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CLIPPED WINGS: DOMESTIC DRONE SURVEILLANCE AND THE LIMITS OF DUE PROCESS PROTECTION

Benjamin White*

“‘[I]n the application of a Constitution, our contemplation cannot be only of what has been, but of what may be.’ The progress of science in furnishing the government with means of espionage is not likely to stop with wire tapping.”

I. INTRODUCTION

In 2012, six cows wandered onto the property of a North Dakota farmer, Rodney Brossart.1 The owner of the cows went to retrieve them. He told Brossart that the cows belonged to him, but Brossart told him that they were his cows now. An argument broke out and the police arrived to the scene. Brossart threatened the police, saying, “If you go on my land, you won’t walk off.”2 Brossart and his three sons were wielding firearms. After a 16-hour standoff, the police called a neighboring Air Force base, which dispatched a large fixed-wing unmanned aircraft vehicle (“UAV” or “drone”) called a Predator, which is armed with cameras and sometimes weapons. Soon Brossart was in police custody.3

Rodney Brossart and his sons were the first known people arrested with the aid of a drone.4 Though his encounter with a drone was occasioned by his own criminal behavior, important constitutional questions were at play in the government’s use of drones and their abilities for aerial surveillance. The public debate hinges on issues of privacy, liberty, security, and control. Although many states have passed some legislation concerning drones,5 the Federal Aviation Administration’s latest rules governing drones left many privacy questions unanswered. Congress has yet to pass significant regulations

* Associate Member, 2016-2017 University of Cincinnati Law Review. Thank you to my faithful supporter, Mandy.

3. Wolverton, supra note 1.
4. Id.
on government use of drones, and the courts have seen very few cases involving drones. The inchoate state of drone law requires a close look at what sort of judicial protections are likely, in lieu of unified federal regulation.

Drones “threaten to perfect the art of surveillance.” Unlike covert government surveillance across networks, such as the work of the National Security Agency (“NSA”), government “surveillance of the populace with drones would be visible and highly salient. People would feel observed,” even if the information gathered was never used.

Observation from the sky elevates surveillant activity above the lateral plane where our images are captured on security cameras and where we use our computers, lifting the government’s presence into three dimensions.

II. BACKGROUND

Congress has dedicated significant energy to debating the issues attendant to drones and privacy. Drones represent unique issues, not just in aviation technology, but in privacy, surveillance, Fourth Amendment jurisprudence, and Due Process jurisprudence. Surveillance is a sensitive subject for many groups, including minorities whose relationships with government figures are frequently already fraught. The Federal Aviation Administration (“FAA”) has released rules governing certain drones; these rules, however, have no application on government-operated drones, and the public is increasingly concerned about the risk to their privacy with slow or inadequate legislative responses.

7. Id. at 33 (emphasis original).
8. See Bertrand Guay, Ohio Town Wants to Implement Massive Aerial Surveillance Program, RT (Apr. 5, 2013, 9:45 PM), https://www.rt.com/usa/program-city-surveillance-dayton-412/ (“Drones aren’t conducting surveillance 24/7 in the United States just yet, but that doesn’t mean there’s nothing to worry about: in Dayton, Ohio, manned airplanes might soon do the spying.”).
12. EPIC v. FAA: Challenging the FAA’s Failure to Establish Drone Privacy Rules, ELECTRONIC PRIVACY INFORMATION CENTER, https://epic.org/privacy/litigation/apa/faq/drones/ (last visited Feb. 1, 2017) (reporting that a privacy group has sued the FAA for failing “to issue and solicit public comments on proposed drone privacy regulations.”).
A. The Privacy Risk

1. Dynamics at Play in the Notion and Practice of Surveillance

George Orwell’s 1949 novel, *1984*, satirizes the authoritarian state, where speech and movement are subject to constant surveillance by anonymous, remote government actors. The expression “Orwellian” has come to invoke, among other anxieties, governmental actions designed to infiltrate private life. Edward Snowden’s revelations of the NSA’s data collection practices confirm Orwell’s suspicion that the government will appropriate technological advances to monitor society at the macro and micro levels. Julian Assange, of WikiLeaks fame, describes the “omniscient marvels of today’s surveillance state” as so advanced to make Orwell’s visions seem “quaint, even reassuring.”

But not all surveillance is unpopular. After Tamerlan and Dzhokhar Tsarnaev detonated bombs at the Boston Marathon that killed three people and wounded 264, they were quickly identified through security footage that helped lead to their capture within five days.

Surveillance can lead to other societal benefits as well: closed-circuit television (“CCTV”) and surveillance cameras have demonstrated the potential to reduce crime.

13. GEORGE ORWELL, 1984 (1949). In the story, at least two forms of surveillance have become anchored as cultural norms. In the first chapter, the protagonist notices a low-flying helicopter among the buildings: it was the police, “snooping into people’s windows.” Id. at 2. Second, and more predominant, are the ubiquitous telescreens that record audio and visual information with great sensitivity – at one point, the protagonist notes that “you could not control the beating of your heart, and the telescreen was quite delicate enough to pick it up.” Id. at 79.


cameras in highcrime urban areas, despite costs in installation, maintenance, and monitoring, have paid off. Four months after implementation, total crime within the cameras’ viewsheds had decreased by almost 25%.20

The introduction of public surveillance systems does not always tout such impressive numbers, and even the statistics above poorly represent other dynamics contributing to the change in crime. After similar surveillant interventions in Washington, D.C., crime was still sporadic. Statistical analysis did not clearly reveal that the cameras had produced a positive impact.21 Challenges imperiling the success of surveillance differ between active and passive monitoring. “Passive” monitoring finds application in investigations and prosecutions, because no one watches the images as they are captured. Instead, investigators retrieve and examine previously recorded footage as the need arises.22 However, zooming in after the footage has already been recorded renders granular images, which do not often lead to positive identifications.23 “Active” systems are viewed in real time, usually by police or security guards.24 This occupies their time and keeps them from other duties. Since the demands of active monitoring exceed the resources of most jurisdictions, passive and active systems are often used together.25 These limitations can be difficult to navigate.

Solutions to the practical limitations described above, however, do not address the privacy concerns which many find most troubling. A significant fear is that the people who work with the gathered information may misuse it.26 “Mission creep” describes the phenomenon of “government officials misusing data in bad faith or for ends they believed were justified, albeit not explicitly authorized.”27 This concern

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20. Id. The underlying theory of why public surveillance can deter crime is consistent with the rational choice theory, which assumes that individuals weigh the risks and rewards before deciding to offend. If they know they are being watched, the risk increases for the same reward. In theory, this dynamic should reduce criminal offenses. The COPS findings indicate that this theory has merit. Id. at 4.

21. Id. at 73-85.

22. Id. at 3 and 85.

23. Id. at 85.

24. Id. at 3.

25. Id. at 4. Even science fiction writer Isaac Asimov pointed out the flaw in 1984 that Orwell’s telescreens are far too inefficient to surveil the populace. “One person cannot watch more than one person in full concentration, and can only do so for a comparatively short time before attention begins to wander. I should guess, in short, that there may have to be five watchers for every person watched. And then, of course, the watchers must themselves be watched since no one in the Orwellian world is suspicion-free.” Isaac Asimov, Review of 1984, http://georgeorwell.org/asi.htm, (last visited Feb. 1, 2017).

26. PUBLIC SURVEILLANCE CAMERAS, supra note 19, at 5. This concern includes an argument for adequate safeguards and regulations upon the government officials to prevent the misuse of information.

27. Christopher Slobogin, Surveillance and the Constitution, 55 WAYNE L. REV. 1105, 1128
can be further exacerbated when the government hires outside contractors to perform its intelligence work. Outside contracting entrusts matters of critical security to private parties, who may be less accountable to oversight.  

A common rejoinder to privacy advocates is that people with nothing to hide have nothing to fear. One writer has observed that proponents of this argument’s simplest iteration can be confronted merely by asking whether they have curtains at home. A stronger form of this argument maintains that all law-abiding citizens have nothing to hide and “people engaged in illegal conduct have no legitimate claim to maintaining the privacy of such activities.” Arguably the strongest variant of the nothing-to-hide argument is that the transaction involves a small amount of private, but negligible, information about ourselves in exchange for information that could potentially increase national security. What becomes clear is that the security concerns and the privacy concerns need to be balanced.

The value of privacy, the argument provides, is low, because the information is often not particularly sensitive. The ones with the most to worry about are the ones engaged in illegal conduct, and the value of protecting their privacy is low to nonexistent. On the government interest side of the balance, security has a very high value. Having a computer analyze the phone numbers one dials is not likely to expose deep dark secrets or embarrassing information to the world. The machine will simply move on, oblivious to any patterns that are not deemed suspicious. In other words, if you are not doing anything wrong, you have nothing to hide and nothing to fear.

(2009).


30. Id. at 749. This rhetorical question serves to show that everyone holds something in private.

31. Id. at 751.

32. Id. at 752-53.

33. One data security expert has suggested that conceiving the dichotomy as privacy pitted against security mischaracterizes the issue when the tension is actually between liberty and control. Bruce Schneier, The Eternal Value of Privacy, WIRED NEWS (May 18, 2006, 2:00 AM), https://web.archive.org/web/20061130065347/http://www.wired.com/news/columns/1%2C70886-0.html.

34. Solove, supra note 29, at 753.
In balancing these interests, Justice Brandeis’s dissent in Olmstead v. United States is a helpful treatise on privacy.\(^{35}\) Noting that the Fourth and Fifth Amendments were designed to protect “the sanctities of a man’s home and the privacies of life,”\(^{36}\) Justice Brandeis observed that ‘time works changes, brings into existence new conditions and purposes.’ Subtler and more far-reaching means of invading privacy have become available to the government. Discovery and invention have made it possible for the government, by means far more effective than stretching upon the rack, to obtain disclosure in court of what is whispered in the closet.\(^{37}\)

Expositing the constitutional safeguards provided by the Framers, he drew attention to the Constitution’s recognition that “only a part of the pain, pleasure and satisfactions of life are to be found in material things.”\(^{38}\) Against the government, the Framers installed “the right to be let alone – the most comprehensive of rights and the right most valued by civilized men.”\(^{39}\)

Besides Justice Brandeis’s strong endorsement of respecting private spheres, philosophical and psychological works recognize the effects surveillance has on people. Michel Foucault developed Jeremy Bentham’s concept of the Panopticon: a circular, segmented carceral structure where the observer, occupying a central tower in the midst of a network of cells, can maintain a constant, alert gaze on every subject contained within them.\(^{40}\) Each subject occupies a fixed place and “is constantly located.”\(^{41}\) This physical manifestation of surveillant power, however, does not capture today’s nuanced system of surveillance “assemblages” – the sophisticated network of informational flows.

\(^{35}\) Olmstead v. United States, 277 U.S. 438, 471 (1928).

\(^{36}\) Id. at 473 (Brandeis, J., dissenting) (quoting Boyd v. United States, 116 U.S. 616, 630 (1886)).

\(^{37}\) Id. Justice Brandeis goes on to say that ‘“in the application of a Constitution, our contemplation cannot be only of what has been, but of what may be.’ The progress of science in furnishing the government with means of espionage is not likely to stop with wire tapping.” Id. at 474.

\(^{38}\) Id. at 478. This passage echoes words Justice Brandeis helped pen almost four decades earlier in a famous publication with the Harvard Law Review. “The intense intellectual and emotional life, and the heightening of sensations which came with the advance of civilization, made it clear to men that only a part of the pain, pleasure, and profit of life lay in physical things.” Samuel D. Warren & Louis D. Brandeis, The Right to Privacy, 4 HARV. L. REV. 193, 195 (1890).

\(^{39}\) Olmstead, 277 U.S. at 478.


\(^{41}\) Id. Foucault’s Panopticon is largely about the exercise of power: “the slightest movements are supervised . . . all events are recorded . . . an uninterrupted work of writing links the centre and periphery . . . power is exercised without division . . .” Id. at 197.
constantly sourced by diverse outputs such as social media (through which an individual helps develop her own “surveillance record”42) and any other channel through which information is conveyed.43 In other words, modern surveillance is bulwarked by the social imperative to belong to a community, even a digital one.44 The digitization of community thus expands surveillance systems into our social networks.45

The United Kingdom has been criticized for its rapid expansion of CCTV surveillance,46 and Americans can look to the United Kingdom to observe how mass surveillance affects individuals, given the ubiquity of surveillance systems.47 But we can also refer to our own history. J. Edgar Hoover’s counter-intelligence program, COINTELPRO was designed to neutralize certain participants in the political process, particularly minority voices like those of the Black Panthers and Martin Luther King, Jr. COINTELPRO offers a vivid glimpse at what government agencies can accomplish with the knowledge of individuals’ personal information.48 Hoover pried past private barriers the old-fashioned way, but new tools are available today.

2. Drones’ Unique Threat to Privacy

Drones feature advanced technological capabilities such as facial, license plate, and biometric recognition.49 Yet drones are also

44. See id. at 723.
45. See id. This dynamic does not mean that people knowingly develop their surveillance records. Selective curation of the selves we decide to present to the world is a salient feature of social media, but when people with whom we have not decided to share our personal information nevertheless have access to it, a sense of self and ability to influence the impressions people have on us is in jeopardy. See Golbeck, supra note 42 (“Most of us try to curate the public identities we broadcast—not only through the way we dress and speak in public, but also in how we portray ourselves on social medial platforms.”). See also Jason G. Goldman, How Being Watched Changes You – Without You Knowing, BBC (Feb. 10, 2014), http://www.bbc.com/future/story/20140209-being-watched-why-thats-good (“If there is one thing that the rise of social media has taught us it’s how to carefully curate the information we present to the digital world.”).
47. Ellis et al., supra note 43, at 716 (noting that cities are particularly concentrated zones of surveillance).
49. Future of Drones, supra note 9, at 3.
controversial “because of their potential use by overreaching governments.” Many commentators express anxiety that current and imminent applications of drones by the government will deteriorate “our dwindling individual and collective privacy.” A salient feature of drones is that they are equipped with cameras. They are designed with remote observation in mind. The operator can see what the drone sees by feeding the drone’s camera footage either to virtual reality (VR) goggles or a screen mounted to the remote control. The operator flies the drone using this visual feedback or by maintaining a visual line of sight (VLOS) on the craft. Drones are autonomous. They can “fly, hover, or navigate without input from a pilot.” Their ability to self-stabilize without constant control by a pilot is part of what makes them intelligent. Many drones also have multiple rotors, which are a physical explanation for their autonomy as well. Extra propellers generate increased lift, enabling them to carry more powerful cameras. Those cameras are what pose a threat to privacy interests, and drones of all sizes have them. Furthermore, manned aircraft impose practical limitations on the government’s surveillance ability, given the expense in acquiring, operating, and maintaining them. Drones are cheaper than manned aircraft. “[R]outine aerial surveillance in

51. Calo, supra note 6, at 32.
52. See John Patrick Pulen, This Is How Drones Work, TIME (April 3, 2015), http://time.com/3769831/this-is-how-drones-work/.
54. Pulen, supra note 52.
55. Id.
56. Id.
57. Id.
58. See id. However, weight also decreases battery life. Consequently, drones are currently limited to short flight times, usually not much longer than 12 minutes. Id.
59. JAY STANLEY & CATHERINE CRUMP, AMERICAN CIVIL LIBERTIES UNION, PROTECTING PRIVACY FROM AERIAL SURVEILLANCE: RECOMMENDATIONS FOR GOVERNMENT USE OF DRONE AIRCRAFT 1 (2011) [hereinafter PROTECTING PRIVACY].
60. See id. at 2.
61. Id. at 1.
American life” is becoming easier and more reasonable to anticipate, without new safeguards designed to protect against government abuses of privacy.63

Drones come in a variety of styles and serve diverse applications. The armed forces use the large, fixed-wing Predator and Reaper drones in attacks against Al-Qaeda-linked militants in Pakistan.64 They can be operated from remote distances, transmitting video feed of ground activity to the operators.65 They take off and land like conventional airplanes and frequently carry missiles and laser-guided bombs.66 In contrast, fixed-wing drones can be smaller, such as Insitu’s ScanEagle, which has a 10-foot wingspan and a camera with “full pan, tilt and zoom capabilities [that] allows the operator to track both stationary and moving targets.”67 A catapult launcher sends it into flight and a SkyHook retrieval system—a rope hanging from a 50-foot boom—captures it in midflight when its mission is complete.68 After the Houston police department tested the ScanEagle, inviting law enforcement personnel to watch the drone’s performance, the FAA was “flooded” with police requests to fly drones on patrol.69

The most commercially popular drones may be the easily-acquired quadcopters that can hover and send video footage to the operator.70 One innovator of these drones observed that, as with the personal computer and Internet before them, the usage and market of drones are unclear.71

63. PROTECTING PRIVACY, supra note 59, at 1. The ACLU reports, “We need a system of rules to ensure that we can enjoy the benefits of this technology without bringing us a large step closer to a ‘surveillance society’ in which our every move is monitored, tracked, recorded, and scrutinized by the authorities.” Id.

64. Id. at 2 (noting that the Predator has a wingspan of 66 feet and can fly as high as 50,000 feet); Steve Coll, The Unblinking Stare: The Drone War in Pakistan, THE NEW YORKER (Nov. 24, 2014), http://www.newyorker.com/magazine/2014/11/24/unblinking-stare.

65. Coll, supra note 64.


68. Id.


Various applications await to be discovered, but “[s]omething sure will come.”72 What is clear is that the technology lends itself to being exploited to gather information.73

Finally, there are the increasingly tiny drones, such as the Black Hornet and Nano Hummingbird.74 The Nano Air Vehicle (“NAV”) industry illuminates the effort that is going into creating aircraft verging on undetectable. The Nano Hummingbird, designed by the Defense Advanced Research Projects Agency (“DARPA”) within the Department of Defense (“DOD”), looks like the bird after which it is named, flapping its wings to stabilize its flight.75 It exploits a design process called biomimicry. It can fly through open doors and windows, sit on power lines, blend in with its environment, and gather information while camouflaged to look like wildlife.76 One defense expert reported that they can be used anywhere, “and the target will never even know they’re being watched.”77 The Pentagon has contributed about $4 million to the Nano Hummingbird’s development and similar technology.78 Another NAV, the Black Hornet, has been described as “exactly the kind of drone that scares people about drones.”79 It films in normal and infrared light, carries regular and thermal cameras, fits in the palm of a hand, and can be programmed to fly to waypoints autonomously.80

Some of these drones are designed with military purposes in mind.81 However, this fact does little to mitigate public concerns about drones being used domestically for surveillance and criminal investigation. The DOD has the largest drone force, followed by Customs and Border Protection (“CBP”).82 From 2010 to 2012, CBP flew almost 700

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72. Id.
73. Id.
76. Hennigan, supra note 74. The developers show an interest in blending into the environment, pointing out that hummingbirds are rare in New York City and that a sparrow may therefore be better. Id. This comment is illuminating: the targets of biomimetic reconnaissance live in American cities.
77. Id.
78. Id.
79. Id.
81. See Tucker, supra note 80.
82. Craig Whitlock & Craig Timberg, Border-Patrol Drones Being Borrowed by Other Agencies
surveillance missions with drones on loan to other federal, state, and local agencies. At the time, CBP was one of the few agencies that the FAA permitted to use drones daily and domestically. Such interagency drone-sharing practices – the context of Rodney Brossart’s arrest – suggest that the purpose a drone is engineered to serve is secondary to the government’s interest in deploying them to meet ends that may be at odds with the public’s interest.

### B. Government Response to Drones

1. The Federal Aviation Administration

In 2012 – the same year Rodney Brossart was arrested – Congress

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83. Id.

84. Id.


86. The Federal Aviation Administration (“FAA”) falls under the umbrella of the Department of Transportation (“DOT”), which belongs to the Executive Branch. Given the diverse applications of drones, including wildfire monitoring, scientific research, border protection, and law enforcement support, as well as expectations of technological capacity, President Obama ordered Federal agencies to examine their policies and procedures vis-à-vis the “collection, use, retention, and dissemination of information obtained by UAS, to ensure that privacy, civil rights, and civil liberties are protected.” BARACK OBAMA, PRESIDENTIAL MEMORANDUM: PROMOTING ECONOMIC COMPETITIVENESS WHILE SAFEGUARDING PRIVACY, CIVIL RIGHTS, AND CIVIL LIBERTIES IN DOMESTIC USE OF UNMANNED AIRCRAFT SYSTEMS (Feb. 15, 2015). The President identified the Privacy Act as an applicable regulation with which agencies must comply, but did not limit agencies’ compliance to that Act alone. Id.

Agencies were also instructed to update their policies and procedures, or create new ones, as such changes become necessary. Id. The collection and use of data acquired by drones must be pursuant to an authorized purpose. Id. Agencies may only retain drone-acquired personally identifiable information (“PII”) for 180 days, unless longer retention is necessary to an authorized mission, justified by the Privacy Act, or required “by any other applicable law or regulation.” Id. Information not maintained by a recording system provided for by the Privacy Act “shall not be disseminated outside of the agency unless dissemination is required by law, or fulfills an authorized purpose and complies with agency requirements.” Id.

The President provided for oversight measures by requiring that agencies verify that federal personnel and contractors involved in drone programs are guided by rules of conduct and training. Additionally, agencies must ensure that procedures exist providing for the report of drone abuses and misuses. Id. Any individuals with access to PII must also operate within a regime of policies and procedures providing for meaningful oversight. Id. Requests of drone-assistance for governmental operations must conform to articulable policies and procedures as well. Id. Finally, any government which receives Federal funding for drones must “have in place policies and procedures to safeguard individuals’ privacy, civil rights, and civil liberties prior to expending such funds.” Id.
passed the FAA Modernization and Reform Act ("Reform Act").87 Among its provisions, the Reform Act authorized and required the FAA to propose rules governing the use of civil drones in national airspace ("NAS").88 Specifically, Congress instructed the Secretary of Transportation to "develop a comprehensive plan to safely accelerate the integration of civil unmanned aircraft systems into the national airspace system."89 Pursuant to the Reform Act, the FAA finalized the Rules for Small Unmanned Aircraft Systems ("Part 107") on June 21, 2016, and Part 107 went into effect on August 29, 2016.90

Some important observations need to be made. First, Part 107, by statutory definition, only applies to drones that weigh less than 55 pounds.91 Thus, the executive guidance for which the public has waited, and about which it commented widely, has not restricted the use of drones larger than 55 pounds. Second, Part 107 is concerned with integration of civil unmanned aircraft.92 These two features of the FAA’s most recent Rules are related in that the drones most civilians fly weigh less than 55 pounds.93

The second feature – Part 107’s application to civil drones only – means that government entities are no more regulated after the passage of the Rules than they were before. “Public aircraft” refers to aircraft used solely by the United States Government.94 “Civil aircraft” is any aircraft that is not a public aircraft.95 Section 332 of the Reform Act directed the FAA to promulgate a “comprehensive plan” for the integration of civil drones into the NAS within 270 days of the enactment of the Act.96 As for public drones, Section 334 directed the FAA to “issue guidance” regarding their operation, using the same 270-day deadline.97

88. Id. at § 332(a)(1).
89. Id.
92. See §§ 331-332, 126 Stat. at 72-75. Congress clearly distinguished civil UAS and public UAS by providing for the former in § 332 and the latter in § 334. Additionally, § 332(a)(2)(H) makes plain the congressional intent for FAA to provide guidance for the safe and simultaneous operation of civil and public UAS.
93. See Fisher, supra note 70.
94. 49 U.S.C. § 40102(a)(41) (2012). This definition is necessarily simplified and subject to an exception. If the aircraft is used for commercial purposes, or to carry unqualified non-crewmembers, it ceases to be a public aircraft, as defined.
95. § 40102(a)(16).
96. § 332(a)(1), 126 Stat. at 73.
97. § 334, 126 Stat. at 76-77. The difference between the development of a “comprehensive
Part 107 straightforwardly excludes public drones from its applicability: “this rule applies to civil aircraft operations only.” The FAA had explained in the Notice of Public Rule Making (“NPRM”) that Part 107 would not apply to public operation of small drones. Public aircraft operation – the FAA uses the DOD as an example – is already governed by 14 C.F.R. § 91, but this is not specific to drones. Instead of broadly applicable regulation, the Certificate of Waiver or Authorization (“COA”) process controls government use of drones. Responses to the Freedom of Information Act show that a diverse variety of government entities have requested COAs from the FAA, namely the Air Force, NASA, CBP, DARPA, police departments from across the country, and universities.

Both NASA and the DOD recommended that the FAA amend the Rule “to clarify that Part 107 does not apply to aircraft operated by or for the National Defense Forces of the United States, but could be used as an alternative means of compliance.” These comments ultimately would have been redundant protective measures in the government’s favor, “because § 107.1 expressly limits the applicability of Part 107 to small UAS.” Instead, the FAA pointed out that these rules offer increased flexibility for government drones, because Part 107 permits the government to comply with its provisions in lieu of seeking a COA from the FAA.

NASA and the DOD were not the only parties that commented on Part 107 when it was proposed. During the notice and comment period,

plan” for civil drones and issuing “guidance” for public drones is not made clear. However, what is clear is that the FAA has not proposed separate rules on public drones at anywhere near the same level of sophistication as it has with civil drones.

99. Id.
100. Id.; see also Air Traffic and General Operating Rules, 14 C.F.R. § 91.113. A search of § 91 reveals nothing pertaining to unmanned aircraft, except for unmanned rockets and balloons. See 14 C.F.R. § 91.1.
104. Id.
105. Id.
the public voiced numerous concerns, many of which related to privacy from government abuses.106 However, the FAA treated privacy as beyond the scope of its rulemaking.107 Part 107 states that the public comments “demonstrate a lack of consensus” with respect to how integration of drones jeopardizes the privacy interest, how these concerns should be addressed, and what role, if any, the FAA has in addressing privacy.108 Addressing this purportedly fragmentary record, the FAA observed that “its mission is to provide the safest, most efficient aerospace system in the world, and does not include regulating privacy.”109 The features on drones that provoke concerns about privacy relate to technology and hardware, not flight safety.110 The FAA identified cameras as lying beyond its administrative reach, and for that matter, the protection of individual privacy.111 However, the agency did acknowledge that its detachment from the privacy issue was not the end of the matter:

[T]here is substantial, ongoing debate among policymakers, industry, advocacy groups and members of the public regarding the extent to which UAS operations pose novel privacy issues, whether those issues are addressed by existing legal frameworks, and the means by which privacy risks should be further mitigated. Recognizing the importance of addressing privacy concerns in the proper forum, the FAA has partnered with other Federal agencies with the mandate and expertise to identify, develop, and implement appropriate mitigation strategies to address privacy concerns.112

The Supreme Court has broadly interpreted the FAA’s regulatory authority over the navigable airspace, with the purpose of ensuring aircraft safety, efficient use of the airspace, and protection of “persons
and property on the ground.”\textsuperscript{113} The American Civil Liberties Union has identified this latter zone of authority—the protection of individuals on the ground—as obliging the FAA
to protect individuals on the ground [by] protecting the privacy that Americans have traditionally enjoyed and rightly expect. If the agency refuses to do so, or is found by the courts to have limited powers in that area, then Congress should step in to directly enact any additional protections that are needed to preserve that privacy.\textsuperscript{114}

However, the Reform Act made it clear that Congress did not intend for the FAA to make sweeping provisions and restrictions on every current application of drones.\textsuperscript{115} Congress also constrained the content of the comprehensive plan it directed the FAA to draft by focusing on the safe operation of drones in the national airspace system.\textsuperscript{116} Provisions related to privacy are absent.\textsuperscript{117} The FAA reaffirms its congressionally limited role this way:

None of the UAS-related provisions of Public Law 112–95 [the Reform Act] directed the FAA to consider privacy issues when addressing the integration of small UAS into the airspace, or mandated the inclusion of privacy considerations in the UAS Comprehensive Plan. Reading such a mandate into Public Law 112–95 would be a significant expansion beyond the FAA’s long-standing statutory authority as a safety agency.\textsuperscript{118}

2. Congressional Attempts to Regulate Government Drones

Congress has proposed bills drafted to curtail applications of drones that would intrude on privacy. The Preserving American Privacy Act of 2015, proposed in the House of Representatives in March 2015, seeks the protection of information that is “reasonably likely to enable identification of an individual,” and it concerns “an individual’s

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\textsuperscript{114} PROTECTING PRIVACY, supra note 59, at 2.
\textsuperscript{115} § 332, 126 Stat. 73.
\textsuperscript{116} See § 332(a)(2)(B), (2)(E), and (2)(H). For instance, (2)(B) reads that the plan “shall contain, at a minimum, recommendations or projections on . . . the best methods to enhance the technologies and subsystems necessary to achieve the safe and routine operation of civil unmanned aircraft systems in the national airspace system . . . .”
\textsuperscript{117} See § 332, 126 Stat. 73.
property that is not in plain view.”119 The bill requires any government entity using a drone to submit a data collection statement to the Attorney General, which provides numerous details, including the purpose of the mission, the drone’s data-collection capabilities, and the duration for which the data would be retained.120 Furthermore, no evidence collected by the operation of a public drone may be admitted “against an individual in any trial, hearing, or other proceeding.”121 The bill further provides that law enforcement may not use drones to collect or disclose covered information, except when that action is pursuant to a warrant or court order, to monitor the border, is permitted by the prior written consent of the monitored individual, or is for an emergency such as a threat to national security.122 Any covered information collected in violation of those procedures may not be considered and must be expunged from the collecting agency’s databases.123 The Preserving Freedom from Unwarranted Surveillance Act of 2013, narrower in scope, provides for similar restrictions against unwarranted drone monitoring.124

The language of the Drone Aircraft Privacy and Transparency Act is perhaps the strongest of all proposed legislation. Proposed in March 2015, the bill observes that drones have traditionally found almost exclusively military application, but are increasingly being used by “State and local governments . . . including deployments for law enforcement operations.”125 Acknowledging the beneficial applications, “from spotting wildfires to assessing natural disasters,”126 the bill submits that “there also is the potential for unmanned aircraft system technology to enable invasive and pervasive surveillance without adequate privacy protections, and currently, no explicit privacy protections or public transparency measures with respect to such system technology are built into the law.”127 Like the Preserving American Privacy Act, the Drone Aircraft Privacy and Transparency Act would require a data collection statement minimizing the intake of information and detailing the purposes, duration, and impact on privacy that the

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120. Id. at § 3119b(c).
121. Id. at § 3119c(a).
122. Id. at § 3119c(b)-(c).
123. Id. at § 3119c(c)(6).
126. Id. at § 2(5).
127. Id. at § 2(6).
drone surveillance will have upon the monitored individual. In fact, they have had to be re-introduced, because their predecessors have died in previous Congresses. One author has argued that federal regulations on law enforcement’s use of drones could “provid[e] a floor for state laws.” The states would then be the principal legislators of drone law, citing federal bills that “propose warrant requirements for drone surveillance by law enforcement.”

III. DUE PROCESS AND JUDICIAL PROTECTION AGAINST PUBLIC ACTION

Two lines of Supreme Court cases show when the Court is willing to extend due process protection: (1) when an individual presents a strong liberty interest against a weak or weakened government interest and (2) when the government has acted in a way that shocks the conscience. The first analysis is frequently discharged in the judicial review of legislation which is allegedly unconstitutional. The second analysis usually involves executive or police action.

When a technological dynamic is significant to a case’s facts, the Court shows a willingness to defer to Congress as the best-situated body to protect privacy interests in the face of burgeoning technological advances. A rule-making body may listen to and reflect changing public feeling and delineate rules that “balance privacy and public safety in a comprehensive way.”

A. The Right to Privacy

In their influential essay, The Right to Privacy, future-Justice Louis Brandeis and his classmate Samuel Warren chronicled the common law’s ability to adapt to societal changes and needs. The law’s

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128. Id. at § 339(a)-(b).
130. Id.
132. Id.
capacity to expand, without the guidance of precedent or legislation, is limited; but as the essay’s epigraph suggests, when judicial doctrine does expand, it is a function of its sensitivity to “principles of private justice, moral fitness, and public convenience.”138 Significantly, the impetus of the article was the increasing prevalence of “the photographic art.”139 In 1888, George Eastman introduced the Kodak camera, which many amateur photographers used for its simplicity.140 By 1890, Brandeis and Warren were proposing that tort doctrines could be expanded to protect people’s right to privacy with respect to burgeoning photographic technology.141 Describing past judicial groping, such as prosecuting the reading of private letters as a breach of contract, they conclude that common law evolutions protecting “personal appearance, sayings, acts, and . . . personal relations” flow from the right to privacy, or “rights as against the world.”142 The justification for judicially protecting individual privacy depends on the recognition that

[...]he intense intellectual and emotional life, and the heightening of sensations which came with the advance of civilization, [make] it clear to men that only a part of the pain, pleasure, and profit of life lay in physical things. Thoughts, emotions, and sensations demanded legal recognition, and the beautiful capacity for growth which characterizes the common law enabled the judges to afford the requisite protection, without the interposition of the legislature.143

Such doctrinal expansion is a dominant gene in the substantive due process bloodline. In Griswold v. Connecticut, Justice Douglas’s majority opinion relied on the penumbra of the Bill of Rights to protect the right to privacy for married couples to use contraceptives.144 The right, he argued, was protected because of what the Bill of Rights partly

138. Id. at 193 (quoting Millar v. Taylor (1769) 4 Burr. 2303, 2312).
139. Id. at 211. The authors refer to private action, largely journalistic, which invaded the lives of others. However, they do not limit to private action their principle of a right to privacy underlying common law evolutions meant to protect privacy, arguing that “the existing law affords a principle which may be invoked to protect the privacy of the individual from invasion . . . [by] the possessor of any other modern device for recording or reproducing scenes or sounds.” Id. at 206.
141. Warren & Brandeis, supra note 137, at 211.
142. Id. at 213. Judge Cooley preferred the right “to be let alone.” Id. at 195.
143. Id. at 195.
shadows through implication.\textsuperscript{145} Justice Harlan’s concurrence disagreed, arguing that the proper constitutional touchstones were the Fourteenth Amendment’s Due Process Clause and its protection against violations of values “implicit in the concept of ordered liberty.”\textsuperscript{146} Though brief, the concurrence can be considered to have Justice Harlan’s seminal \textit{Poe v. Ullman} dissent appended to it.\textsuperscript{147}

In \textit{Poe}, Justice Harlan argued that a statute against the use of contraceptives by married couples was “an intolerable and unjustifiable invasion of privacy in the conduct of the most intimate concerns of an individual’s personal life.”\textsuperscript{148} Justice Harlan recognized that legal codes cannot determine the content of due process; rather, the Court supplies its content—which is comprised of “history and purposes” rather than of words—by contemplating the living traditions which guide the Court into striking a balance between the liberty of the individual and an organized society’s demands.\textsuperscript{149} The continuum of protected liberties “includes a freedom from all substantial arbitrary impositions and purposeless restraints . . . [recognizing] that certain interests require particularly careful scrutiny of the state needs asserted to justify their abridgment.”\textsuperscript{150} Though the Court has not defined “with exactness the liberty thus guaranteed . . . [w]ithout doubt, it denotes, not merely freedom from bodily restraint . . . .”\textsuperscript{151} In exegeting what lies within the boundaries of due process, a “new decision must take ‘its place in relation to what went before and further (cut) a channel for what is to come.’”\textsuperscript{152} Justice Harlan affirmed the characterization in \textit{Rochin v. California} of due process as a narrow strip of judicial license enclosed all around with limits inherent in the judicial process.\textsuperscript{153} In short, he does not represent the enterprise of balancing limits with liberty as anything less than fastidious. Despite these constraints, Justice Harlan would have found that marital relations were too private for the State’s moralizing intrusion.\textsuperscript{154}

If the \textit{Poe} dissent expressed the limits constraining due process, later

\begin{itemize}
\item \textsuperscript{145} \textit{Id.} at 484 (“[S]pecific guarantees in the Bill of Rights have penumbras, formed by emanations from those guarantees that help give them life and substance.”).
\item \textsuperscript{146} \textit{Id.} at 500 (Harlan, J., concurring) (quoting Palko v. State of Connecticut, 302 U.S. 319, 325 (1937)).
\item \textsuperscript{147} \textit{Id.} (“For reasons stated at length in my dissenting opinion in Poe v. Ullman . . . I believe that [the Connecticut statute] does [infringe the Due Process Clause of the Fourteenth Amendment].”).
\item \textsuperscript{148} Poe v. Ullman, 367 U.S. 497, 539 (1961) (Harlan, J., dissenting).
\item \textsuperscript{149} \textit{Id.} at 542-43.
\item \textsuperscript{150} \textit{Id.} at 543 (citations omitted).
\item \textsuperscript{151} \textit{Id.} (quoting Meyer v. Nebraska, 262 U.S. 390, 399 (1923)).
\item \textsuperscript{152} \textit{Id.} at 544 (quoting Irvine v. People of California, 347 U.S. 128, 146 (1954) (Frankfurter, J., dissenting)).
\item \textsuperscript{153} \textit{Id.} See \textit{Rochin} discussion \textit{infra}.
\item \textsuperscript{154} \textit{Id.} at 555.
\end{itemize}
opinions confirmed the license animating due process.\textsuperscript{155} \textit{Roe v. Wade} held that the right of privacy was sufficiently broad to include a woman’s decision to terminate a pregnancy qualified by important state interests.\textsuperscript{156} A scrupulous review of prior cases showed that “only personal rights that can be deemed ‘fundamental’ or ‘implicit in the concept of ordered liberty’ are included in this guarantee of personal privacy.”\textsuperscript{157} \textit{Roe} entered a crucible and emerged singed but intact in \textit{Planned Parenthood of Southeastern Pennsylvania v. Casey}.\textsuperscript{158} Drawing from the Poe dissent, Justice O’Connor’s opinion observed that adjudicating substantive due process claims called the Court “to exercise that same capacity which by tradition courts always have exercised: reasoned judgment.”\textsuperscript{159} Absent, however, is any reference to \textit{Palko’s} language that liberty interests are fundamental when they are “implicit in the concept of ordered liberty,”\textsuperscript{160} which would later be adopted by the \textit{Washington v. Glucksberg} majority in structuring substantive due process analysis going forward.\textsuperscript{161} Instead, Justice O’Connor employed a \textit{stare decisis} analysis that identified two decisional lines that had ended with watershed cases, demonstrating appropriate justifications for departing from \textit{stare decisis}.\textsuperscript{162} The Court thus found each case comprehensible as the Court's response to facts that the country could understand, or had come to understand already, but which the Court of an earlier day, as its own declarations disclosed, had not been able to perceive. As the decisions were thus comprehensible they were also defensible, not merely as the victories of one doctrinal school over another by dint of numbers (victories though they were), but as applications of constitutional principle to facts as they had not been seen by the Court before. In constitutional adjudication as elsewhere in life, changed circumstances may impose new obligations, and the thoughtful part of the Nation could accept each decision to overrule a prior case as


\textsuperscript{157} \textit{Roe}, 410 U.S. at 152 (citation omitted).


\textsuperscript{159} \textit{Casey}, 505 U.S. at 849.


a response to the Court’s constitutional duty. In this light, Roe had to be upheld. Society’s understanding of what Roe meant had not so changed that justified overruling it.

Washington v. Glucksberg demonstrates the difficulty that substantive due process claims face. It is in Glucksberg that the Court synthesizes a major analytical standard by which to measure substantive due process claims. Substantive due process protects fundamental rights and liberties that are “deeply rooted in this Nation’s history and tradition” and “implicit in the concept of ordered liberty,” such that “neither liberty nor justice would exist if they are sacrificed.” Secondly, the fundamental liberty interest must be carefully described. The government may in no way infringe such an interest, but narrowly tailored infringements designed to advance a compelling government interest will be evaluated with strict scrutiny. The Court narrowly construed Casey’s existential and philosophical flourishes about defining one’s own ontological concepts as actually referring to “personal activities and decisions” that comport with the newly expressed (and narrow) standard. In addition to Casey, an observation further narrows the new standard: although personal autonomy is a common thread in many liberties protected by due process, this “does not warrant the sweeping conclusion that any and all important, intimate, and personal decisions are so protected, and Casey did not suggest otherwise.” Measured against this standard, the Washington statute prohibiting physician-assisted suicide did not violate the Fourteenth Amendment.

Justice Rehnquist criticized Justice Souter’s suggested framework,

163. Casey, 505 U.S. at 863-64.
164. Id. at 901. “Our Constitution is a covenant running from the first generation of Americans to us and then to future generations . . . We accept our responsibility not to retreat from interpreting the full meaning of the covenant in light of all of our precedents.”
165. Id. at 864. “Because neither the factual underpinnings of Roe’s central holding nor our understanding of it has changed (and because no other indication of weakened precedent has been shown), the Court could not pretend to be reexamining the prior law with any justification beyond a present doctrinal disposition to come out differently from the Court of 1973.”
166. See Glucksberg, 521 U.S. at 720.
167. Id. at 720-21 (quoting Moore v. City of East Cleveland, Ohio, 431 U.S. 494, 503 (1977)).
169. Id.
170. Id.
171. Id. at 727 (“By choosing this language, the Court's opinion in Casey described, in a general way and in light of our prior cases, those personal activities and decisions that this Court has identified as so deeply rooted in our history and traditions, or so fundamental to our concept of constitutionally ordered liberty, that they are protected by the Fourteenth Amendment.”).
172. Id. at 727-28 (citation omitted).
173. Id. at 735.
influenced by the Poe dissent, as forfeiting this “restrained methodology” and defenseless against the subjectivity attendant to substantive due process claims.\textsuperscript{174} Justice Souter, who joined Justice O’Connor’s Casey opinion, proposed a different substantive due process framework, which arguably has a germ in the emphasis in Rochin and Casey on the inevitability of using reasoned judgment to evaluate due process claims.\textsuperscript{175} Justice Souter would first require that the values the Court recognized be “truly deserving of constitutional stature.”\textsuperscript{176} This constraint echoes the Poe dissent’s warning against permitting one’s personal convictions to transgress the principles inherent in the judicial tradition.\textsuperscript{177} Passing this threshold, a due process claim is next weighed against the state’s interest; the Court balances the relative “dignities of the contending interests, and to this extent the judicial method is familiar to the common law.”\textsuperscript{178} When the “legislation’s justifying principle, critically valued, is so far from being commensurate with the individual interest as to be arbitrarily or pointlessly applied . . . the statute must give way.”\textsuperscript{179}

Lawrence v. Texas adopted Justice Souter’s due process analysis in overruling Bowers v. Hardwick, which upheld a state law criminalizing sodomy, thus extending the right for homosexual relations between consenting adults.\textsuperscript{180} Though not explicit in its application, the majority opinion modeled Justice Souter’s guidance to first determine that the claimed right rose to a constitutional stature.\textsuperscript{181} From there, Justice Kennedy engaged in common law methodology as Justice Souter prescribed in Glucksberg, and similar to Justice O’Connor’s approach in Casey. Casey and Romer v. Evans had substantially eroded the shore on

\textsuperscript{174} Id. at 721-22.
\textsuperscript{175} Id. at 767-68 (Souter, J., concurring). See also Planned Parenthood of Southeastern Pennsylvania v. Casey, 505 U.S. 833, 849 (1992) (“The inescapable fact is that adjudication of substantive due process claims may call upon the Court in interpreting the Constitution to exercise that same capacity which by tradition courts always have exercised: reasoned judgment.”); Rochin v. California, 342 U.S. 165, 171-72 (1952) (“To believe that this judicial exercise of judgment could be avoided by freezing ‘due process of law’ at some fixed stage of time or thought is to suggest that the most important aspect of constitutional adjudication is a function for inanimate machines and not for judges.”).
\textsuperscript{176} Glucksberg, 521 U.S. at 767 (Souter, J., concurring).
\textsuperscript{177} Id. (citing Poe, 367 U.S. at 542).
\textsuperscript{178} Id. at 767.
\textsuperscript{179} Id. at 768.
\textsuperscript{180} Lawrence v. Texas, 539 U.S. 558, 578 (2003).
\textsuperscript{181} Id. at 567 (“To say that the issue in Bowers was simply the right to engage in certain sexual conduct demeans the claim the individual put forward, just as it would demean a married couple were it to be said marriage is simply about the right to have sexual intercourse . . . . The statutes do seek to control a personal relationship that, whether or not entitled to formal recognition in the law, is within the liberty of persons to choose without being punished as criminals.”).
which Bowers had been built. Against this weakened precedent, the individual interest was great. The stigma of a criminal conviction jeopardizes the charged person’s dignity; one’s existence is derogated and destiny controlled when a state criminalizes private sexual conduct. Application of this framework, very different from Glucksberg, resulted in the overruling of Bowers.

Thus, Lawrence is a sort of inverse of Casey; though the Court applied similar reasoning in both cases: after extensive consideration of the propriety and constitutionality of the right under review, the Court overturned one case depriving liberties in the former and upheld another case protecting liberties in the latter. Their similar methodologies both resulted in the protection of individual liberties when balanced against opposing government interests.

Glucksberg’s continuing applicability is in question after Obergefell v. Hodges. Obergefell stated that Glucksberg’s insistence on careful description of the right claimed, “with central reference to specific historical practices,” was inconsistent with any inquiry concerning fundamental rights. Chief Justice Roberts’ dissent sharply criticized the majority for “jettison[ing]” Glucksberg.

B. Due Process Protection Against Executive Action

Rochin v. California provides the foundation for evaluating due process protections of human dignity and constitutionally intolerable methods of police evidence-gathering. The story of Rochin begins with a man sitting on his bed with his wife when police entered the bedroom and demanded to know who owned the pills on the nightstand. Rochin grabbed the pills and swallowed them. The police wrestled him, but were unable to extract the pills. They handcuffed him and took him to a hospital, where they ordered a doctor to force an emetic through a tube into Rochin’s stomach, against his will. He vomited. The vomit contained two pills, which held morphine. These pills were used as evidence against him at trial, where he was convicted.

182. Id. at 576.
183. Id. at 575.
184. Id. at 578.
186. Id. at 2602.
187. Id. at 2620-21 (Roberts, C.J., dissenting) (“the majority’s position requires it to effectively overrule Glucksberg”).
189. Id. at 166.
190. Id.
191. Id.
Although the conviction was affirmed on appeal, one judge found that the record revealed “a shocking series of violations of constitutional rights.”

In an opinion written by Justice Frankfurter, the Supreme Court reversed, holding that the methods used to obtain the conviction violated due process. Justice Frankfurter acknowledged that the administration of criminal justice was largely entrusted to the States and a court’s application of due process ought not be wielded as a “destructive dogma” against States’ administration of criminal justice. However, though not specified in any authoritative formulation, due process guarantees “respect for those personal immunities . . . ‘so rooted in the traditions and conscience of our people as to be ranked as fundamental’ or are ‘implicit in the concept of ordered liberty.’”

Addressing the inexact contours of due process, the Court observed that “[i]n dealing not with the machinery of government but with human rights, the absence of formal exactitude, or want of fixity of meaning, is not an unusual or even regrettable attribute of constitutional provisions.” The nature of this sort of judgment precluded “freezing ‘due process of law’ at some fixed stage of time,” because the adjudication of constitutional rights was a task for judges and not “inanimate machines.” On the contrary, these were not episodic, ad hoc judgments, but judgments that required care in reconciling the “needs both of continuity and of change in a progressive society.” In a word, this judicial task required humility.

From this posture of judicial humility, the Court found that the government’s investigative conduct was “too close to the rack and the screw.” Invading the man’s privacy, struggling to open his mouth, and forcibly extracting the contents of his stomach shocked the

192. Id. at 167.
193. Id. at 174.
194. Id. at 168.
195. Id.
196. Id. at 169 (quoting Snyder v. Commonwealth of Massachusetts, 291 U.S. 97, 105 (1934)).
198. Id. (quoting Malinski v. People of State of New York, 324 U.S. 401, 416-17 (1945)). The object of review in the Malinski line of cases is a state court conviction.
199. Id.
200. Id. at 171.
201. Id. at 172.
202. Justice Frankfurter treats, at some length, the expansion of due process rights as demanding “the habit of self-discipline and self-criticism, incertitude that one's own views are incontestable and alert tolerance toward views not shared.” Id. at 171.
203. Id. at 172.
conscience. The Court considered it well established that due process made requirements upon the investigative means used to produce legitimate evidence. Notably, the Court was reluctant to lay down a clear standard with which law enforcement must comply in obtaining convictions, other than those methods must not offend “a sense of justice.” However, figuring prominently in the Court’s reasoning were analogies between coerced confessions and the brutality showed by the police. “A sense of justice” was shocked when law enforcement coerced a confession, and so with brutal displays of power.

The Court narrowed its holding further, noting that its resolution of this matter did not impact State court cases dealing with “essentially different, even if related” matters that had arisen “through use of modern methods and devices for discovering wrongdoers . . . .” Clearly, the facts in Rochin were of principle importance and the distinguishing factors were the brutalizing force and offense to human dignity. “[H]ypothetical situations can be conjured up,” the opinion states, and incrementalism does not always flow along a logical path, but “the Constitution ‘is intended to preserve practical and substantial rights, not to maintain theories.’”

Justice Black concurred, but criticized the majority for relying on “evanescent standards” and the “accordion-like qualities of this philosophy [which] must inevitably imperil all the individual liberty safeguards specifically enumerated in the Bill of Rights.”

It is easy to see that the methods the police used to gather evidence invaded Rochin’s body to a conscience-shocking degree. An example of what is not shocking to the conscience is a city’s failure to train its employees. That was the issue in Collins v. City of Harker Heights, which concluded that any breach by the city in securing a safe working environment is actionable under state tort law, not due process.

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204. Id.
205. Id. at 173 (“Due process of law, as a historic and generative principle, precludes defining, and thereby confining, these standards of conduct more precisely than to say that convictions cannot be brought about by methods that offend ‘a sense of justice.’”).
206. Id. “So here, to sanction the brutal conduct . . . would be to afford brutality the cloak of law.” Id. It has been elsewhere acknowledged that the due process protection on display in Rochin is provoked by an abuse of the defendant’s person. See State v. Delisio, 2d Dist. Greene No. 91-CA-46, 1992 WL 213451, at *7 (Sept. 3, 1992).
207. Rochin, 342 U.S. at 174.
208. Id. (quoting Davis v. Mills, 194 U.S. 451, 457 (1904)).
209. Id. at 177 (Black, J., concurring). Both Justice Black’s and Justice Douglas’s separate concurrences reasoned that the Fifth Amendment’s protection against self-incrimination prohibited the police from admitting evidence obtained by forcing the defendant to vomit.
210. See id. at 174.
such neglect “arbitrary in a constitutional sense.”

Paul v. Davis held that police chiefs were not liable under Section 1983 for circulating a shoplifter’s photograph to area merchants. The claimed constitutional protection was too different to more substantive privacy decisions “relating to marriage, procreation, contraception, family relationships, and child rearing and education.” A sharp dissent criticized the majority for permitting law enforcers to “condemn innocent individuals as criminals and thereby brand them with one of the most stigmatizing and debilitating labels in our society.”

Justice Brennan argued that the Court had gone against its own procedural due process precedent “recognized that the public branding of an individual implicates interests cognizable as either ‘liberty’ or ‘property,’ and held that such public condemnation cannot be accomplished without procedural safeguards designed to eliminate arbitrary or capricious executive action.”

Whalen v. Roe recognized a privacy interest in “avoiding disclosure on personal matters,” but did not find that this interest was violated by a statute providing for the recording of Schedule II drug prescriptions and the patients who received them. The statute was not arbitrary, because it confronted a problem as “an orderly and rational legislative decision.”

Finally, in County of Sacramento v. Lewis, Justice Souter reiterated that the Court’s “touchstone of due process is protection of the individual against arbitrary action of government,” and clearly separated the arbitrariness analysis “whether it is legislation or a specific act of a governmental officer that is at issue.” Only truly egregious actions by a government official rise to the level of constitutional arbitrariness that was lacking in Collins. And here, Justice Souter pointed to Rochin as a continuing standard of this level of arbitrariness that permits the Court to step between a claimant and a wayward

212. Id. at 130.
214. Id.
215. Id. at 714 (Brennan, J., dissenting).
216. Id. at 725 (citing Jenkins v. McKeithen, 395 U.S. 411 (1969)).
217. Whalen v. Roe, 429 U.S. 589, 599-600 (1977). See also Slayton v. Willingham, 726 F.2d 631, 635 (10th Cir. 1984) (holding that plaintiff had stated a claim against police for circulating “highly sensitive, personal, and private” photographs of him, reasoning that lower court misapplied Paul by not considering Whalen’s recognition that a constitutional right to privacy inheres in “avoiding disclosure of personal matters”).
218. Whalen, 429 U.S. at 597.
220. Id. at 846.
221. Id.
government official: “for half a century now we have spoken of the
cognizable level of executive abuse of power as that which shocks the
conscience . . . In the intervening years we have repeatedly adhered to
Rochin’s benchmark.” The Rochin line of cases thus serve as a
weathervane in evaluating what sort of situations the Supreme Court is
willing to employ the Due Process Clause as a bar to intrusive
investigations by law enforcement.

IV. OBSTACLES TO JUDICIAL PROSCRIPTION OF GOVERNMENT DRONE
SURVEILLANCE

A. Test Cases

As seen above, whatever drone model is employed – the hulking
Predator, the agile ScanEagle, the furtive Black Hornet, or the
ubiquitous quadcopter – an onboard camera enables the operator to
observe private behavior. Surveillance by drones differs from
surveillance through other media. The public anxiety toward overhead
observation by physical and mechanical eyes has been on display in
Compton, Dayton, Baltimore and rural North Dakota. A company based
in Dayton, Ohio – Persistent Surveillance Systems (“PSS”) – developed
a means of surveilling an entire city by installing a 192-megapixel aerial
camera array to the bottom of an aircraft. Once aloft, the array takes
one picture every second of the city below. Computers stabilize and
patch the photographs together to capture a region as large as 25 square
miles. Originally developed for the Pentagon for use in Afghanistan,
CEO Ross McNutt made it possible to use these wide-area pictures to
create a live-feed that recorded not just the outlay of an entire city,
including cars and individuals, but also capture the passage of time.
He likens the surveillance system to a “‘live version of Google Earth’
complete with a rewind button.”

The poor resolution prevents the identification of individuals and

222. Id. at 846-47.
223. See also York v. Story, 324 F.2d 450, 456 (9th Cir. 1963) (plaintiff stated a § 1983 and due
process claim when police arbitrarily intruded upon her privacy by taking unnecessary nude photographs of her).
224. Chris Stewart, Wide Net, Big Problems Cast By New Police Tools, DAYTON DAILY NEWS
net-big-problems/nkgjp/.
225. Id.
226. Id.
227. Reel, supra note 11.
228. Stewart, supra note 224.
vehicle models. Instead, the photographs render individuals as pixels that an analyst can track by moving backwards or forwards in time through the series of photographs. When a roadside bomb would explode, analysts could isolate the location of the explosion, zoom in to where it was detonated, and scroll through the pictures backwards in time to the moment of the explosion – and then keep rewinding until they saw a pixel, representing a person or vehicle stopping at that location long enough to plant the bomb. From there, they could follow the suspects backwards and forwards in time, learning where they went next, where they lived, or where their network was based. Thus, instead of single individuals, McNutt’s technology identified whole networks of enemies.

The technology found a domestic market. In 2012, the Los Angeles County Sheriff’s Department employed PSS for a nine-day trial period over Compton. The police did not tell the city’s residents or the mayor. The aircraft, heavy with its camera array, flew in a continuous loop over Compton, transmitting images to the sheriff’s office. The surveillance was intentionally kept a secret. One police sergeant explained, “A lot of people do have a problem with the eye in the sky, the Big Brother . . . so in order to mitigate any of those kinds of complaints, we basically kept it pretty hush-hush.” When the people of Compton learned about the surveillance a year later, they angrily protested and demanded new policies that protected their privacy.

When PSS sought an opportunity to flex its muscles at its home base in Dayton, Ohio, the police were interested, but first held public hearings to gauge the community’s sentiment. The proposal was met with much opposition, particularly from the African-American community. The city leaders decided against hiring PSS.

The Baltimore Police Department did not inform the public when it

229. Reel, supra note 11.
230. Id.
231. Id.
232. Id.
233. Id.
234. Id.
235. Id.
237. Id.
238. Reel, supra note 11.
239. Id.
240. Id.
241. Id.
began using the technology.\textsuperscript{242} In February 2016, the shooting of two elderly siblings gave PSS the opportunity to find the suspect. The analysts examined the aerial photographs of the scene. They spent two hours tracking vehicles leaving the scene, until they learned that the suspect had fled on foot. The analysts returned to the moment of the shooting and observed a person appear to rush away after the shots were fired.\textsuperscript{243} Though the person only appeared as a pixelated dot, they tracked his movements forward in time until he entered a house. Later, a vehicle arrived at the house. Someone exited the house, entered the car, and traveled to a hospital. They tracked him as far as the emergency room entrance. But due to the earlier confusion, they were not tracking the person in real time. It seemed they had no way to find the person after he entered the hospital.\textsuperscript{244}

Then the police determined that the house the man entered was probably owned by the girlfriend of Carl Anthony Cooper, who had a criminal record. Additionally, in tracking the person’s movements, the analysts realized he had passed in front of a ground-level security camera, whose footage they retrieved. Comparison between the security footage and the Cooper’s mug shot yielded a “possible match.”\textsuperscript{245} The police later labeled Cooper as “Public Enemy #1,” posting his picture and the footage from the security camera, which did not reveal suspicious behavior.\textsuperscript{246} The public was confused at how the police had concluded Cooper was the man who had shot the elderly siblings. Eventually Cooper was arrested for attempted murder and assault. The police said nothing of the surveillance technology which gave them a basis for his arrest.\textsuperscript{247}

The ACLU has suggested that it is a matter of time before the limits of the current aircraft carrying the camera array will give way to drones,\textsuperscript{248} which are far less limited in practicality. There are functional and financial rationales for this. The ScanEagle, popular with law enforcement, can stay aloft for 20 hours at a time,\textsuperscript{249} whereas McNutt’s pilots can stay aloft for only six hours.\textsuperscript{250} Financially, the City of Dayton

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{242} Id. McNutt himself believes the surveillance technology is best used transparently. \textit{Id.}
\item \textsuperscript{243} \textit{Id.}
\item \textsuperscript{244} \textit{Id.}
\item \textsuperscript{245} \textit{Id.}
\item \textsuperscript{246} \textit{Id.}
\item \textsuperscript{247} \textit{Id.}
\item \textsuperscript{249} \textit{ScanEagle Snapshot}, supra note 67.
\item \textsuperscript{250} PBS \textsc{NewsHour}, (Apr. 26, 2014, 12:56 PM) http://www.pbs.org/newshour/bb/new-police-surveillance-techniques-raise-privacy-concerns/.
\end{itemize}
\end{footnotesize}
(in addition to the residents’ privacy concerns) was reluctant to pay $120,000 “for such a short time in the air.” Purchase of an entire surveillance system starts at $1.5 million, or a city could pay $2,000 per hour. Local agencies may invest in their own drone surveillance systems or continue borrowing them from agencies with their own drone force. After all, interagency drone-sharing is already significantly occurring with Customs and Border Patrol through the Certificate of Authority process.

It was through an interagency drone loan that the Nelson County Sheriff’s Department in North Dakota arrested Rodney Brossart and his sons. In the dispute over his neighbor’s cows, Brossart grew increasingly angry and threatened to kill the police officers who came to intervene. A 16-hour standoff followed on the massive 3,000 acre property. The police called a nearby Air Force base and, very shortly thereafter, a Predator drone was airborne. The Predator tracked down Brossart’s exact location.

In the ensuing prosecution, the state argued that the drone was not in use when Brossart threatened to kill the police officers, and it was only deployed as a “last ditch effort to peacefully end the nearly daylong deadlock.” Brossart argued that the “guerilla-like police tactics” and lack of judicial warrant made the use of the drone illegal. In 2012, U.S. District Court Judge Joel Medd disagreed, concluding that “there was no improper use of an unmanned aerial vehicle’ and that the drone ‘appears to have had no bearing on these charges being contested here.’” Two years later, a jury found Brossart guilty of terrorizing the police.

B. Litigating Due Process Claims Against Weighty State Interests

Since Part 107 does not apply to government drones and meaningful

251. Stewart, supra note 224.
252. Id.
253. See Whitlock & Timberg, supra note 82.
256. Wolverton, supra note 1.
257. Id.
258. Id.
260. Id.
261. Id.
congressional statutes have not been passed, citizens may have to resort to the courts. The Certificate of Authority system likely increases the discretion the FAA has in permitting governmental agencies to use drones. The Freedom of Information of Act requests made public are categorized per the requesting body. Some files are enormous, containing many applications by agencies to use drones.\textsuperscript{262}

Whether the due process attack comes under a claimed right to privacy or an allegation of arbitrariness against a government official, difficulties will meet the claimant immediately. The state interests are significant. Preventing crime and protecting national security are inherent powers held by the government. The Supreme Court has protected this governmental power in its due process jurisprudence by proscribing primarily the most offensive government conduct. Taking a man to a hospital and forcing him to vomit offends a sense of justice and shocks any sense of decency.\textsuperscript{263} So does forcing a woman to submit to nude photographs while in police custody.\textsuperscript{264} Such conduct is appropriately proscribed. But even as it is proscribed, significant police latitude is preserved. If the action does not rise to the level that shocks the conscience or is “fatally arbitrary,”\textsuperscript{265} there is no violation of a person’s constitutional right to due process. So, circulating photographs of a shoplifter to area merchants\textsuperscript{266} and deliberate indifference to a suspect’s life in a police chase\textsuperscript{267} are not automatically arbitrary or conscience-shocking.

\textit{County of Sacramento} re-emphasized the principle that due process protects an individual from the government’s arbitrary exercise of power.\textsuperscript{268} In stark contrast to the fact scenarios in the Court’s shock-the-conscience and arbitrary executive action jurisprudence, Brossart’s arrest falls far below this standard. He threatened to kill police who had been called to his property because he had refused to return cows that obviously belonged to his neighbor. Not only did Brossart threaten the police, but his three sons did as well.\textsuperscript{269} The police force in that case had to contend with four armed men on a 3,000-acre property with which the four men were very familiar. No matter the state of technology, Brossart did not have the right to evade the police on his land. Having given the police cause to pursue him, he surrendered the right to privacy on his

\begin{itemize}
  \item \textsuperscript{262} FOIA RESPONSES, supra note 102.
  \item \textsuperscript{263} Rochin v. California, 342 U.S. 165, 172 (1952).
  \item \textsuperscript{264} York v. Story, 324 F.2d 450, 456 (9th Cir. 1963) (plaintiff stated a § 1983 and due process claim when police arbitrarily intruded upon her privacy by taking unnecessary nude photographs of her).
  \item \textsuperscript{265} County of Sacramento v. Lewis, 523 U.S. 833, 846 (1998).
  \item \textsuperscript{266} Paul v. Davis, 424 U.S. 693 (1976).
  \item \textsuperscript{267} County of Sacramento, 523 U.S. at 855.
  \item \textsuperscript{268} Id.
  \item \textsuperscript{269} Lee, supra note 254.
\end{itemize}
own property. Before drone technology, the police would have been able to come onto his property to arrest him. Drones make it easier for the government to enforce the rule of law, but an increase in law enforcement efficiency per se does not violate fundamental rights. The government is permitted to adopt new forms of technology in the fulfillment of its mission.

Similarly, deployment of the PSS technology from a drone would not rise to the level of arbitrary government action. First, the photographs render individuals as anonymous pixels, impossible to identify as specific individuals. Although Cooper was roughly identified after he entered a certain house in Baltimore, his identity was established through other means, including uncontroversial street-level cameras. Second, society is generally comfortable with the exchange of a minimal amount of privacy for increased community protection. For instance, the PSS technicians were only tracking Cooper’s pixel because he had fled the crime scene after the shots were fired. The intersection of a violent crime and suspicious behavior was the impetus for tracking him. Fundamentally, this is nothing new to criminal justice.

Even in situations less antagonistic than what Brossart provoked or what Cooper was involved in, Paul v. Davis makes it very difficult for any claim of right to prevail when there is a suspicion of criminal activity. However, Paul v. Davis needs to harmonize with the Court’s later rulings in Lawrence and Obergefell. This latter line of cases is arguably not out of reach from a claim like Brossart’s, or the people of Baltimore complaining of clandestine police surveillance. In Seegmiller v. LaVerkin City, the Tenth Circuit acknowledged County of Sacramento’s division of substantive due process analyses based on whether the challenged action is legislative or executive. Fatally arbitrary legislation differs from a fatally arbitrary specific act by a government official. However,

\[\text{[n]owhere in that opinion or elsewhere, however, did the Court establish an inflexible dichotomy. This makes good sense, for the distinction between legislative and executive action is ancillary to the real issue in substantive due process cases: whether the plaintiff suffered from governmental action that either (1) infringes upon a fundamental right, or (2) shocks the conscience.}\]

If the difference is merely ancillary, government use of drones that infringes upon a fundamental right may trigger an analysis closer to

\[\text{270. Seegmiller v. LaVerkin City, 528 F.3d 762 (2008).}\]
\[\text{271. Id. at 767-68.}\]
\[\text{272. Id. at 768.}\]
Obergefell than Glucksberg. The Obergefell opinion is nothing if not it does hinge on a fundamental right. Chief Justice Roberts’ prophesy that Glucksberg has been ejected may come to bear.

Access to the fundamental right analysis, however, does not necessarily carry a claim against government use of drones very far. The right still must pass constitutional muster under Lawrence. The individual liberty interest against unnecessary observation is deserving of constitutional stature. But Lawrence’s balancing of interests ends unfavorably for a claimant seeking complete liberty from government surveillance, by drones or any other technology. We consent to our appearances being captured by security cameras and law enforcement every time we venture out of our homes. Road signs already notify us that our speed is monitored by aircraft. In the virtual realm, many treat the internet as a public space and expect little or no privacy with respect to their digital selves, an attitude which comports with reality. The transaction is a slight degree of privacy for potentially substantial increases in security and police efficiency.

V. CONCLUSION

Without overt government intrusion in a person’s most private space, it is not likely that a court will grant broad due process protections to an individual complaining of the government’s use of drones, which is based in interests as weighty as national security and criminal control. American society is already under significant surveillance. As technology advances, state and federal congresses should embrace their legislative role in tailoring policies that protect individuals from overreaching government uses of drones. First, the Supreme Court has shown a willingness to uphold legislation providing for appropriate uses of and safeguards against the sort of technology whose abuse may result in substantial encroachments by the government into private life. Second, there is a dearth of precedent supporting a due process right of privacy in protecting the populace from surveillance. Third, the federal Congress, and especially state legislatures, are keenly postured to tailor rules that clearly demarcate socially beneficial and appropriate government uses of drones from the undesirable applications that intrude into realms that ought to remain private.


274. United States v. Jones, 132 S. Ct. 945, 964 (2012) (Alito, J., concurring) (“In circumstances involving dramatic technological change, the best solution to privacy concerns may be legislative.”). In fact, Senator Grassley has recognized that Jones is “a good starting point for a discussion on drones.” Future of Drones, supra note 9, at 4.