> (last visited June 23, 2013).

⁶⁸ See Jeffrey Rosen, *The TSA Is Invasive, Annoying—and Unconstitutional*, WASH. POST, Nov. 28, 2010, at B1, available at <http://www.washingtonpost.com/wp-dyn/content/article/2010/11/26/AR2010112604290.html>.

pilot's public account of his experience,⁶⁹ a passenger who wrote the text of the Fourth Amendment on his chest and was subsequently arrested,⁷⁰ and in Germany, a nude protest in an airport, organized by the Pirate Party.⁷¹

Still, it seems that overall, support for the usage of scanners was larger than the criticism it drew. A Gallup poll conducted in January 2010, shortly after the Christmas Day bomber was arrested, found 78% approval of body scanners.⁷² Polls conducted in November 2010, shortly after the implementation of the 2010 policy, were somewhat inconsistent, with a general tendency of finding public approval for the scanners. A Zogby International poll found that 61% of Americans oppose full body scans and thorough pat-downs,⁷³ but a Washington Post–ABC News poll found that 64% support scanning and 50% think that enhanced pat-downs are not justified,⁷⁴ a CBS News poll found that 81% of Americans support the use of scanners.⁷⁵ A Fox News poll found that 61% prefer the scanners to pat-downs (with a slightly higher percentage for this preference among women).⁷⁶ An NPR–Thomson Reuters poll found that 23% of those surveyed said they would refuse to be scanned,⁷⁷ but in practice, it seems that the rate of passengers who opt out is much lower. A *New York Times*

⁶⁹ See Michael Roberts, *Pilot to TSA: "No Groping Me and No Naked Photos,"* LEWROCKWELL.COM (Oct. 18, 2010), <http://archive.lewrockwell.com/orig11/roberts-m1.1.1.html>. Roberts then filed a petition with the district court, which was denied for lack of jurisdiction. See *Roberts v. Napolitano*, 798 F. Supp. 2d 7, 12 (D.D.C. 2011).

⁷⁰ When directed to the body scanner at the Richmond International Airport, Aaron Tobey took off his shirt, exposing the message written on his chest. He was arrested on suspicion of disorderly conduct in a public place, a charge that was later dropped. He then sued various airport and TSA officials under 42 U.S.C. § 1983 for violation of his First, Fourth, and Fourteenth Amendment rights; with the exception of the First Amendment claim, all of the claims were dismissed due to the TSA's immunity. See *Tobey v. Napolitano*, 808 F. Supp. 2d 830, 831 (E.D. Va. 2011), *aff'd*, 706 F.3d 379, 380 (4th Cir. 2013).

⁷¹ See Kula, *supra* note 11, at 23–27.

⁷² See Jeffrey M. Jones, *In U.S., Air Travelers Take Body Scans in Stride*, GALLUP (Jan. 11, 2010), <http://www.gallup.com/poll/125018/air-travelers-body-scans-stride.aspx>.

⁷³ Hugo Martin, *Poll Finds 61% Oppose New Airport Security Measures*, L.A. TIMES BLOG (Nov. 23, 2010, 11:41 AM), http://latimesblogs.latimes.com/money_co/2010/11/new-poll-says-61-oppose-new-airport-security-measures.html.

⁷⁴ Jon Cohen & Ashley Halsey III, *Poll: Nearly Two-Thirds of Americans Support Full-Body Scanners at Airports*, WASH. POST, Nov. 23, 2010, <http://www.washingtonpost.com/wpdyn/content/article/2010/11/22/AR2010112205514.html>.

⁷⁵ Stephanie Condon, *Poll: 4 in 5 Support Full-Body Airport Scanners*, CBS NEWS (Nov. 15, 2010, 6:30 PM), <http://www.cbsnews.com/stories/2010/11/15/politics/main7057902.shtml?tag=contentMain;contentBody>.

⁷⁶ *Fox News Poll: Airport Body Scanners Preferred 3–1 over Pat-Downs*, FOX NEWS (Dec. 17, 2010), <http://www.foxnews.com/us/2010/12/17/fox-news-poll-airport-body-scanners-preferred-pat-downs/>.

⁷⁷ Scott Hensley, *Americans Say Security Checks Are a Bigger Health Concern than Flights*, NPR (Dec. 23, 2011, 8:55 AM), <http://www.npr.org/blogs/health/2011/12/22/144134785/americans-say-security-checks-are-a-bigger-health-concern-than-flights>.

report quoted officials stating that only 1% of passengers opted out and asked to be examined by a thorough pat-down rather than being subject to scanning.⁷⁸

One might argue that the public's acceptance of body scanners means that passengers' expectations are that they will be scanned; thus, under the common judicial test for privacy, there is no reasonable expectation to have privacy in the airport. However, the above data about the public's perception should be treated with caution. First, it illustrates the circularity of the reasonable expectations test: the fact that privacy is violated and is accepted as a matter of practice does not necessarily mean that the harm evaporates. People might accept it because they do not have a real choice, and the alternative pat-down is considered worse by most passengers. Second, it is unclear what passengers know and do not know about body scanning. *De facto* acceptance based on lack of knowledge about the kind and level of intrusion is meaningless.⁷⁹ Third, ignorance does not legitimize the harm: human rights are protected even when their bearers are unaware of their rights. Just as it is illegitimate to violate the dignity of an unconscious person, it is illegitimate to violate the right to privacy even if we are unaware that a violation occurs.

D. *The (Hidden) Judicial Conception of Privacy*

1. *Legal Challenges*

Courts have reviewed various security-related policies and screening procedures in the past, for example the identification requirement,⁸⁰ x-raying carry-on baggage,⁸¹ and the use of magnetometers.⁸² In all cases, courts approved the governmental measures. Several challenges to the TSA's 2010 body scanning policy were submitted to district courts, but were dismissed for lack of jurisdiction, as the law assigns the courts of appeals with exclusive jurisdiction for reviewing TSA orders.⁸³ The Supreme Court has not ruled on the matter directly. Thus far, the single most important challenge was a petition

⁷⁸ Scott Shane, *Administration To Seek Balance in Airport Screening*, N.Y. TIMES, Nov. 21, 2010, at A16, available at http://www.nytimes.com/2010/11/22/us/22tsa.html?_r=1.

⁷⁹ Although anecdotal, while presenting drafts of this paper, we found that most passengers who were subjected to body scanner screening were unaware of the images that the scanners produced. Thus, it is only when they learned about the nature of those images that their sense of the dissonances we describe below arose.

⁸⁰ See *Gilmore v. Gonzales*, 435 F.3d 1125, 1137–39 (9th Cir. 2006).

⁸¹ See *Sima Prods. Corp. v. McLucas*, 612 F.2d 309, 312–13 (7th Cir. 1980) (petition for review dismissed for lack of subject matter jurisdiction).

⁸² See *United States v. Aukai*, 497 F.3d 955, 955–56 (9th Cir. 2007).

⁸³ See 49 U.S.C. § 46110(a) (2006); *Blitz v. Napolitano*, 700 F.3d 733 (4th Cir. 2012); *Corbett v. United States*, 458 F. App'x 866 (11th Cir. 2012); *Ventura v. Napolitano*, 828 F. Supp. 2d 1039 (D. Minn. 2011); *Roberts v. Napolitano*, 798 F. Supp. 2d 7 (D.D.C. 2011) (the fact that petitioners are pilots rather than passengers does not affect jurisdiction); *Durso v. Napolitano*, 795 F. Supp. 2d 63 (D.D.C. 2011); *Redfern v. Napolitano*, No. 10-12048-DJC, 2011 WL 1750445, at *3 (D. Mass. May 9, 2011).

brought by EPIC in the D.C. Circuit Court of Appeals.⁸⁴ EPIC argued first, that the procedure of adopting the policy ran afoul of the Administrative Procedure Act,⁸⁵ second, that the policy violated several federal laws—the Homeland Security Act, the Privacy Act, the Video Voyeurism Prevention Act, and the Religious Freedom Restoration Act—and finally, that it violated the Fourth Amendment.⁸⁶

EPIC won only on the first, administrative procedure issue.⁸⁷ The court found that the TSA’s policy to install body scanners as a primary screening method was a new substantive rule, rather than just an interpretive rule or a general statement policy, and hence the TSA should have issued a notice and solicited comments prior to adopting the policy.⁸⁸ Accordingly, the TSA was instructed to conduct an orderly administrative procedure, which it has done in 2013. Despite the remand on the administrative point, the court refused to issue an injunction against the use of body scanners.⁸⁹

In the course of its administrative law analysis, the court commented in passing that “[d]espite the precautions taken by the TSA, it is clear that by producing an image of the unclothed passenger, an AIT scanner intrudes upon his or her personal privacy in a way a magnetometer does not.”⁹⁰ On examination of the substantive privacy issues, the court rejected EPIC’s arguments in their entirety.⁹¹ Regarding the argument that capturing passengers’ images is unlawful under the Video Voyeurism Prevention Act, the court found that lawful law enforcement activities are exempted.⁹² A second privacy argument was that the use of the body scanners violated the Privacy Act, but the court found that the Act applies only to governmental “systems of records,” namely databases, whereas the TSA does not store the images and does not maintain such a database.⁹³ The court acknowledged the TSA’s potential ability to re-identify passengers’ images, but since there was no evidence that the TSA has done so, the argument failed.⁹⁴ Moving on to a Fourth Amendment analysis, EPIC argued that the use of body scanners as a primary screening method is more invasive than necessary. Phrased in constitutional terms, the argument was

⁸⁴ See Petition for Review, *EPIC v. DHS*, 653 F.3d 1 (D.C. Cir. 2011) (No. 10-1157), available at http://epic.org/privacy/litigation/EPIC_v_DHS_Petition.pdf.

⁸⁵ EPIC first filed petitions with the TSA on behalf of thirty organizations, urging the TSA to undertake a rulemaking process to receive the public’s input. See *id.* at Exhibit 1; Brief for Petitioner at 22, 30, *EPIC*, 653 F.3d 1 (No. 10-1157), available at http://epic.org/EPIC_Body_Scanner_OB.pdf.

⁸⁶ See Brief for Petitioner, *supra* note 85, at 32–37.

⁸⁷ See *EPIC*, 653 F.3d at 6.

⁸⁸ See *id.* at 6–7 (rule not merely interpretive); *id.* at 7 (rule not a general statement of policy).

⁸⁹ *Id.* at 8.

⁹⁰ *Id.* at 6.

⁹¹ *Id.* at 8 n.11.

⁹² *Id.* at 8.

⁹³ *EPIC*, 653 F.3d at 8.

⁹⁴ *Id.*

about the lack of proportionality of the measures applied to solve the conflict between the security needs and privacy.

2. *Administrative Search and Balancing*

A brief doctrinal comment is in place.⁹⁵ The Supreme Court articulated the reasonable expectations test, which indicates whether a privacy interest is harmed.⁹⁶ The test has both a subjective, descriptive element—the expectation the person actually had at the time of the event at stake, and more importantly, a normative, purportedly objective element—whether the expectation is reasonable. However, as Orin Kerr aptly commented, “[a]lthough four decades have passed since Justice Harlan introduced the test in his concurrence in *Katz v. United States*, the meaning of the phrase ‘reasonable expectation of privacy’ remains remarkably opaque.”⁹⁷ The Fourth Amendment, which does not explicitly mention privacy, requires that a search can be conducted only if it is reasonable and is based on probable cause.⁹⁸ Given that there is no dispute that the screening is a *search* within the meaning of the Fourth Amendment,⁹⁹ the analysis should turn to the two requirements set in the clause: that the search is reasonable, that it is based on probable cause, or both. These two conditions should be met, otherwise the search is unconstitutional.¹⁰⁰

The Supreme Court carved out some exceptions regarding the probable cause prong of the Fourth Amendment, the administrative search doctrine being the one most relevant here.¹⁰¹ When a governmental search is routine, part of a general regulatory scheme, and applies equally to all passengers regardless of

⁹⁵ For a thorough discussion, see Reinert, *supra* note 8, at 220–21.

⁹⁶ *Katz v. United States*, 389 U.S. 347, 361 (1967) (Harlan, J., concurring).

⁹⁷ Orin S. Kerr, *Four Models of Fourth Amendment Protection*, 60 STAN. L. REV. 503, 504–05 (2007).

⁹⁸ The Fourth Amendment reads:

The right of the people to be secure in their persons, houses, papers and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

U.S. CONST. amend. IV.

⁹⁹ For discussion of this point, see Smith, *supra* note 40, at 627 (concluding that searching a person’s exterior is a search under the Fourth Amendment).

¹⁰⁰ If there is probable cause, then the search is deemed reasonable. *See, e.g.*, *Bailey v. United States*, 586 U.S. 1, 4 (2013) (quoting *Dunaway v. New York*, 442 U.S. 200, 213 (1979)) (“Fourth Amendment seizures are ‘reasonable’ only if based on probable cause.”).

¹⁰¹ Commentators have pointed to additional exceptions that might apply. We shall not delve into them here, as they all converge into a balancing exercise. *See, e.g.*, Bradshaw, *supra* note 8, at 1357–58 (discussing the “border search” doctrine, which allows routine, warrantless, suspicionless searches, without a showing of probable cause); LeVine, *supra* note 8, at 179 (discussing the exceptional circumstances and special needs exception to the probable cause requirement); Welch, *supra* note 8, at 182–83 (discussing the “critical zone” doctrine).

any specific suspicion, it is considered an administrative search, in which case there is no need to show probable cause.¹⁰² A typical example is a police roadblock to verify drivers' licenses.¹⁰³ An administrative search is nevertheless still subject to the first condition set in the Fourth Amendment, namely the reasonableness requirement. Courts have consistently interpreted the reasonableness requirement to be a matter of balancing. For example, in a 1985 airport search case, the Supreme Court stated that

what is reasonable depends upon all of the circumstances surrounding the search or seizure and the nature of the search or seizure itself. The permissibility of a particular law enforcement practice is judged by balancing its intrusion on the individual's Fourth Amendment interests against its promotion of legitimate governmental interests.¹⁰⁴

There are different judicial formulations of balancing. For example, in 2006, the Third Circuit applied other Fourth Amendment precedents to the context of airport searches in *United States v. Hartwell*.¹⁰⁵ Then-Judge Samuel Alito wrote: "Suspicionless checkpoint searches are permissible under the Fourth Amendment when a court finds a favorable balance between 'the gravity of the public concerns served by the seizure, the degree to which the seizure advances the public interest, and the severity of the interference with individual liberty.'"¹⁰⁶

Here, we need not delve into the various balancing formulations, as a common feature of all is the initial juxtaposition of the two prima facie conflicting rights and interests. In the case of airport screening, the two rivals are the governmental interest in protecting the public at large and the privacy harm to the searched individual.¹⁰⁷ The critique that follows is directed against the common judicial *application* of the balancing formulas, rather than their structure.¹⁰⁸ In a nutshell, we observe that courts tend to assume that privacy is harmed, without explaining how and why, with the result that the courts almost

¹⁰²For a judicial discussion of what is routine in this context, see *Tabbaa v. Chertoff*, 509 F.3d 89, 98 (2d Cir. 2007).

¹⁰³See *Delaware v. Prouse*, 440 U.S. 648, 663 (1979) (suggesting that such a roadblock would be permissible). However, a checkpoint that was primarily designed to detect evidence of criminal wrongdoing was not approved. See *City of Indianapolis v. Edmond*, 531 U.S. 32, 41–42 (2000).

¹⁰⁴*United States v. Montoya de Hernandez*, 473 U.S. 531, 537 (1985) (citation omitted) (internal quotation marks omitted).

¹⁰⁵436 F.3d 174 (3d Cir. 2006).

¹⁰⁶*Id.* at 178–79 (quoting *Illinois v. Lidster*, 540 U.S. 419, 420 (2004)).

¹⁰⁷Note the asymmetry of the juxtaposition, with the public on one side and an individual on the other. For a discussion of the distributive assumptions of such balancing, see generally Daphne Barak-Erez, *Distributive Justice in National Security Law*, 3 HARV. NAT'L SECURITY J. 283 (2012).

¹⁰⁸Reinert, *supra* note 8, at 223–24 (criticizing the balancing test in this context for its analytical and rhetorical bias).

immediately turn to examine the potentially diffusing measures, namely, a means-end fit examination. This is the case with the judicial treatment of body scanners.

The *EPIC v. DHS* court classified the use of body scanners as an administrative search that does not require an individualized suspicion.¹⁰⁹ The court cited a 2001 Supreme Court case, stating that the reasonableness of administrative searches “is determined by assessing, on the one hand, the degree to which it intrudes upon an individual’s privacy and, on the other hand, the degree to which it is needed for the promotion of legitimate governmental interests.”¹¹⁰ In other words, the court assessed reasonableness as a matter of balancing. The court then dismissed EPIC’s argument: “In view of the Supreme Court’s repeated refusal to declare that only the least intrusive search practicable can be reasonable under the Fourth Amendment, and considering the measures taken by the TSA to safeguard personal privacy, we hold AIT screening does not violate the Fourth Amendment.”¹¹¹

Under the administrative search doctrine, the court then engaged in a brief, and as we argue, a partial, balancing exercise: it first mentioned on the one hand the obvious security need to detect explosives of all kinds (nonmetal included), which it described as “acute.”¹¹² One would expect that the court would then explain the privacy interest at stake and the harm thereto, but this side of the scales was taken for granted. Recall the court’s earlier comment that “it is clear that by producing an image of the unclothed passenger, an AIT scanner intrudes upon his or her personal privacy in a way a magnetometer does not.”¹¹³ The court did not elaborate. Instead, on the other side of the scale it listed the measures undertaken by the government to protect passengers’ privacy: the distortion of the image,¹¹⁴ the deletion of the image as soon as the passenger is cleared, and finally, the alternative offered to passengers—opting out of the scanning in favor of a (thorough) pat-down.¹¹⁵

The court thus followed the accepted reasonableness-balancing test. This formulation, which abstains from defining the harm to privacy, assumes too much and is systematically flawed in that it reduces privacy to an almost always overridable right.

¹⁰⁹ *EPIC v. DHS*, 653 F.3d 1, 10 (D.C. Cir. 2011).

¹¹⁰ *Id.* (quoting *United States v. Knights*, 534 U.S. 112, 113 (2001)).

¹¹¹ *Id.* (citation omitted).

¹¹² *Id.*

¹¹³ *Id.* at 6.

¹¹⁴ This comment likely refers to face blurring rather than the use of ATR software that uses a generic figure, as the latter was operated only in 2011.

¹¹⁵ *Id.* at 10.

3. Deciphering the Court's Privacy Conception

What does this judicial framing of the balancing at stake reveal about the *EPIC v. DHS* court's understanding of privacy?¹¹⁶ In the absence of explicit statements, any discussion is up for debate. Our attempt is to discern the court's implicit conception of privacy, portraying it in the best light possible. The key to deciphering the court's privacy conception is in the conflict-diffusing measures, namely the governmental measures to protect passengers' privacy.

First, the distortion of the image: if this measure is viewed by the court as diffusing privacy harms, it indicates that the court considers the ability to link a face, and by extension, one's identity, with an image of a naked body to be harmful. Put differently, linkability is the key to deanonymize identity. However, on the operational side, blurring the face, and we can add the TSA's policy that the agent inspecting the images is located in a remote location, does not guarantee the anonymity of the passengers. First, agents, like any other human beings, gossip. Will all agents be able to withstand the temptation to communicate to each other about a famous celebrity, for example Angelina Jolie, when she is scanned?¹¹⁷ Second, the anonymity is partial to begin with, or as privacy scholars call it in other contexts, it is traceable.¹¹⁸ Passengers identify themselves with a boarding pass and a passport as they enter the security area of the airport. They are not again identified at the scanner, but their anonymity is momentary and can be easily reversed. Thus, it seems that it is not the risk of identification *per se* that bothers the court, but something else. Perhaps it is the association of the naked body with identifying information, such as one's face. Perhaps there is an assumption here that an image of a naked body that is not associated with a face is a less intrusive situation, both in the eyes of the agent viewing the images, and more importantly, in the eyes of the passengers, who know that the gaze at their bodies does not include their faces. To the extent that these are the court's assumptions and views of privacy, and to anticipate the discussion, we argue that privacy is not limited to the interaction between a human eye and our faceless, naked body. Rather, it is a matter of lack of control over one's self.

Second, the court pointed to the deletion of the images once the passenger is cleared. This indicates that the court considers the very existence of a database to raise privacy concerns. Indeed, many privacy laws are constructed around the idea of a database, perhaps even obsessed with the privacy risks associated with

¹¹⁶ *EPIC*, 653 F.3d at 10.

¹¹⁷ A congressional research report cited complaints by several women, who were told to go through the scanners multiple times, apparently due to their looks. See BART ELIAS, CONG. RESEARCH SERV., R42750, AIRPORT BODY SCANNERS: THE ROLE OF ADVANCED IMAGING TECHNOLOGY IN AIRLINE PASSENGER SCREENING (2012), available at <http://www.fas.org/sgp/crs/homsec/R42750.pdf>.

¹¹⁸ See A. Michael Fromkin, *Anonymity and Its Enemies*, 1995 J. ONLINE L. art. 4, ¶¶ 11, 14–18.

databases.¹¹⁹ Indeed, databases do pose potential risks, since if data is stored it is likely to serve additional functions, other than the original security one. This is a well-known phenomenon, known as function creep.¹²⁰ One way to deal with the problem is to impose legal constraints on the secondary use of data, namely prohibiting the use of data for a purpose other than that for which it was originally collected. This is the way the European data protection regime chose,¹²¹ and in specific cases, also American law.¹²² Another way to address the privacy risks associated with databases is to refrain from creating a database in the first place. The court's emphasis on the latter option is surely important, but it draws our attention to the fate of the data once collected, and away from the moment of collection: when the passenger is technologically stripped of his or her clothes, in front of the machine.

As other scholars have noted, the TSA's measures—and now also with judicial approval—assume that the main privacy harm is the production of the image of the naked body. However, as Madison Taylor aptly observed, “the photographs, like the full-body scan images, are fruits of the violation, not the actual violation.”¹²³ We shall return to the privacy harm in the next Part, attempting to articulate it more clearly. Accordingly, withdrawing from airports the backscatter scanners that produce the full naked images eases some of the privacy concerns, but the initial violation itself persists.

Third, the court placed much weight on the availability of the physical pat-down alternative. The court portrays this option as a choice that passengers have. This judicial emphasis indicates that the court holds a liberal view of privacy, which bases its arguments on consent. However, consent is a shaky basis in situations of unequal power and when the choice means giving up the exercise of the right to travel freely. The different conceptions of privacy in Europe and in the United States are evident here. James Whitman helpfully characterized the former's conception of privacy as based on dignity and the latter as based on liberty.¹²⁴ Accordingly, the Europeans are skeptical of consent in certain situations, such as in the employment context, health services, and similar situations where the data subject, to use European terms, hardly has a real choice. An extreme version of the American view would not second-

¹¹⁹ See, e.g., Michael Birnhack, *Reverse Engineering Informational Privacy Law*, 15 YALE J.L. & TECH. 24, 87 (2012) (arguing that the EU Data Protection Directive is constructed around a deep concern with databases).

¹²⁰ See, e.g., Kevin D. Haggerty & Richard V. Ericson, *The New Politics of Surveillance and Visibility*, in THE NEW POLITICS OF SURVEILLANCE AND VISIBILITY 3, 18–19 (Kevin D. Haggerty & Richard V. Ericson eds., 2006).

¹²¹ See Council Directive 95/46, art. 6(1)(b), 1995 O.J. (L 281) 31, 40 (EC) (“Member States shall provide that personal data must be: . . . collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes.”).

¹²² See, e.g., Privacy Act of 1974, 88 Stat. 1896 (codified as amended at 5 U.S.C. § 552(e)(1) (2012)).

¹²³ Taylor, *supra* note 8, at 15.

¹²⁴ See James Q. Whitman, *The Two Western Cultures of Privacy: Dignity Versus Liberty*, 113 YALE L.J. 1151, 1161 (2004).

guess the individual's behavior. However, for those who do not have much of a choice other than to travel by air, the choice between the scanner and the thorough pat-down is a Hobson's choice.¹²⁵ Some courts have acknowledged this problem, stating that the legality of airport screening does not depend on consent, and accordingly, have applied a balancing and proportionality test.¹²⁶

To sum up, this thought experiment, which reverse engineers the judicial formulation of the balancing test in *EPIC*, can teach us that the court places much weight on the human inspection of the naked body, perceives anonymity as a central pillar of privacy, is concerned with databases, and holds a liberal view that believes that choice, even if it is between bad and worse, diffuses any harm. This, we argue, is a partial and narrow view of privacy. While all these concerns are valid, privacy is more than the court's (assumed) perception thereof.

4. *Balancing with a Missing Variable*

Let us return to the judicial framing of the constitutional setting: the court placed national security on one side of the scales and described it as acute, and placed an unarticulated privacy right on the other side of the scales. The court did not elaborate on the latter, but it did conclude that certain measures diffuse any harm to privacy.

Thus, the judicial balancing exercise was performed with a strong interest on one side of the scales and an assumed but undefined harm on the other side. The alleged conflict between national security and privacy was diffused by turning to technological measures (face blurring, deletion of images) and administrative measures (offering pat-downs as an alternative). Playing on the geometrical metaphor of balancing, we can say that the court's setting of the constitutional conflict and its resolution is akin to placing a variable of infinite magnitude on one side of an equation, an unknown variable on the other side, and concluding that the former is greater than the latter, due to several additional factors.

It might be the case that the ultimate result and conclusion are correct. Namely, that the security interest outweighs privacy interests, and that the governmental measures do ease some of the privacy harms. However, a constitutional balance of such importance and magnitude should not assume

¹²⁵ Commentators have pointed to the shaky basis of implied consent in the context of body scanning in airports. *See, e.g.*, Lombard, *supra* note 43, at 354–55 (arguing that “the common air travelers’ ‘willing’ or voluntary submission to undergo a search fails to denote more than forced acceptance”); Mock, *supra* note 8, at 236 (there is no consent where an individual must elect between a governmental search and travel); Reinert, *supra* note 8, at 221–22 (concluding that consent is a weak and far-reaching ground to find airport searches constitutional).

¹²⁶ *See* *United States v. Aukai*, 497 F.3d 955, 960 (9th Cir. 2007) (“[R]equiring that a potential passenger be allowed to revoke consent to an ongoing airport security search makes little sense in a post-9/11 world.”).

that the privacy side of the scale is harmed without defining it. We need to better figure out the privacy harm, so that we can better evaluate whether the diffusing measures actually answer privacy concerns. Otherwise, the balancing exercise is too vague and abstract to perform its role as a proxy for reasonableness, as required by the Fourth Amendment.¹²⁷ This is the next step in our discussion, in which we first point to two dissonances caused by the use of body scanners, and then to a contextual-theoretical analysis.

III. TWO DISSONANCES

Body scanners reveal what is under our clothes. Some scanners (backscatters) produce an image of body contours and folds, genitalia, breasts, scars, prostheses, diapers and pads, and more. This image is very much akin to a black and white photograph of our naked body. Other scanners (millimeter wave) do not produce such an explicit image of the body's contours and surface, but alert whenever any bodily "anomaly" is revealed (e.g., adult diapers, implants, urinary bags, or prostheses), resulting in directing the passenger to undergo a thorough pat-down.¹²⁸ This fact renders the moment of being scanned as extraordinary and puzzling *vis-à-vis* our ordinary relationship with the State. This is an unusual moment because the law usually expects us to cover our bodies and avoid appearing naked in public; thereby it participates in ingraining in us dressing norms (the *dress/undress dissonance*). Moreover, the State routinely signals to its citizens that it is uninterested in specific bodily traits, as we are all equal before the law, whether we are fat or thin, disabled or able-bodied (the *normal/abnormal dissonance*). What makes scanners a difficult technology to grasp, then, is that it sees through our clothes and visually undresses us while we remain physically dressed.

If these dissonances are indeed part of the scanning experience, then we should conclude that passengers' privacy is harmed by airport scanning, because their reasonable expectation is that the State refrains from requiring them to subject themselves to a gaze that (technologically) strips off their clothes, and sustains the passengers' expectation that they remain dressed.¹²⁹ Passengers also reasonably expect that the Government sustains its disinterest in bodily traits. Privacy serves as a safety valve for such expectations.

Note that we do not argue that airport body scanning is unconstitutional: this conclusion can only be reached after careful balancing of the privacy harm with competing rights and considerations. Our purpose is to take a step back

¹²⁷ For additional criticism of the balancing in this context, see Taylor, *supra* note 8, at 26–27 (arguing that the balance is *a priori* inequitable and that judges place a thumb on the scale in favor of the government); Barak-Erez, *supra* note 107, at 304 (arguing that distributive considerations have been overlooked in the context of national security, namely choosing between harsh security measures that affect a selective basis or less harmful measures that affect a larger population).

¹²⁸ See discussion *supra* Part II.

¹²⁹ See *Katz v. United States*, 389 U.S. 347, 361 (1967) (Harlan, J., concurring).

and understand how and why exactly privacy is compromised by the technology of scanning. Such a detailed focus on the nature of the harm to privacy will facilitate a more convincing balancing. The airport is akin to an assembly line, in which passengers are the items that move from one point to another, and in which they, along with their luggage, are subject to continuous inspecting gazes. Scanners are the latest current innovation in this field of transportation.¹³⁰ Our discussion zooms in on this one element of the airport process. Part of the analysis that scanners produce is applicable to other parts of the airport security monitoring, and another part is unique to scanners.

We discuss the two dissonances, and then conceptualize them within a theoretical understanding of privacy as a concrete manifestation of human dignity, encapsulated in the notion of privacy as control.

A. *The Dress/Undress Dissonance*

*Nakedness in contemporary culture is a solo affair, or else it is sexual by virtue of the presence of a gazing second party.*¹³¹

As a result of eating the forbidden fruit, so the biblical story goes, Adam and Eve felt compelled to cover their intimate parts, or more accurately, parts that became intimate once they defied God's command. *Genesis's* narrative links this transformation in human experience of the body—the sense of shame that prompted the first two humans to cover themselves—to the ability for ethical judgment. Adam and Eve were transformed into beings who distinguish good from evil. This ability for moral evaluation was intertwined with their new impulse to hide their nakedness. Moreover, despite God's rage on the first humans that ate the fruit, God made leather garments for them to wear before expelling them from the Garden of Eden.¹³² Thus, the divine stance seems to be that having moral sensibilities comes along with creating boundaries between one's naked body and the gaze of others.

As this ancient story conveys, the convention that it is imperative to cover certain body parts is intrinsic to the human condition (although the question which parts should be covered varies across time and culture).¹³³ Contemporary social arrangements reflect this social fact. As members of society, we receive

¹³⁰ For a sociological account of the airport, see generally Kula, *supra* note 11.

¹³¹ Rob Cover, *The Naked Subject: Nudity, Context and Sexualization in Contemporary Culture*, 9 *BODY & SOC'Y*, Sept. 2003, at 53, 56.

¹³² *Genesis* 3:21 (King James).

¹³³ See generally Karen Tranberg Hansen, *The World in Dress: Anthropological Perspectives on Clothing, Fashion, and Culture*, 33 *ANN. REV. ANTHROPOLOGY* 369 (2004) (reviewing the cultural significance and habits of dress in different parts of the world, and the theoretical paradigms that anthropologists use to understand them).

constant messages that we must cover our bodies, that covering is pivotal and that the ways in which we cover ourselves matter.¹³⁴

Violating dressing and undressing conventions does not pass muster in contemporary society. When Janet Jackson's breast was exposed after Justin Timberlake ripped off her bustier during the 2004 Super Bowl halftime show, more than half a million viewers wrote to complain about the incident.¹³⁵ Indeed, the Federal Communications Commission (FCC) imposed a \$550,000 fine on CBS, which was then found to be unjustified by the Third Circuit (the Supreme Court denied certiorari),¹³⁶ but the significance of maintaining the dress/undress convention still played an important role in the judicial treatment of this case. Chief Justice Roberts, concurring in the denial of certiorari, doubted the network's argument that since the FCC has been tolerant to fleeting expletives before, it should also be tolerant to fleeting images. Images are much stronger than words, Roberts explained.¹³⁷ Recall that it was an image of a body part that according to convention must be covered. Millions of impressionable children saw it, Roberts commented.¹³⁸

Facebook has been censoring some photos of breastfeeding mothers, sometimes even shutting off their accounts, explaining that such photos violate

¹³⁴ See ANITA L. ALLEN, UNPOPULAR PRIVACY: WHAT MUST WE HIDE? 47 (2011) (discussing the dual function of covering the body, as both concealment and exhibition and urging to politicize the question of coercive dressing and undressing).

¹³⁵ See *Janet Jackson: Supreme Court Approves Super Bowl Ruling*, BBC NEWS (June 29, 2012, 12:41 PM), <http://www.bbc.co.uk/news/entertainment-arts-18651908>. For an academic discussion of the event, see generally Lawrence Wenner, *Recovering (from) Janet Jackson's Breast: Ethics and the Nexus of Media, Sports, and Management*, 18 J. SPORT MGMT. 315 (2004). As Iris Young explains, the boundaries of how much of the breasts can be exposed are political and value laden. See Iris Marion Young, *Breasted Experience: The Look and the Feeling*, reprinted in *THE POLITICS OF WOMEN'S BODIES: SEXUALITY, APPEARANCE, AND BEHAVIOR* 152, 156 (Rose Weitz ed., 2d ed. 2003) ("Cleavage is good—the more, the better—and we can wear bikinis that barely cover the breasts, but the nipples must be carefully obscured. Even go-go dancers wear pasties. Nipples are no-nos, for they show the breasts to be active and independent zones of sensitivity and eroticism.").

¹³⁶ See *CBS Corp. v. FCC*, 535 F.3d 167, 172 (3d Cir. 2008), *cert. granted*, 535 F.3d 167 (2009); *CBS Corp. v. FCC*, 663 F.3d 122 (3d Cir. 2011), *cert. denied*, 132 S. Ct. 2677 (2012).

¹³⁷ *FCC v. CBS Corp.*, 132 S. Ct. 2677, 2678 (2012). Roberts concurred in the denial of certiorari because the question became moot after the FCC clarified its policy.

¹³⁸ Apparently, sometimes it is the mere mentioning of certain body parts that raises shock and leads to severe sanctions. When Democrat Michigan House Representative Lisa Brown mentioned the word vagina in a discussion on abortion law reform ("Finally, Mr. Speaker, I'm flattered that you're all so interested in my vagina, but 'no' means 'no.'"), Republican representatives barred her from speaking on the floor, explaining that her remark was "offensive," "over the line," and failed to maintain decorum. One representative said that the word was so offensive that he didn't want to say it in front of women. See Christine Roberts, *Michigan State Rep. Lisa Brown Silenced After "Vagina" Comments*, N.Y. DAILY NEWS, June 15, 2012, http://articles.nydailynews.com/2012-06-15/news/32258989_1_anti-abortion-law-therapeutic-abortions-byrum.

the social network's obscenity policy.¹³⁹ In February 2012 about sixty mothers protested this policy in a "nurse-in" outside Facebook's headquarters.¹⁴⁰ In September 2012, Facebook shut down the *New Yorker's* page due to an Adam and Eve cartoon that allegedly violated the site's nudity policy because it showed Eve's nipples (the affair received the name "nipplegate").¹⁴¹

The law partakes in protecting the norms of appropriate body coverage not only through industry regulation, as we saw in the Janet Jackson case, but also by penal means. Exposing body parts that must be covered according to social convention is a criminal offense. In reading penal codes regarding forbidden bodily exposure, we observe the vague and overbroad language applied. In a manner atypical to criminal codices, which usually aspire for accuracy and specificity, in criminalizing body exposure, penal codes apply a language that relies on social conventions. The California Penal Code, for example, forbids any person from "expos[ing] his person, or the private parts thereof" willfully and lewdly.¹⁴² A reader of the penal code who is unfamiliar with local conventions regarding where the line is drawn between acceptable showing of the body (e.g., palms or the neck) and one that is considered an exposure of something so deeply intimate that it amounts to one's "person," or is offensively indecent, might be unable to decipher the law or abide by it.¹⁴³

The legislative reliance on conventions to communicate what is permitted and what is prohibited regarding bodily exposure conveys that the legislators imagine a legal subject that "just knows" which bodily exposure crosses the line. It is a line that is indeed hard to express accurately in a legal rule, but nevertheless, it is clear enough to every social actor. The State, then, participates in ingraining in us the notion that we should know better than to expose ourselves.

The incidents in which anti-exposure laws are enforced, as well as their very existence on the law books, have expressive importance.¹⁴⁴ Through laws

¹³⁹ See Asher Moses, *Facebook Ban Incurs "Lactivist" Wrath*, SYDNEY MORNING HERALD, Sept. 7, 2007, <http://www.smh.com.au/news/web/facebook-mothers-outraged-at-breastfeeding-ban/2007/09/07/1188783470779.html>.

¹⁴⁰ See *Facebook Nurse-In: 60 Breastfeeding Moms Protest at Facebook Headquarters*, HUFFINGTON POST (Feb. 15, 2012, 5:46 PM), http://www.huffingtonpost.com/2012/02/08/facebook-nurse-in-60-brea_n_1263532.html.

¹⁴¹ See Robert Mankoff, *Nipplegate: Why the New Yorker Cartoon Department Is About To Be Banned from Facebook*, NEW YORKER (Sept. 10, 2012), <http://www.newyorker.com/online/blogs/cartoonists/2012/09/nipplegate-why-the-new-yorker-cartoon-department-is-about-to-be-banned-from-facebook.html>.

¹⁴² CAL. PENAL CODE § 314 (West 2013).

¹⁴³ Furthermore, such forbidden exposure is grouped with sexual offenses such as rape for the purpose of relaxing evidence rules regarding the defendant's other sexual offenses. CAL. EVID. CODE § 1108(d)(1)(A) (West 2013).

¹⁴⁴ On the expressive role of law see generally Alex Geisinger & Ivan E. Bodensteiner, *An Expressive Jurisprudence of the Establishment Clause*, 112 PENN ST. L. REV. 77 (2007); Michael Ashley Stein, *Under the Empirical Radar: An Initial Expressive Law Analysis of the ADA*, 90 VA. L. REV. 1151 (2004).

and sporadic enforcement, the law participates in maintaining the boundaries between nudity and dress. And these laws *are* being enforced.¹⁴⁵ As a recent Maryland incident indicates, “exposing” a fake penis has led to indecent exposure charges against one Jacob Lee Bovia.¹⁴⁶ Exposing one’s intimate parts can also be considered illegal discrimination against those present: myriad cases on sexual harassment deal with acts of indecent exposure.¹⁴⁷

The spaces in which people can walk around naked in our society are well-defined and their boundaries strictly delineated: the nudist beach, the gym showers, or one’s own home.¹⁴⁸ Even in fitting rooms in stores we are allotted our own private space to be naked. When we expose our bodies for a cosmetic treatment or a medical examination, an unspoken convention renders the cosmetician or physician’s gaze functional or clinical, neutralizing any potential sexual meanings.¹⁴⁹ In the case of medical examinations, the prevailing ethical

¹⁴⁵ See, e.g., Andy Campbell, *Thomas Edwin March Naked at Beach, Holding Laptop, 3D Glasses, Beer, Cheeseburger: Police*, HUFFINGTON POST (Sept. 10, 2012, 1:32 PM), http://www.huffingtonpost.com/2012/09/10/thomas-edwin-march-naked-at-beach_n_1871144.html; *Man Arrested for Riding Bike Naked in Ohio Park*, AKRON BEACON J. ONLINE (Oct. 9, 2012), <http://www.ohio.com/news/break-news/man-arrested-for-riding-bike-naked-in-ohio-park-1.340468>; David Moye, *Chainsaw Naked: Lindsay Medd Stevens Arrested for Operating Power Tool with No Clothing*, HUFFINGTON POST (July 17, 2012), http://www.huffingtonpost.com/2012/07/17/lindsay-medd-stevens-chainsaw-naked_n_1680878.html; David Moye, *Marty Parrish Accused of Walking Naked on Florida Beach Boardwalk*, HUFFINGTON POST (Sept. 26, 2012), http://www.huffingtonpost.com/2012/09/26/marty-parrish-walking-naked_n_1916733.html; Rachel Quigley, *Police Arrest Woman, 35, Who Stripped Naked at Busy Intersection*, MAILONLINE (June 7, 2012), <http://www.dailymail.co.uk/news/article-2155865/Tracy-Mabb-35-took-clothes-exposed-genitals-Pompano-Beach-intersection.html>.

¹⁴⁶ *Man Gets Real Indecent Exposure Charge for Exposing Fake Genitalia*, HUFFINGTON POST (Mar. 7, 2012, 11:32 AM), http://www.huffingtonpost.com/2012/03/07/jacob-lee-bovia-arrested-exposing-fake-penis-maryland_n_1326558.html.

¹⁴⁷ See, e.g., *Meritor Savs. Bank v. Vinson*, 477 U.S. 57, 60 (1986) (plaintiff’s boss exposed himself to her, among other things); *Oncale v. Sundowner Offshore Servs.*, 83 F.3d 118, 118 (5th Cir. 1996), *rev’d*, 523 U.S. 75 (1998) (employees exposed their private parts to plaintiff).

¹⁴⁸ Even toddlers sometimes create discomfort in contemporary American society if they run around naked, and caretakers are expected to make sure that at least their genitals are covered. See, e.g., Associated Press, *Arizona Couple Sues Walmart After Being Accused of Sexual Abuse over Kids’ Bath-Time Photos*, N.Y. DAILY NEWS, Sept. 18, 2009, <http://www.nydailynews.com/news/national/arizona-couple-sues-walmart-accused-sexual-abuse-kids-bath-time-photos-article-1.405737>. As Amy Adler demonstrated, the sexual potential of the young person is already lurking as dangerous in its potential to draw pedophilic advances, or simply to raise immodest and inappropriate thoughts and fantasies. See Amy Adler, *Child Pornography Law and the Proliferation of the Sexualized Child*, in CENSORING CULTURE: CONTEMPORARY THREATS TO FREE EXPRESSION 228 (Robert Atkins & Svetlana Mintcheva eds., 2006).

¹⁴⁹ The Hippocratic Oath does mention secrecy that the physician owes to patients. See *Hippocratic Oath*, WEILL CORNELL MED. C. (2005), available at http://weill.cornell.edu/deans/pdf/hippocratic_oath.pdf.

convention is that patients are entitled to a chaperone, private facilities for undressing, gowns, and other means that reflect respect toward the social convention that dictates dress and creates a considerate, comfortable, and dignified atmosphere for the patient.¹⁵⁰ TSA agents, at least at this point, lack both the professional ethos and the public perception that their gaze is clinical and impersonal. Moreover, in such contexts we expose our bodies for our own needs: to promote health or beauty, whereas in the airport, our bodies are exposed to promote the general good, which only indirectly benefits us personally.

Is nakedness less politically charged than we might think? One might argue, against our argument, that the naked body merely reveals one's "pre-cultural" natural body, a body that by being stripped of clothes, is being momentarily positioned nearer to our animalistic nature (as opposed to our mental human capacities such as reasoning and language). Therefore, just as animals do not cover their bodies, being seen naked should mitigate our sense of shame rather than heighten it. This stance would stress that nakedness emphasizes that we are all fragile, organic beings, and that we pretty much have similar body parts—thus nakedness has an egalitarian and democratizing potential of positioning all humans on the same terrain, without dress, jewelry, or other insignia that reinforces hierarchies.¹⁵¹

Our reply is twofold. First, clothes cover the body and reconstruct it by either hiding or accentuating its contours, and by adding to bodily appearance rich significance (aesthetic, ideological, social) through the semiotics of fashion. Through these functions, clothes serve a central role in the cultural project of distancing humans from animals, minimizing humans' animalistic nature to the greatest extent possible. Many of our most basic social practices and seemingly automatic gestures (e.g., using utensils rather than hands for eating, or covering our nose and mouth when sneezing) revolve around taming bodily functions, thus camouflaging humans' close affinity with "raw" natural functions. From Plato to Descartes, the body has been understood as especially culpable in its potential to demote man to the status of animal.¹⁵² Restraining the body has been a central part of stressing the preeminence of man above a beast. Therefore, subjecting passengers to a gaze that exposes our nakedness, as body scanners do, has a destabilizing potential in stripping off the comforting

¹⁵⁰ See *Code of Medical Ethics Opinion 8.21—Use of Chaperones During Physical Exams*, AM. MED. ASS'N, available at <http://www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics/opinion821.page> (last visited July 23, 2013).

¹⁵¹ Another potentially equalizing effect of body scanning is enabling generally free citizens to empathize with those who undergo invasive searches on a regular basis, such as prisoners or people living in conflict zones, who need to go through security checkpoints in order to go to work or to school. We thank our student Mickey Zar for making this point in the Law & IT Colloquium at Tel-Aviv University.

¹⁵² For a classic account of the threat body represents in Western culture due to its affinity with nature, see Susan Bordo, *Introduction: Feminism, Western Culture, and the Body*, in *UNBEARABLE WEIGHT* 1, 1–42 (1993).

enfolding of culture around our person and demoting us to raw, animalistic, untamed, and uncivilized creatures.

Second, the naked body is far from being neutral or natural. It carries rich meaning as it is saturated with cultural signification. Nakedness in sites such as communal public showers, writes geographer Rob Cover,

is a practice of the Foucauldian confessional—by virtue of the revelation of an “inner” image of the body devoid of the significations of clothing and variously encoded otherwise in terms of musculature, genitalia shapes and sizes, chests and breasts, abilities, skin colouring, tan or sun exposure and so on.¹⁵³

Thus, “it is the site of a disciplined gaze—a gaze that is allegedly without interest in the sexual.”¹⁵⁴ In the next Section we discuss hierarchical cultural classifications of bodies. At this point, suffice it to note that there is much that can be learned and deciphered from one’s naked body, thus it should not be romanticized as a moment of return to innocence.

Back to the airport. When passengers are asked by security agents to step into the scanner or stand in front of it, legs apart, place their feet in precise spots, and assume a specific posture of arms raised above one’s head but not straight up, the setting conveys a strong message: they are expected to instantly doff their deeply ingrained inhibitions about being seen naked.¹⁵⁵ As passengers, they are expected to undo the nexus that law and culture make between the capacity for moral judgment and feeling that there are body parts that should be hidden from public view. Not only are passengers expected to suspend what culture tells them about the imperative to cover their bodies, but they are expected to suspend the messages usually conveyed by criminal and civil law regarding nudity. For a few seconds they must emotionally become merely flesh: inanimate matter that needs to be inspected because it might serve as a vehicle for dangerous weapons. The airport context subjects us to a one-way gaze, as we are unable to look back at the machine and the remote agents that watch us. This gaze is particularly disorienting because passengers remain physically dressed while they are virtually undressed. Since the stripping off is done with an invisible ray, the sense of loss of control and disorientation might be heightened.

The covert message that the State conveys, then, is that in those few seconds of scanning, the body is rendered mere flesh in the eyes of those who

¹⁵³ See Cover, *supra* note 131, at 59.

¹⁵⁴ *Id.*

¹⁵⁵ The process of shedding of items that constitute our appearance (and therefore our social persona) as civilized and well groomed begins before stepping into the scanner. Passengers are asked to take off their shoes and remove their belts, jewelry, and head wraps. Taking off these seemingly small items might literally and symbolically dismantle one’s composed posture and have a destabilizing effect.

gaze at us, without any social or cultural significance.¹⁵⁶ But, as Cover commented, the naked body is “always already represented and constrained by codes of behaviour, contexts, differentiation from the clothed body, loose significations and cultural rituals.”¹⁵⁷ Thus it is not that the State requires passengers to agree to *be* naked or to be seen naked; rather, the State places passengers in a situation in which, whether they like it or not, they *do* naked—they perform their nudity as they are being stripped of their clothes by means of technological imaging.¹⁵⁸

Agreeing to be seen naked, or to do naked, is decidedly not a benign, everyday experience for us, and the law is a significant agent in reinforcing our reluctance to be seen naked.¹⁵⁹ Airport body scanning, in sum, confronts passengers with an unfamiliar and unexpected requirement that they subject themselves to a stripping gaze. This unexpectedness is a result of the dissonance between the regular socio-legal requirement to dress and the airport security requirement to (virtually) undress. As we show in the next Section, another dissonance that passengers experience during scanning is between being treated by the State as equal—bodily differences notwithstanding—and being marked due to bodily traits that are considered abnormal.

B. *The Normal/Abnormal Dissonance*

*[S]urveillance contributes to reinforcing existing power relations rather than challenging them.*¹⁶⁰

Our culture constantly classifies bodies along an axis of normality and abnormality. Messages about the desired and normative bodies on the one hand, and the bodies that should be corrected, hidden, or considered embarrassing or

¹⁵⁶ Another interesting avenue to explore in this context is whether there are class differences between passengers and TSA employees. Middle or upper-middle class passengers may be accustomed to exposing their bodies only by choice and only to educated and trained professionals, such as physicians or masseurs. Thus the airport scanning context may create unease in its exceptionality, at least for this group: stripping is done in front of agents who earn less and might be less educated than the passengers. We are grateful to Anita Allen for making this observation in a conversation.

¹⁵⁷ Cover, *supra* note 131, at 53.

¹⁵⁸ On performance as a helpful concept for understanding embodied practices, see JUDITH BUTLER, *GENDER TROUBLE: FEMINISM AND THE SUBVERSION OF IDENTITY* 128–41 (1990).

¹⁵⁹ See, e.g., Levy, *supra* note 8, at 503. Levy proposes a bright line rule for privacy violations regarding the body: any search that looks within the body would be forbidden under the Fourth Amendment. *Id.* at 533. Similarly, any usage of technological means to inspect the body beyond the inspector’s eyes would be considered harm to privacy. *Id.* at 536. We concur.

¹⁶⁰ Hille Koskela, “*Cam Era*”—*the Contemporary Urban Panopticon*, 1 *SURVEILLANCE & SOC’Y* 292, 301 (2003).

unappealing on the other hand, are ubiquitous.¹⁶¹ Commercial ads and magazines' lifestyle columns present ideal images of the bodies to which we should all aspire.¹⁶² The gazes of doctors, sexologists, clerics, teachers, social workers, physiotherapists,¹⁶³ gym instructors, employers, and potential intimate partners classify our bodies as either normal or deformed, deviant, and in need of correction. As Foucault described:

The judges of normality are present everywhere. We are in the society of the teacher-judge, the doctor-judge, the educator-judge, the "social worker"-judge; it is on them that the universal reign of the normative is based; and each individual, wherever he may find himself, subjects to it his body, his gestures, his behaviour, his aptitudes, his achievements.¹⁶⁴

Our social and physical world is organized in a way that provides numerous and ongoing reminders to some of us about our bodily inferiority. People using wheelchairs, for example, often face accessibility barriers to schools, restaurants, and many other venues. They might also be mistakenly treated as feebleminded just because they use a wheelchair.¹⁶⁵ Fat people cannot find clothes in regular stores, cannot fit in the airplane seat, and are expected to do almost anything to lose weight, or at least to cover their body and hide their excess fat, for it is both shameful and not aesthetic.¹⁶⁶ These groups face

¹⁶¹ See generally ABIGAIL C. SAGUY, WHAT'S WRONG WITH FAT? (2013) (critiquing the moral panic against fat bodies); THE ROUTLEDGE QUEER STUDIES READER (Donald E. Hall & Annamarie Jagose eds., 2013) (surveying theoretical approaches to bodies sexually abnormal); KENJI YOSHINO, COVERING: THE HIDDEN ASSAULT ON OUR CIVIL RIGHTS (2006) (analyzing the social demands from minorities to convert, pass, or cover, and suggesting a civil rights framework to protect against such pressures).

¹⁶² There is myriad literature on cultural messages regarding normal or ideal bodies. See generally Daniel Agliata & Stacey Tantleff-Dunn, *The Impact of Media Exposure on Males' Body Image*, 23 J. SOC. & CLINICAL PSYCHOL. 7 (2004); Anne E. Becker, *Television, Disordered Eating, and Young Women in Fiji: Negotiating Body Image and Identity During Rapid Social Change*, 28 CULTURE MED. & PSYCHIATRY 533 (2004) (analyzing the relationship between media images of "ideal" bodies and eating disorders); Shelly Grabe et al., *The Role of the Media in Body Image Concerns Among Women: A Meta-analysis of Experimental and Correlational Studies*, 134 PSYCHOL. BULL. 460 (2008).

¹⁶³ See Michal Hoffman, *Bodies Completed: On the Physical Rehabilitation of Lower Limb Amputees*, 17 HEALTH 229, 235 (2013) (finding that physiotherapists encourage patients to pass as able-bodied, sometimes at the expense of functionality and comfort in movement).

¹⁶⁴ See MICHEL FOUCAULT, DISCIPLINE AND PUNISH 304 (Alan Sheridan trans., Vintage Books 2d ed. 1995) (1977).

¹⁶⁵ See Linda McClain et al., *A Qualitative Assessment of Wheelchair Users' Experience with ADA Compliance, Physical Barriers, and Secondary Health Conditions*, 6 TOPICS IN SPINAL CORD INJ. REHABILITATION, Summer 2000, at 99, 112; Paul K. Longmore, *Uncovering the Hidden History of People with Disabilities*, 15 REV. AM. HIST. 355, 359 (1987).

¹⁶⁶ See Tirosh, *supra* note 42, at 279–80.

discrimination in the workplace,¹⁶⁷ prejudice and stigma in social encounters (such as in the dating scene), and to the extent that they are unable to rehabilitate their bodies and bring them back to “normal,” they are expected to hide their mark of shame.¹⁶⁸

Modern legal principles of liberty and equality, however, entail that the State disregards such bodily differences. Everyone is equal before the law, bodily traits notwithstanding. In fact, this equalization of bodies can be described as the most significant achievement of the main revolutions and of Enlightenment ideas.¹⁶⁹ Historically, achieving equality before the law has meant, to a great extent, that bodily differences would ideally not matter for the State—that they would be erased from its visual frame.¹⁷⁰ Thus, in contemporary liberal regimes one’s race, sex, gender, sexual orientation, birthplace, age, or physical (dis)ability do not determine one’s legal status (except when taking note of one’s physical traits serves to achieve substantive equality, as in the case of affirmative action, or when the State allocates disability benefits by social insurance).¹⁷¹

Under the gaze of body scanners, the governmental indifference to our bodily difference dissipates. Airport body scanning creates an event in which one’s bodily abnormality becomes salient in two ways. *First*, some bodies are unfit for scanning and need to undergo a thorough physical search. This is the case, for example, for passengers with prostheses, diapers, or urinal bags. Being unfit for the mainstream technology re-marks those bodies as deviant and inferior. *Second*, for passengers whose bodies are culturally classified as abnormal, the sense that their unclothed body is gazed at by a government-authorized agent might amplify their internalized everyday feeling of bodily inferiority.¹⁷² As most of us know from our own experience, wearing clothes

¹⁶⁷ See DEBORAH L. RHODE, *THE BEAUTY BIAS: THE INJUSTICE OF APPEARANCE IN LIFE AND LAW* 23–44 (2010) (surveying forms of appearance-based discrimination in different social contexts).

¹⁶⁸ See Karen Throsby, *Happy Re-birthday: Weight Loss Surgery and the “New Me,”* 14 *BODY & SOC’Y*, Mar. 2008, at 117, 127 (finding that people undergoing weight loss surgery often hide this fact and pretend to have lost weight through dieting).

¹⁶⁹ See IRIS MARION YOUNG, *JUSTICE AND THE POLITICS OF DIFFERENCE* 156–57 (2011).

¹⁷⁰ See CHARLES W. MILLS, *THE RACIAL CONTRACT* 53 (1997) (arguing against the disincarnate political theory of the orthodox social contract, in which “the body vanishes, becomes theoretically unimportant”); CAROLE PATEMAN, *THE SEXUAL CONTRACT* 222–23 (1988) (criticizing the false perception that social contract theories promise equality to everybody, with no significance to bodily difference); KAREN SÁNCHEZ-EPPLER, *TOUCHING LIBERTY: ABOLITION, FEMINISM, AND THE POLITICS OF THE BODY* 1–8 (1993) (discussing the tension between the American constitutional rhetoric by which legal subjects are of equally disembodied personhood, and the actual unequal application of civil rights to those whose bodies were defined inferior, such as women and slaves).

¹⁷¹ See Age Discrimination in Employment Act of 1967, 29 U.S.C. §§ 621–34 (2006); Title VII of the Civil Rights Act of 1964, 42 U.S.C. §§ 2000e–2000e17 (2006); Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101–213.

¹⁷² Journalist Jeffrey Goldberg reported that in a conversation with a TSA agent, the latter repeatedly referred to the Backscatter scanner as “The Dick-Measuring Device.” See

manages to somewhat mitigate our sense of bodily abnormality (e.g., dressing in a way that hides our extra pounds, covers scars, or camouflages other impairments). Subjecting ourselves to a gaze that exposes our body underneath our clothes might therefore be a moment of emotional distress due to our sense that we are stripped of the semiotic shields that we put on in order to be able to walk around in the social world without feeling that our bodily deficiencies are exposed for all to see. In the paragraphs that follow, we elaborate on these two forms of harm to privacy.

Not every body (we deliberately do not use “everybody”) can go through airport scanners. Some bodies are unfit for scanning. The scanners’ design reflects the designers’ reliance on a notion of prototypically “normal” bodies.¹⁷³ The scanners cannot detect metal or other materials as such. Rather, they help detect “anomalies.”¹⁷⁴ Thus, they are designed for a body of a person that can stand up and raise his or her arms; a body to which no prostheses are attached. It is a body in which bladder and colon are within one’s control, thus it is in no need of diapers. Any body that deviates from these characteristics is unfit for scanning. Individuals whose bodies challenge the existing scanning technology are required to subject themselves to a thorough manual examination, which involves the TSA agent touching their skin surface, including intimate parts such as the inside of their thighs and their buttocks. Passengers report even more intimate touching.¹⁷⁵

Jeffrey Goldberg, *For the First Time, the TSA Meets Resistance*, ATLANTIC (Oct. 29, 2010), <http://www.theatlantic.com/national/archive/2010/10/for-the-first-time-the-tsa-meets-resistance/65390/>.

¹⁷³ Other visual inspection technologies in which the State gazes at its subjects have similar exclusionary effects. See, e.g., Koskela, *supra* note 160, at 298 (discussing surveillance in urban spaces as a means to exclude “the Other”); *id.* at 300–01 (surveillance technology reflects fears about populations regarded as different, monitoring groups whose visual appearance is interpreted as deviant).

¹⁷⁴ *TSA Oversight Part I: Whole Body Imaging: Hearing Before the Subcomm. on Nat’l Sec., Homeland Def. & Foreign Operations of the H. Comm. on Oversight & Gov’t Reform*, 112th Cong. 73–74 (2011) (statement of Fred H. Cate, Director, Center for Applied Cybersecurity Research, Indiana University).

¹⁷⁵ The ACLU received complaints from passengers who felt that the searches were invasive, punitive, and humiliating. A substantial number of the complaints came from people with medical conditions. For specific stories, see *Passengers’ Stories of Recent Travel*, ACLU, <http://www.aclu.org/passengers-stories-recent-travel/> (last visited Oct. 26, 2013). Other reported incidents include a passenger groping a TSA agent, arguing this was a way to protest her own sense of being groped. Meena Hart Duerson, *Carol Jean Price Accused of Groping TSA Agent, Florida Woman Says Just Demonstrating the Treatment She Received*, N.Y. DAILY NEWS, June 19, 2012, <http://www.nydailynews.com/news/national/carol-jean-price-accused-groping-tsa-agent-florida-woman-demonstrating-treatment-received-article-1.1098521>; see also Lauri Apple, *Woman Arrested for Grabbing TSA Agent’s Boobs*, GAWKER (July 16, 2011), <http://gawker.com/5821894/woman-arrested-for-grabbing-tsa-agents-boob>). A female passenger’s shirt was pulled off during a pat-down, exposing her breasts. See Kevin Underhill, *TSA Settles with Woman Whose Top Was Pulled Down*,

Thus, when the scanning machine does not produce a green light, it indicates that it cannot produce a reliable image of a specific body. At that moment, the passenger is labeled as abnormal, experiencing again what social norms about bodily normality already remind him or her on a daily basis. The very requirement that they step outside of the scanner and be searched differently marks such individuals as deviant in the eyes of others (TSA agents and fellow-passengers alike), and themselves.

But this badge of exceptionality that is produced by being labeled unfit for the routinized scanning is not the only damage caused. Many people—perhaps most people—have some sense of inferiority and abnormality regarding some aspect of their body that they manage to conceal (at least partly) with clothes or other accessories, such as a wig, but which is then exposed by the scanner. People cover scars, for example, for they may mark diseases, surgeries, or accidents. People who are considered overweight certainly carry such sense of shame and often also responsibility for their extra pounds, trying to conceal their folds and curves through clothes.¹⁷⁶ Women tend to feel less at ease with their appearance and are more prone to feel vulnerable under inspecting gazes.¹⁷⁷ The image produced by scanners exposes the exact contours of their body. People with genitalia that do not fit their outward gender appearance (say, preoperative transgender individuals or intersex people) may feel similarly harshly exposed. Phrased in the terms suggested above, these passengers may experience the normal/abnormal dissonance when undergoing body scanning. Normally, their legal persona is as individuals who are equal before the law and the State without regard to their specific bodily traits. Suddenly, in front of the airport scanner, their bodies are virtually stripped naked and gazed at, thereby exposing the traits that they wish to conceal and that are not supposed to enter the State's sight.

This problem is particularly bothersome for members of groups that (Western) culture classifies through their bodies, as beings whose bodies play a more significant (and even determinative) role in defining their “nature.” Women, people of color, gays and lesbians, and people with disabilities are some such groups.¹⁷⁸ The cultural classification of minority identities as ones with heightened bodily existence usually infiltrates to the psyche of minority

FORBES (June 8, 2011, 3:13 PM), <http://www.forbes.com/sites/kevinunderhill/2011/06/08/tsa-settles-with-woman-whose-top-was-pulled-down/>.

¹⁷⁶ On the internalized stigma and guilt of fat people, see Tirosh, *supra* note 42, at 272.

¹⁷⁷ Feminist psychologist Susie Orbach observed that femininity today means hating your body. See Aida Edemariam, *The Saturday Interview: Susie Orbach*, GUARDIAN, Feb. 25, 2011, <http://www.theguardian.com/theguardian/2011/feb/26/susie-orbach-endangered-species-summit>. This is probably increasingly true for men as well. See generally SUSAN BORDO, *THE MALE BODY: A NEW LOOK AT MEN IN PUBLIC AND IN PRIVATE* (2000) (discussing the emergence of the male body as an object of critical cultural gaze).

¹⁷⁸ See, e.g., MARTHA C. NUSSBAUM, *HIDING FROM HUMANITY: DISGUST, SHAME, AND THE LAW* 107–23 (2007) (women, gays, Jews, and other groups were constructed as having essential body inferiority, and thus as unworthy of equality).

group members and becomes part of their internalized experience of themselves.¹⁷⁹ Often, people with bodies that are culturally marked as abnormal experience their body as more central to their identity and to how they perceive themselves compared to members of unmarked groups (such as males, whites, straights, etc.). That is, their identity is entangled with their body in more intense, rich, and meaningful ways than those with unmarked bodies.

Political philosopher Iris Marion Young demonstrates this point by discussing the embodied experience of women. She begins with Maurice Merleau Ponty's observation that for bodies to move in the world, to move towards other objects, they have to transcend their own object-ness and refer to themselves as subjects. "As subject, the body refers not onto itself, but onto the world's possibilities."¹⁸⁰ But for feminine existence, Young observes, "the body is frequently both subject and object for itself at the same time and in reference to the same act. Feminine bodily existence is frequently not a pure presence to the world because it is referred onto *itself* as well as onto possibilities in the world."¹⁸¹ In other words, it is very hard for many women to simply be in their bodies and act through them. This, according to Young, cannot be explained through physical or psychological theories, but is rather a product of living in social conditions of sexism.¹⁸² Because society objectifies women, their existence is "physically inhibited, confined, positioned, and objectified."¹⁸³ This experience of self-reference leads women to insecurity regarding whether their motions are entirely under their control. If women's social existence is, as Young argues, an existence as object of the gaze of another, then they are more severely impacted when they are put in a situation in which their bodies are being gazed upon, as happens in airport scanners.¹⁸⁴

A parallel argument can be made for people with disabilities,¹⁸⁵ people of color,¹⁸⁶ transgender people, or fat people. Members of these groups have an

¹⁷⁹ See, e.g., FRANTZ FANON, BLACK SKIN, WHITE MASKS 109 (Charles Lam Markmann trans., 1967) (awareness of one's race, and of racism, is a product of the gaze of others).

¹⁸⁰ Iris Marion Young, *Throwing Like a Girl: A Phenomenology of Feminine Body Comportment Motility and Spatiality*, 3 HUM. STUD. 137, 148 (1980).

¹⁸¹ *Id.* (citation omitted).

¹⁸² See *id.* at 152.

¹⁸³ *Id.*

¹⁸⁴ Koskela argued that the gendered nature of surveillance technology must be recognized, and that "the female body is still an object of a gaze in different way [sic] than the male body." Koskela, *supra* note 160, at 301. Following Dora Epstein, *Abject Terror: A Story of Fear, Sex, and Architecture*, in ARCHITECTURE OF FEAR 133, 138 (Nan Ellin ed., 1997), Koskela expressed concern that spaces covered by surveillance cameras will be avoided by women due to their heightened awareness of the effects of the gaze. Koskela, *supra* note 160, at 301.

¹⁸⁵ Anita L. Allen, *Face to Face with "It": And Other Neglected Contexts of Health Privacy*, 151 PROC. AM. PHIL. SOC'Y 300, 305, 308 (2007) (because some ill people experience increased feelings of vulnerability, respecting privacy in this context enables minimizing their emotional distress).

intensified experience of their corporeality, and have more exposed psychological membranes to having their bodies subjected to inspection.

Thus, body scanning technology has a disparate impact on those whose bodies are socially classified as normal and those who are considered abnormal. Bodily privacy could have equalized the diversity of bodies and reinstalled the State's required indifference to such differences. However, the scanners frustrate these reasonable expectations and this equalizing potential. The burden, and hence the privacy violation, on people whose bodies are tagged abnormal is greater than on the former.¹⁸⁷ In other words, when it comes to the stigmatized groups we mentioned here, the right to privacy is allocated unequally. This is quite paradoxical, as body scanning has been presented as an equalizing technology, which successfully replaces human profiling.¹⁸⁸

C. *Privacy and Shame*

The discussion thus far has suggested that when passengers are scanned, the governmental gaze at the naked body contradicts its routine messages, about the social norms of dressing, and about the irrelevance of bodily differences. How does this conclusion fit within privacy theory? This section ties the two dissonances to privacy scholarship, and then presents—and responds—to a possible critique.

1. *Privacy?*

Most scholars, and as we saw above, the D.C. Circuit Court of Appeals, too, have assumed that body scanners harm privacy, but have not articulated the harm. The close reading of the court's opinion revealed that the assumed harm is related to the production of the image: when the TSA agent sees what she sees, and whether the State maintains a database of the images (it does not). The production of the image and its storage could indeed have a harmful potential, as the agent may have associated an image with a person, and may reveal intimate personal data. A database, if there were one, would be extremely sensitive, and the potential harm would obviously be staggering. Many of these concerns can be diffused by the technological design (blurring faces, using generic figures, not storing the images even momentarily), and by administrative means (locating the agents so they cannot see the passengers).

¹⁸⁶ See FANON, *supra* note 179, at 109; Koskela, *supra* note 160, at 301 (pointing to the more severe impact of surveillance technologies on black people).

¹⁸⁷ Privacy in general is not equally distributed. A research project that examined the privacy implications of future technologies observed this phenomenon and called it privacy divides. See Michael Birnhack & Niv Ahituv, *Deliverable D6.2, Analysis of the Legal Implications of Emerging & Future Technologies*, PRACTIS 36 (July 23, 2012), <http://practis.org/docs/D62%20Policy%20Implications%20FINAL.pdf>.

¹⁸⁸ We are grateful to our student, Alon Jasper, for this observation at the Law & IT Colloquium at Tel-Aviv University.

But the discussion of the two dissonances indicates that there is more at stake. It is not only the outcome of the search that raises concerns; it is the search itself.

One way to phrase the privacy harm is to locate the dissonances within Fourth Amendment doctrine, and specifically, the reasonable expectations test.¹⁸⁹ There is ample critique of this test as both tautological and too malleable, and for its shortcomings in handling new technologies,¹⁹⁰ but for the time being we accept it, as it governs privacy doctrine. The two dissonances we presented above mean that our old expectations about the privacy of our bodies (dress/undress) and about its social and self-acceptability (normal/abnormal) are reasonable. The reasonableness is established and constantly reinforced through social and legal norms.

The two dissonances further establish that current expectations as to bodily privacy are unlikely to change any time soon. This is an important point, as in other contexts, it seems that the Supreme Court portrayed the reasonableness element of the test as a descriptive matter rather than a normative position. Thus, according to this construction of the test, if a certain practice seems at one point reasonable (having privacy), but circumstances change so that it is no longer experienced as the common situation—the judicial conclusion might change. An example is the case of privacy in the workplace. In a 1987 case, the Court ruled that an employee had a reasonable expectation of privacy in his desk drawers. But the Court offered employers an escape route: “Public employees’ expectations of privacy in their offices, desks, and file cabinets, like similar expectations of employees in the private sector, may be reduced by virtue of actual office practices and procedures, or by legitimate regulation.”¹⁹¹

To the extent that the test is based on a descriptive element, passengers might get used to not having bodily privacy in the specific airport context, but this will not be a result of changing expectations about bodily privacy in general, but only—if it so turns out—as to the specific situation. In fact, the TSA’s announcement about eliminating the naked backscatter scanners reinforces current privacy expectations. If the government will again change its mind, and attempt to reintroduce the backscatters, such a hypothetical move is likely to meet much stronger privacy sentiments. If, however, reasonableness is best understood as containing a normative element, i.e., a value judgment of the expectations, then we need an external yardstick, according to which we can evaluate passengers’ expectations.

This is where we depart from Nissenbaum’s framework of contextual integrity.¹⁹² Up to this point, we have examined the airport situation before and

¹⁸⁹ See *Katz v. United States*, 389 U.S. 347, 361 (1967) (Harlan, J., concurring).

¹⁹⁰ See, e.g., *Kyllo v. United States*, 533 U.S. 27, 34 (2001); DANIEL J. SOLOVE, UNDERSTANDING PRIVACY 71–74 (2008); Thomas P. Crocker, *The Political Fourth Amendment*, 88 WASH. U. L. REV. 303, 325 (2010) (“‘Reasonableness’ is not an independent inquiry. To conclude that a search is ‘reasonable,’ courts must make prior judgments about the importance of a particular police practice or a particular privacy interest.”).

¹⁹¹ *O’Connor v. Ortega*, 480 U.S. 709, 717 (1987).

¹⁹² See NISSENBAUM, *supra* note 11, at 129.

after the sociotechnological system was installed and evaluated the change in terms of the informational norms. To the extent that the scanners have an impact on the flow of information, it is obvious that there is a dramatic change, in that information about one's body that was considered private is now available to TSA agents. However, as one of us argued elsewhere, contextual integrity brings us only this far. It does not contain in itself a much needed normative element that can serve as a measure, to evaluate whether the change in the flow of information is good or bad.¹⁹³ This is where privacy theories enter the picture.

There are several main theories of privacy, or more accurately, of the legal right to privacy. This is not the place to discuss these theories.¹⁹⁴ For the current purposes, we maintain that a group of different justifications share a common core, which is that privacy is best understood as a matter of control: control of oneself.¹⁹⁵ The justifications turn to a philosophical understanding of the human condition, in the spirit of Kant; to psychological needs of developing one's personality and identity, along with the social need not to be taken out of one's own context. The justifications do not stop at the boundaries of the individual, but look also at the importance of privacy for maintaining intimate relationships,¹⁹⁶ certain professional relationships, and even the community at large.¹⁹⁷ The different theories all converge at one point: the individual person is the one to make decisions about his own fate, about his own information.

Privacy as control, thus, is not a justification in itself. It is a heading that groups together different justifications. Privacy as control is often caricatured as relying too much on notice and consent, and hence it is a short way to portray privacy as control as the commodification of privacy. If thinking about privacy in terms of property is correct, then the conceptualization of privacy as control facilitates even more harm to our privacy.¹⁹⁸ However, privacy as control does not need to be conceptualized as property. It derives from Kantian notions of human dignity and autonomy. Privacy law has developed its own set of tools, referred to as Fair Information Privacy Principles (FIPPs).¹⁹⁹

Framing the airport body scanning situation within this understanding of privacy, as a matter of one's control over oneself without external interference,

¹⁹³ See Birnhack, *supra* note 12, at 449.

¹⁹⁴ For a thorough discussion, see generally SOLOVE, *supra* note 190. Solove, however, finds flaws with each theory, and hence opts for a sociological, descriptive taxonomy. In this aspect, Nissenbaum's and Solove's approaches are similar, as they turn to a sociological description, rather than a normative analysis.

¹⁹⁵ The first and most powerful articulation of privacy as control is ALAN F. WESTIN, *PRIVACY AND FREEDOM* 169–326 (1967).

¹⁹⁶ See Charles Fried, *Privacy*, 77 *YALE L.J.* 475, 490 (1968).

¹⁹⁷ See EDWARD J. BLOUSTEIN, *INDIVIDUAL AND GROUP PRIVACY* 123–86 (1978).

¹⁹⁸ For an argument along this line, see generally Julie E. Cohen, *Examined Lives: Informational Privacy and the Subject as Object*, 52 *STAN. L. REV.* 1373 (2000).

¹⁹⁹ FIPPs emerged through a series of national reports in the 1970s, and were then legislated by international instruments in the 1980s. Their current most influential articulation is found in the EU Data Protection Directive, *supra* note 121.

draws our attention not only to the outcome of the search, but to the initial point, when we stand in front of the machine. At that moment, the passenger has little choice (to fly or not to fly, to be scanned or physically touched). The passenger is exposed, without knowing who sees what, without access to such data, and in a state of unsettled confusion about the contradictory messages that the State signals about the importance of being dressed and the irrelevance of bodily traits, while undressing and marking the passenger. At that point, the passenger loses control over herself. Importantly, the fact that the inspection takes place in public does not eliminate the privacy interest.²⁰⁰ If the passenger were to see her scanned image, it might ease some of the tension because it would return some control over the gaze to the passenger, but at the same time, the dissonances might only be enhanced.

2. *Shame?*

A significant objection to our argument would be that by legitimizing people's sense of awkwardness and shame about their bodies and by suggesting that airport security technology should be designed in a way that does not single out those with abnormal bodies, we contribute to deepening the social stigma attached to such bodies. Wouldn't it be better, the objection would go, if our socio-legal arrangement celebrated the body and bodily diversity rather than downplaying and hiding it? After all, by legally validating one's sense of bodily inferiority, and respecting one's need to pass as normal-bodied, we reify the value-laden hierarchy between bodies rather than mitigate it.

This critique echoes familiar criticism of privacy, that it protects secrets that someone wishes to hide, namely, secrets which society would be better off if they were not secret. The popular critique points to criminals or people who should be, socially speaking, ashamed of what they have done.²⁰¹ The common response is that we all have secrets that we wish not to share, or at least we would like to make the decision as to what we share, with whom and how, on our own. But the critique against our argument, portrayed in its best light, is even stronger. Namely, that we require privacy not for what people *do*, but for who they *are*, with the result of reinforcing social stigma. Examples include the outing of another person's sexual preferences against his will or illnesses that carry social stigma. If privacy assists in concealing these facts, so the argument goes, we might reinstate the closet instead of shattering it,²⁰² and we might reinstate stigma instead of dispelling it.

²⁰⁰ See Helen Nissenbaum, *Protecting Privacy in an Information Age: The Problem of Privacy in Public*, 17 LAW & PHIL. 559 (1998) (discussing collection of data which is publicly available).

²⁰¹ For a decisive reply, see Daniel J. Solove, "I've Got Nothing To Hide" and Other Misunderstandings of Privacy, 44 SAN DIEGO L. REV. 745, 764 (2007).

²⁰² See EVE KOSOFKY SEDGWICK, *EPISTEMOLOGY OF THE CLOSET* 67 (1990). Although Sedgwick does not discuss privacy directly, her discussion of the social construction of the closet fits the argument above.

A similar argument is made in the surveillance context. David Bell argues, for example, that body diversity would be promoted if people who are considered deviant stop trying to hide their body from the technological gaze.²⁰³ In a similar vein, criticizing the repeated invocation of the toilet example in discussion of transsexuals' rights,²⁰⁴ Tobias Wolff argues that invoking a sense of shame and bodily anxiety due to bodily differences has served as a rhetorical weapon by those objecting to granting civil rights to discriminated groups such as blacks, gays, or transgender people.²⁰⁵ How much weight should be ascribed to the agitation of "natural" women who may need to share the public bathroom with male-to-female transsexuals? Ascribing great significance to such privacy concerns reifies and legitimizes taboos around nudity, norms of female chastity, and social conventions that connect feminine practices to concealment (for example, the usage of euphemism, such as going to powder one's nose to refer to many other bodily practices that are better left untold).

Jeffrey Weeks recognizes the paradox regarding privacy that takes place when one claims that he or she is entitled to legal recognition and accommodation of his or her bodily difference. Such claimants "go *public*," in order to protect the possibility of *private* life and private choice.²⁰⁶ This recognition of the complexity of the movement between public and private is critical.

Our topic—body scanners—raises the challenge of how to find a way to both insist that one's body should be treated with equal respect no matter how far it is from entrenched notions of normality, and at the same time, insist that one's sense of awkwardness in exposing that body is worthy of recognition and legal protection.

²⁰³ David Bell, *Surveillance Is Sexy*, 6 SURVEILLANCE & SOC'Y 203, 211 (2009).

²⁰⁴ This example invokes the case of male-to-female transsexual persons using the women's toilets. Such diffusion of sex segregation rules might, so the argument goes, expose "real" women to harassment and to violation of their privacy.

²⁰⁵ See Tobias Barrington Wolff, *Civil Rights Reform and the Body*, 6 HARV. L. & POL'Y REV. 201, 231 (2012); see also *id.* at 202 ("The body can be a site of vulnerability and pain, shame and pleasure, excitement and embarrassment—human experiences that are often unmediated by rational thought and impervious to reasoned argument. When opponents of civil rights reform mobilize these primal forces in response to progressive efforts, they wield a potent tool for preserving existing arrangements of status and power.").

²⁰⁶ Jeffrey Weeks, *The Sexual Citizen*, 15 THEORY CULTURE & SOC'Y, Aug. 1998, at 35, 37. Weeks acknowledges that subjectivities and identities "may be fictions, but they are necessary fictions: they provide the means through which we negotiate the hazards of everyday life in a world in a process of constant change." *Id.* at 46 (citation omitted). Rob Cover points to this tension as well:

Where nakedness *upsets* the performance of subjecthood is in the paradox between the sheer commonality of nakedness, since we all have a body that *does naked*, and the signification of nakedness as something very, very personal and private (with *private parts*); hence the strictures of contexts which code and constrain the ways in which naked is performed under the gaze of others.

See Cover, *supra* note 131, at 58.

This is, indeed, a complex challenge. We maintain that legal arrangements can rise to this challenge and produce rules that recognize and accommodate the negative feelings people with bodies that are considered inferior might feel when they are being gazed at, and at the same time do not reproduce an account of their inferiority. After all, this is what antidiscrimination laws have been doing for many decades: marking the protected group, but not in order to emphasize its difference, but rather in order to mitigate the social disadvantages attached to it.

Importantly, similar dilemmas come up in many other legal contexts, and in none of them is there an easy or clear-cut solution. For example, antidiscrimination and affirmative action laws typically name the groups and identify categories that they wish to protect (e.g., race, sex, gender, sexual orientation, or people of color). Thereby, to some extent, these laws unwittingly subvert their own purpose, which is to render such identity classifications insignificant and stress the extent to which they are a matter of social construction rather than of essential differences. To employ poststructuralist jargon, by interpolating a legal subject as a woman or a gay person, the law does not merely reflect her identity, but takes part in bringing it about.²⁰⁷ Defamation cases raise another analogous problem. When courts grant compensation to a plaintiff who argues that he was defamed because a publication falsely referred to him as gay, as fat, or as black, they reaffirm the stigma attached to these identities.²⁰⁸

All of these dilemmas call for a careful and nuanced navigation between is and ought; between existing social conditions and ideal ones. Going back to our first analogy, of whether antidiscrimination laws reify social differences by naming different groups, we believe that historical experience demonstrates that it was imperative that antidiscrimination laws delineate specific groups, because this enabled noticing the particular ways in which members of these groups are afflicted by negative stereotypes and bias.²⁰⁹ Similarly, in the case of whether to accommodate sex change, we think that in a culture in which binary and stable sex identities prevail, it would be patronizingly cruel to ask transgender people to occupy fluid and undefined gender identities and suffer the social harms that

²⁰⁷ See JUDITH BUTLER, *THE PSYCHIC LIFE OF POWER: THEORIES IN SUBJECTION* 107 (1997).

²⁰⁸ On imputations of homosexuality in defamation case law, see Eric K.M. Yatar, *Defamation, Privacy, and the Changing Social Status of Homosexuality: Re-thinking Supreme Court Gay Rights Jurisprudence*, 12 *LAW & SEXUALITY* 119, 129–32 (2003).

²⁰⁹ See Noya Rimalt, *Israeli Feminism Whence and Whither: Rethinking Difference, Dignity, and Gender Based Equality Following Feminism*, *Rights and the Law by Orit Kamir*, 27 *TEL-AVIV U. L. REV.* 857 (2004) (arguing that explicitly naming categories such as sex has value for enhancing equality); cf. Orit Kamir, *Why (Equality of) Human Dignity Is Favorable over Equality of Liberty: The Social Meaning of the Israeli Choice of Human Dignity as a Basic Value*, 13 *HAMISHPAT* (2009) (arguing that dignity has an advantage over equality because it rids legal discourse of the need to rely on socially reified categories); Katharine T. Bartlett, *Feminist Legal Methods*, 103 *HARV. L. REV.* 829, 837 (1990) (urging readers to “ask the woman question” when analyzing any legal issue).

such identities attract. In other words, the much needed social change cannot be imposed onto unwilling individuals. Those who are willing to challenge the social norms, should, of course, be able to do so, and be admired for their courage and vision.

The same applies in the airport context. In a culture obsessed with classifying and ranking bodies, it is unjust to lay the burden of challenging the social norms on those who suffer from them most. To say that the fat or the disabled person should not feel harmed by the way that the scanner's technology is designed because recognizing this harm would reify hierarchies between bodies is to disregard legal subjects' autonomy, and disqualify their sense of what kind of protection they need from the law. Admittedly, this is a liberal position, situated within a legal rights discourse. The answer distinguishes between the long run social goal, which we share, of shattering the closet, stigma, and shame of our bodies. But in the short run, the way to challenge these strongly-held social conventions is not by ignoring those of us—perhaps all of us—who are already caught within these conventions. We would love to see the day when shame in one's body is gone, but until we reach that point, society, and especially the State, should not impose the heavy burden on those who cannot carry it all by themselves.

IV. CONCLUSION

The story of body scanners is an ongoing one: social concerns (anti-terror measures) resulted in the development and use of new surveillance technologies, which then met with social protests and legal challenges on the public's side, and some technological and organizational adjustments on the government's side, alongside a *de facto* practice of growing acceptance, only to be overturned again by a new policy decision, to withdraw some kinds of machines from airports. At this point in time, there is a continuous search for less invasive technologies. An important technological development might be, for example, that scanners will be able to automatically detect the kind of external object carried on the body, thus separating the diaper from the bomb, or the prosthesis from the gun. Accordingly, the social construction of scanners is yet to be settled.

The details tell the story of our everyday lives in a post-9/11 technological age. There is also a broader story here. The case of body scanners demonstrates the interplay between technology and the law, in this case, privacy law. The popular and legal discourses often treat surveillance technologies as if they were predetermined, neutral, and fixed. This uncritical approach, along with the fact that technologies often aim to serve important purposes such as national security, might lead to their almost automatic legitimization. One such indication for the prompt legitimization of invasive technologies is the general cooperation of passengers with airport scanning. The fact that most passengers support body scanning and have not felt that this practice violated their privacy in unbearable or excessive ways is fascinating in itself, and merits more

theorizing about the effects of search practices on our perception of privacy. As the case of body scanners exemplifies, technological design is much more malleable than is usually assumed and can be designed with more or with less mindfulness to privacy considerations. The realization that privacy concerns can be accommodated opens up the possibility to assess a given technology's harm to privacy without being intellectually paralyzed due to a false sense of awe in light of a new technology and to the security interests at stake.

The prevalent legal analysis balances the competing considerations of privacy and national security without providing an account of why and how exactly scanning harms privacy.²¹⁰ Judicial balancing under such conceptually deficient conditions is partial and unsatisfying. Our account of the two dissonances that passengers experience when they are ordered to stand dressed—but naked—in front of the machine, subject to the gaze of the scanner operators, explains the ways in which privacy is compromised by this technology. While the State usually reinforces anti-nudity conventions, passengers undergoing scanning are expected to instantly shed any qualms about their naked bodies (the dress/undress dissonance). Furthermore, whereas in most other contexts the governmental gaze is principally indifferent to body diversity and to cultural hierarchies between different bodies, scanning technology amplifies bodily differences and their different cultural value (the normal/abnormal dissonance).

Framing these dissonances into the reasonable expectations test produces a troubling conclusion. Namely, that passengers can (and probably do) reasonably expect *not* to be subject to a technology that virtually strips them of their clothes and—at least in the case of backscatters—produces an image of their naked bodies. It is not only the fact that scanning produces an image of passengers' unclothed bodies that is problematic: passengers' lack of control of their own bodies and of the information gathered about them is what defies their reasonable expectations and harms privacy. But the reasonableness of human expectations is subject to rapid changes. As in the case of other new technologies, the public has not yet formed expectations about the privacy implications of body scanners. Thus, the social framing of the debate at this point in time is crucial.

²¹⁰ There are many more privacy issues at stake, which we leave for another day. For example, should Congress intervene and regulate body scanners or should courts, operating under general Fourth Amendment jurisprudence, undertake the mission? For this observation of the division of labor (not in the context of body scanners), see Orin S. Kerr, *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution*, 102 MICH. L. REV. 801, 857–88 (2004).