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What Happens When Police Robots Violate the Constitution?

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What Happens When Police Robots Violate the Constitution? Revisiting the Qualified Immunity Standard for Excessive Force Litigation Under § 1983 Regarding Violations Perpetrated by Robots

ABSTRACT

Public concern surrounding excessive use of force by police officers and the overmilitarization of the police continues to grow. The use of police robots, both with and without artificial intelligence capabilities, is already transforming the practice of policing. Police use of robots gained national attention on July 7, 2016, when Dallas police used a robot to disarm and kill an active shooter who killed five and injured several others in a hostage situation. The qualified immunity doctrine was designed to protect police officers, but under the Supreme Court's current qualified immunity framework, police robots may pose a challenge to accomplishing that goal. This Note suggests a two-pronged approach to the problem: (1) lessening the burden of proof for plaintiffs to defeat qualified immunity claims in excessive force cases where robots use force, and (2) carving out an exigent circumstances exception to the heightened standard.

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Imagine you are at your friend's house. The police have a valid no-knock[1] search warrant for the house. A police robot carrying a battering ram in one claw and a flashbang grenade[2] in the other claw

1. No-knock warrants are warrants that authorize the police to enter a person's home to execute a valid search or arrest warrant without first knocking on the person's door and announcing that they are police officers. *See, e.g.*, Todd Witten, Note, Wilson v. Arkansas*: Thirty Years After* Ker *the Supreme Court Addresses the Knock and Announce Issue*, 29 AKRON L. REV. 447, 456 & n.63 (1996). No-knock warrants require a showing of reasonable suspicion that knocking and announcing police presence would be dangerous, futile, or would hamper the investigation of a crime. Richards v. Wisconsin, 520 U.S. 385, 394 (1997); *see* Wilson v. Arkansas, 514 U.S. 927, 930 (1995).

2. Flashbang grenades are a less lethal explosive device used to "stun" a suspect. *See* Dukes v. Deaton, 852 F.3d 1035, 1040 (11th Cir. 2017) ("The [SWAT] manual classifies flashbangs as explosives that can generate heat in 'excess of 2,000 degrees centigrade,' a flash of light up to 80 times brighter than the flashbulb of a camera, and over 150 decibels of noise for less than one half of a second."), *cert. denied*, 138 S. Ct. 72 (2017); Julia Angwin & Abbie Nehring, *Hotter Than Lava*, PROPUBLICA (Jan. 12, 2015), https://www.propublica.org/article/flashbangs [https://perma.cc/5MZ6-5F43]. Flashbang grenades

approaches the door. The robot transmits video of its surroundings through a camera and microphone to police stationed thirty feet outside the door. The robot uses the battering ram to open the door. Then, the robot uses its other claw to throw the grenade into the living room. You hear a loud bang followed by a second bang. The living room immediately erupts in smoke and catches fire, and you sustain serious injuries. Human police officers enter your friend's home after the robot throws the flashbang grenade.

You decide to sue the police officer who authorized the robot's use of force, alleging that the police violated your Fourth Amendment rights.[3] You know that the Fourth Amendment to the US Constitution guarantees the right of the people to be free from "unreasonable searches and seizures."[4] You also know that if a reasonable officer in that circumstance would find it appropriate to use force, there is justification for the use of force.[5] Finally, you know that some courts hold that a human police officer throwing a flashbang grenade without first inspecting the premises almost certainly violates the Fourth Amendment.[6] Thus, it seems likely that a robot's use of the flashbang grenade without prior inspection also violates the Fourth Amendment.

In spite of the Fourth Amendment violation, your suit fails at the summary judgment stage.[7] The court acknowledges that the police use of excessive force through the robot violated your Fourth Amendment rights, but the officers at your friend's home who authorized the robot's use of force enjoyed qualified immunity.[8] Police

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are reasonable only when: (1) police have reasonable suspicion to believe that the suspect is dangerous; (2) the police have inspected the area for possible innocent people before throwing the flashbang grenade; and (3) police carry a fire extinguisher. *See, e.g.*, Estate of Escobedo v. Bender, 600 F.3d 770, 784–85 (7th Cir. 2010).

3. *See* U.S. CONST. amend. IV ("The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated[.]"); 42 U.S.C. § 1983 (2012) (establishing a civil cause of action for constitutional violations committed by government officials).

4. *See* U.S. CONST. amend. IV.

5. *Id.*; Graham v. Connor, 490 U.S. 386, 396 (1989) ("[I]ts proper application requires careful attention to the facts and circumstances of each particular case, including the severity of the crime at issue, whether the suspect poses an immediate threat to the safety of the officers or others, and whether he is actively resisting arrest or attempting to evade arrest by flight.").

6. *See, e.g.*, *Dukes*, 852 F.3d at 1042; *Bender*, 600 F.3d at 785; Boyd v. Benton Cty., 374 F.3d 773, 779 (9th Cir. 2004) (holding that failure to inspect an area before throwing a flashbang grenade is unreasonable); *cf.* Krause v. Jones, 765 F.3d 675, 679 (6th Cir. 2014) (acknowledging that using flashbang grenades in an area occupied by innocent parties also weighs against reasonableness).

7. *Cf. Dukes*, 852 F.3d at 1042 (dismissing case at summary judgment).

8. This scenario is very similar to the situation in *Dukes*. *See id.* There, police executed a search warrant based on probable cause for evidence of marijuana at 5:30 AM. *Id.* at 1044.

officers benefit from qualified immunity for violations of constitutional rights that are not "clearly established" at the time of the official's misconduct.[9] Courts made it clear that they intend to provide police officers, who make dangerous decisions in split-second situations, with large amounts of protection and discretion in how they do their jobs.[10] Courts typically determine whether qualified immunity attaches at the summary judgment stage.[11] The Supreme Court stated that it defers very heavily to police officers in excessive force cases because it wants to protect human police officers making split-second decisions.[12] The US Court of Appeals for the Seventh Circuit previously upheld the use of flashbang grenades to secure homes prior to the exercise of a nonexigent search warrant.[13]

However, a robot is not a human being. A human police officer who puts a robot into a dangerous situation as opposed to putting his own human body into a dangerous situation should not enjoy the same level of discretion because, simply put, it is common sense that human lives are more valuable than a robot's mechanical appendages.

Human police officers used flashbang grenades to clear the premises without attempting to inspect the premises. *Id.* at 1042. Had police inspected the premises before detonating the flashbang grenades, they would have been able to discern that the house's occupants were sleeping. *See id.* at 1040. The US Court of Appeals for the Eleventh Circuit concluded that while the residents' constitutional rights had been violated, the police made a reasonable mistake because drug suspects are known to be armed and information about the suspect owning a gun was in the warrant. *Id.* at 1043–44.

9. Pearson v. Callahan, 555 U.S. 223, 232 (2009); Harlow v. Fitzgerald, 457 U.S. 800, 819 (1982) ("The public interest in deterrence of unlawful conduct and in compensation of victims remains protected by a test that focuses on the objective legal reasonableness of an official's acts. Where an official could be expected to know that certain conduct would violate statutory or constitutional rights, he should be made to hesitate; and a person who suffers injury caused by such conduct may have a cause of action. But where an official's duties legitimately require action in which clearly established rights are not implicated, the public interest may be better served by action taken 'with independence and without fear of consequences.'" (footnote omitted)); *see* 42 U.S.C. § 1983 (2012). Note that § 1983 also establishes a cause of action for violations of *statutory* rights by government officials; however, this Note only addresses § 1983's application to Fourth Amendment violations by police. *See* 42 U.S.C. § 1983.

10. *See, e.g.*, *Dukes*, 852 F.3d at 1045; Roy v. Inhabitants of Lewiston, 42 F.3d 691, 695 (1st Cir. 1994).

11. *See Harlow*, 457 U.S. at 818 ("Reliance on the objective reasonableness of an official's conduct, as measured by reference to clearly established law, should avoid excessive disruption of government and permit the resolution of many insubstantial claims on summary judgment. On summary judgment, the judge appropriately may determine, not only the currently applicable law, but whether that law was clearly established at the time an action occurred." (footnote omitted)); Teressa E. Ravenell, *Hammering in Screws: Why the Court Should Look Beyond Summary Judgment When Resolving Section 1983 Qualified Immunity Disputes*, 52 VILL. L. REV. 135, 136 (2007).

12. Graham v. Connor, 490 U.S. 386, 396–97 (1989).

13. Estate of Escobedo v. Bender, 600 F.3d 770, 784–85 (7th Cir. 2010).

Use of robots by civilian police departments is not new.[14] What is new is the police use of robots to inflict deadly force on US civilians, underscoring the need for different standards when police use unmanned robots.[15] For example, on July 7, 2016, Dallas police chief David Brown authorized the use of a remote-controlled robot to kill Micah Xavier Johnson after Johnson killed two police officers and gravely injured several others.[16]

For the purpose of this Note, a "robot" is a device that operates unmanned, regardless of its capacity for artificial intelligence (AI).[17] Many people predict that sophisticated police robots will eventually become "useful, cheap, and ubiquitous."[18]

Police robots have the potential to decrease risks police officers face by replacing human officers in dangerous situations.[19] Police departments already use robots to deliver cell phones in hostage negotiation situations and scout potentially dangerous premises.[20] Military robots already apply coercive force against foreign enemies.[21] Many technologies initially developed for military use end up in the hands of local law enforcement agencies (LEAs) through the 1033 Program.[22] On August 28, 2017, President Donald Trump rescinded

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14. *See* DAN GETTINGER & ARTHUR HOLLAND MICHEL, CTR. FOR THE STUDY OF THE DRONE, LAW ENFORCEMENT ROBOTS DATASHEET 1 (2016), http://dronecenter.bard.edu/files/2016/07/LEO-Robots-CSD-7-16-1.pdf [https://perma.cc/PQ3V-6FEK]; *see also* Drew Kann, *Why Your Local Police Force Loves Robots*, CNN (Apr. 18, 2017, 9:54 AM), http://www.cnn.com/2016/11/10/us/police-officers-future-technology-lisa-ling/index.html [https://perma.cc/57ZJ-VJBR].

15. *See* Damon Beres, *This Is the Robot Dallas Police Used to Kill Shooting Suspect*, HUFFINGTON POST (July 11, 2016, 12:53 PM), http://www.huffingtonpost.com/entry/dallas-police-bomb-robot_us_5783bc0de4b01edea78eb60c [https://perma.cc/B8C9-GNKC]; *see also* Andy Campbell & Willa Frej, *Sniper Attack Leaves 5 Police Officers Dead, 7 Injured in Dallas*, HUFFINGTON POST (July 8, 2016), http://www.huffingtonpost.com/entry/dallas-protest-shooting_us_577f0a0ce4b0344d514eb552 [https://perma.cc/2SM8-6H48].

16. Sarah Sidner & Mallory Simon, *How Robot, Explosives Took Out Dallas Sniper in Unprecedented Way*, CNN (July 12, 2016, 8:50 AM), http://www.cnn.com/2016/07/12/us/dallas-police-robot-c4-explosives/ [https://perma.cc/RQ3Q-ETK5]. Eventually, five people died due to injuries inflicted by Johnson. Campbell & Frej, *supra* note 15.

17. Liability for harmful actions committed by AI-possessing robots is also in dispute. *See generally* Amitai Etzioni & Oren Etzioni, *Keeping AI Legal*, 19 VAND. J. ENT. & TECH. L. 133, 135 (2016).

18. Elizabeth E. Joh, *Policing Police Robots*, 64 UCLA L. REV. DISCOURSE 516, 518 (2016).

19. *See id.* at 526–27.

20. *See* Reinhardt v. Feller, No. 1:08-cv-00329 LJO DLB HC, 2008 WL 5386802, at *3 (E.D. Cal. Dec. 24, 2008); Joh, *supra* note 18, at 519.

21. *See* Joh, *supra* note 18, at 521.

22. *Id.* at 528 ("For instance, the so-called '1033 Program,' part of the National Defense Authorization Security Act of 1997, is the federal initiative that has transferred surplus military

restrictions on military equipment available to police through the 1033 Program, allowing more advanced weaponry to pass into the hands of local police departments.[23] Thus, more ubiquitous use of coercive force effectuated by police robots is likely on the horizon.

Robots, regardless of whether they possess AI capacities, change the calculus of police work.[24] There are no publicly available explicit policies and procedures governing robot use in policing. This lack of procedural guidance raises broader constitutional questions.[25] A police robot can disarm a suspect or secure premises for a search warrant without placing human lives on the line. Police are more accurately able to assess risk without putting their own lives at risk. As a result, the police should not enjoy the same level of deference when using excessive force without putting human flesh into a dangerous situation.

This Note suggests a modified approach to qualified immunity and discovery in excessive force lawsuits when a police robot is the entity implementing the excessive force. Part I of this Note discusses different robots that are currently available or in development for military use. That Part contends that because there is little oversight, the 1033 Program—which facilitates transfers of robots and other equipment to police departments—suffers from poor regulation. Part II argues that application of current legal theories surrounding police robot liability requires a detailed analysis of attached issues of qualified immunity. Extending qualified immunity to cases where the actor is a police robot will further complicate discovery and make it significantly harder for plaintiffs to recover in excessive force cases. As a solution, Part III of this Note suggests a two-prong test for determining whether qualified immunity should attach in cases alleging that a robot actor used excessive force. The first prong creates a rebuttable presumption of unreasonableness when a robot carries out the disputed force, which can be rebutted at the summary judgment stage. The second prong carves out an exigent circumstances or imminent danger exception to the modified reasonableness standard.

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equipment such as MRAPs (Mine-Resistant, Ambush-Protected vehicles), grenade launchers, and amphibious tanks to local *police* departments." (emphasis added) (footnote omitted)).

23. *See* Exec. Order No. 13,809, 82 Fed. Reg. 41499, 41499 (Aug. 28, 2017); Tom Jackman, *Trump to Restore Program Sending Surplus Military Weapons, Equipment to Police*, WASH. POST (Aug. 27, 2017), https://www.washingtonpost.com/news/true-crime/wp/2017/08/27/trump-restores-program-sending-surplus-military-weapons-equipment-to-police/?utm_term=.a473f8055339 [https://perma.cc/J63T-CG55].

24. Joh, *supra* note 18, at 519.

25. Melissa Hamilton, *Police Robots and the Law*, 31 WESTLAW J. WHITE-COLLAR CRIME 1, 5 (2016).

I. BACKGROUND

A. The Dallas Police Shooting: A New Frontier in Police Use of Robots

On July 7, 2016, Dallas police used a Remotec Andros Mark V-A1 robot, a robot lacking AI, to kill Micah Xavier Johnson, an Army veteran who opened fire at a peaceful Black Lives Matter protest in downtown Dallas and killed five police officers while injuring seven others.[26] Following a forty-five-minute gun battle and two hours of failed negotiations with Johnson, police turned to the Mark V-A1 robot.[27] The Dallas police Special Weapons and Tactics (SWAT) unit fashioned a pound of C-4, an explosive substance, into a ball and placed it on the Mark V-A1.[28] Using its extension arm, the robot then lodged the ball of C-4 into the wall Johnson was hiding behind.[29] At the time of detonation, Johnson had already murdered two police officers, and later, three other police officers died from their injuries.[30]

Northrop Grumman, the company that manufactures the Mark V-A1, touts the robot as having the following features: (1) a surveillance camera with 216:1 zoom, (2) a 40:1 zoom ratio stationary arm camera, (3) a multiple-mission tool, (4) sensor mounts with plug-and-play capabilities, (5) grippers with continuous rotators, (6) quick release pneumatic wheels, and (7) gripping technology.[31] While the use of explosive material deployed through a robot to kill Johnson was clearly justified when considering Supreme Court precedent, the continued use of police robots in the absence of greater policies and procedures will raise broader constitutional and regulatory questions.[32]

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26. Beres, *supra* note 15; Campbell & Frej, *supra* note 15.

27. Sidner & Simon, *supra* note 16.

28. *Id.*

29. *Id.*

30. *Id.*

31. *Mark 5A-1: Highly Versatile, Robust, All-Terrain Platform*, NORTHROP GRUMMAN [hereinafter *Mark 5A-1*], http://www.northropgrumman.com/Capabilities/Remotec/Products/Pages/Mark5A1.aspx [https://perma.cc/Z7TE-5W6X] (last visited Feb. 1, 2018).

32. *See* Tennessee v. Garner, 471 U.S. 1, 11 (1985); Hamilton, *supra* note 25, at 6.

B. The 1033 Program and the Inevitability of Artificial Intelligence in Policing: The Need for Heightened Regulation of Robot Use of Force

1. The 1033 Program: An Overview

The 1033 Program, in operation since 1997, transfers cutting-edge military technology—like robots—to domestic LEAs.[33] Congress authorizes the transfer of surplus federal military equipment to domestic LEAs at no cost to the recipient.[34] Municipal police departments; federal enforcement agencies, such as Immigration and Customs Enforcement and the Bureau of Alcohol, Tobacco, and Firearms (ATF); state police departments and highway patrols; university police departments; and school districts have all received surplus military tactical equipment through the 1033 Program.[35]

The 1033 Program officially began when the National Defense Authorization Act of 1997 granted permanent authority for the Secretary of Defense to transfer unused military equipment from the Department of Defense (DOD) to LEAs.[36] However, transfers of military equipment to civilian police departments existed long before the program's enactment.[37] Title XI of the National Defense Authorization Act of 1989 (1989 NDAA) established the DOD as the lead federal government agency in detecting and stopping drug trafficking.[38] The 1989 NDAA also authorized the DOD to use or to make available to any federal, state, or local LEA any equipment—including tactical military equipment—in furtherance of that goal.[39] The following year's NDAA authorized the DOD to directly transfer excess equipment suitable for counterdrug activities

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33. *See* Shawn Musgrave et al., *The Pentagon Finally Details Its Weapons-for-Cops Giveaway*, MARSHALL PROJECT (Dec. 3, 2014, 7:35 PM), https://www.themarshallproject.org/2014/12/03/the-pentagon-finally-details-its-weapons-for-cops-giveaway#.e1J6vIf6r [https://perma.cc/D8TL-RQLF]; *see also* Taylor Wofford, *How America's Police Became an Army: The 1033 Program*, NEWSWEEK (Aug. 13, 2014, 10:47 PM), http://www.newsweek.com/how-americas-police-became-army-1033-program-264537 [https://perma.cc/AT8Z-UR59] ("It was called the 1208 Program. In 1996, Congress replaced Section 1208 with Section 1033.").

34. 10 U.S.C. § 2576a(a) (2012); *see* Musgrave et al., *supra* note 33.

35. *See* Musgrave et al., *supra* note 33.

36. National Defense Authorization Act for Fiscal Year 1997, Pub. L. No. 104-201, § 1033, 110 Stat. 2422, 2639–40 (1996) (codified as amended at 10 U.S.C. § 2576a (2012)); DANIEL H. ELSE, CONG. RESEARCH SERV., R43701, THE "1033 PROGRAM," DEPARTMENT OF DEFENSE SUPPORT TO LAW ENFORCEMENT 2 (2014), https://fas.org/sgp/crs/natsec/R43701.pdf [https://perma.cc/SHU6-8ZY8].

37. ELSE, *supra* note 36, at 1–2.

38. *Id.* at 1.

39. *Id.*

to any federal, state, or local LEA.[40] The provision was originally intended to sunset in 1992; however, the 1992 authorization extended the sunset date to 1997[41] and the 1997 NDAA permanently authorized such transfers.[42]

The 1033 Program is responsible for facilitating the transfer of robot technology to police departments. As of July 2016, the 1033 Program had transferred at least 987 robots, together worth over $55.2 million, to LEAs across the United States.[43] Local, not federal, police departments comprise the majority of robot acquisitions through the 1033 Program.[44] Perhaps unsurprisingly, the 1033 Program has faced criticism for the lack of oversight and specialized training provided to local LEAs before the DOD equips them with military-grade weapons.[45]

2. The 1033 Program Is Poorly Regulated

Critics have argued the DOD does not properly regulate the 1033 Program given the lack of training requirements for local LEAs receiving military-grade weapons and the lack of oversight regarding who receives what equipment.[46] Because the DOD designed the 1033 Program,[47] the equipment being transferred is presumably the same as that used in the military. In the wake of the use of military weapons by police during the Ferguson, Missouri, protests in 2014, President Barack Obama attempted to increase federal oversight of the 1033 Program. Executive Order 13,688, signed on January 16, 2015, established a task group to identify potential agency actions that could improve federal oversight of the 1033 Program and the equipment provided to LEAs.[48] Stated goals of the proposed agency actions included (1) increasing transparency in the equipment transferred to LEAs, (2) establishing a process to review the types of equipment eligible for the 1033 Program, (3) developing policies to

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40. *Id.* at 1–2.

41. *Id.* at 2.

42. *Id.*

43. GETTINGER & MICHEL, *supra* note 14, at 3.

44. *See id.* at 2.

45. Karena Rahall, *The Green to Blue Pipeline: Defense Contractors and the Police Industrial Complex*, 36 CARDOZO L. REV. 1785, 1786 (2015); Gregory T. Kiley, *Police with Military Gear: Better Training Needed*, REAL CLEAR POL'Y (Nov. 10, 2015), http://www.realclearpolicy.com/blog/2015/11/11/police_with_military_gear_better_training_needed_1466.html [https://perma.cc/N37X-TP45]; Musgrave et al., *supra* note 33.

46. Kiley, *supra* note 45.

47. Rahall, *supra* note 45, at 1791.

48. Exec. Order No. 13,688, 80 Fed. Reg. 3451, 3451 (Jan. 16, 2015), *revoked by* Exec. Order No. 13,809, 82 Fed. Reg. 41499 (Aug. 28, 2017).

ensure that LEAs receiving equipment abide by limitations and obligations set forth by the federal government, (4) requiring after-action analysis for significant actions involving controlled federal equipment, and (5) creating a database to track all equipment disbursed to LEAs.[49] The government instituted few other regulations or bans on the distribution of particular types of tactical equipment, including robots.[50] However, on August 28, 2017, Attorney General Jeff Sessions announced that the restrictions promulgated by Executive Order 13,688 would be rescinded.[51]

The 1033 Program largely entrusts military technology acquired by local LEAs to SWAT teams, which also lack transparency.[52] The majority of cases in which police use SWAT teams involve narcotics.[53] Almost 80 percent of SWAT team deployments are for the execution of search warrants.[54] According to a 2014 American Civil Liberties Union (ACLU) report that analyzed eight hundred SWAT team deployments between 2011 and 2012, only 7 percent of such deployments were for hostage, barricade, or active shooter scenarios.[55] Information about SWAT team deployments remains very difficult for members of the public to obtain.[56]

C. Other Uses of Robotics in Police and Military Training

Use of robots in policing is not new. At least 280 domestic police forces currently possess police robots, not including domestic LEAs that purchased robots without the use of federal funds.[57] Between 2007 and 2016, the Department of Justice (DOJ) and the Department of Homeland Security (DHS) awarded twenty-five grants—worth at least $2.63 million in total—to local and state LEAs

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49. Exec. Order No. 13,688, 80 Fed. Reg. at 3452–53.

50. Rahall, *supra* note 45, at 1790.

51. Jackman, *supra* note 23.

52. ACLU, WAR COMES HOME: THE EXCESSIVE MILITARIZATION OF AMERICAN POLICING 21–22, 27 (2014), https://www.aclu.org/sites/default/files/assets/jus14-warcomeshome-report-web-rel1.pdf [https://perma.cc/2KUM-SHGL]; *see* Rahall, *supra* note 45, at 1792.

53. ACLU, *supra* note 52, at 31.

54. Radley Balko, *New ACLU Report Takes a Snapshot of Police Militarization in the United States*, WASH. POST (June 24, 2014), https://www.washingtonpost.com/news/the-watch/wp/2014/06/24/new-aclu-report-takes-a-snapshot-of-police-militarization-in-the-united-states/?utm_term=.a412ea20996e [https://perma.cc/X5KV-FDUE].

55. ACLU, *supra* note 52, at 2, 5.

56. *Id.* at 5, 27. In 2014, the ACLU filed public records requests for data about SWAT team deployments with more than 255 LEAs. *Id.* at 27. Of that group, 114 denied the requests either in whole or in part. *Id.*

57. Hamilton, *supra* note 25, at 1.

for purchasing and upgrading robots.[58] The DOJ and DHS also awarded federal agencies, such as the Federal Bureau of Investigation (FBI), $6.25 million in grants for the same purpose.[59] The DOJ gave nine of the ten largest contracts for robot development to either the FBI or the ATF.[60] Northrup Grumman, a global security company, was the largest single recipient of grants, receiving $2.43 million in total.[61] All of this spending is in addition to the estimated $55,232,278 worth of robots that the federal government transferred to local and state LEAs through the 1033 Program.[62] This represents a massive investment on behalf of these federal agencies.

Police frequently use robots to reinstate communication in hostage situations and standoffs.[63] For example, consider the standoff situation in *Reinhardt v. Feller*,[64] where police used a robot to monitor and restart communications with a suspect.[65] At the time the robot entered, the police knew that the suspect's home contained several guns.[66] In fact, the suspect's house contained one handgun, twenty shotguns, and a 257 Roberts rifle, used for shooting big game from up to four miles away.[67] The suspect reportedly yelled threats at SWAT officials positioned outside the house.[68] Police deployed a robot equipped with cameras, a microphone, and speakers.[69] The robot broke a window with a window punch in its claw and entered the home.[70] Police communicated with the suspect through the robot.[71] The suspect shot at the robot[72] and fired shots outside the house.[73]

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58. GETTINGER & MICHEL, *supra* note 14, at 3.

59. *Id.*

60. *Id.*

61. *Id.*; NORTHROP GRUMMAN, http://www.northropgrumman.com/Pages/default.aspx (last visited Feb. 8, 2018).

62. GETTINGER & MICHEL, *supra* note 14, at 3.

63. *See, e.g.*, Reinhardt v. Feller, No. 1:08-cv-00329 LJO DLB HC, 2008 WL 5386802, at *2–3 (E.D. Cal. Dec. 24, 2008). Note that the facts of this case are being used to illustrate a situation in which a robot aided a dangerous standoff situation. The use of the robot was not in dispute in this litigation.

64. *Id.*

65. *Id.* at *3.

66. *Id.* at *2.

67. *Id.*

68. *Id.* at *3 ("During the negotiations, appellant repeatedly threatened to kill: 'you pull a gun on me and you know what? I will kill instantly.' 'I'm not worried about your little SWAT team. What I've got in my hand pokes holes right through bullet proof vests . . . .").

69. *Id.*

70. *Id.*

71. *See id.*

72. *Id.*

73. *Id.*

Due—at least in part—to the robot's role in the standoff, no one was hurt.[74] Without robots, police officers would likely face greater risks of harm in situations similar to *Reinhardt*.

The military currently develops autonomous robots for combat capacities and drones with AI capabilities.[75] The Defense Advanced Research Projects Agency (DARPA) is working on a drone that would have AI capabilities and would not need a human remotely controlling it.[76] In October 2016, DARPA tested a drone that could identify people carrying AK-47s within a makeshift village in Fort Edwards, Massachusetts.[77] Autonomous aircraft that could travel alongside manned aircraft in combat are in development by the DOD.[78] The Pentagon's most recent budget committed $18 billion to developing necessary technologies to create combat robots that can function autonomously.[79] The Pentagon expects to have these combat robots functioning by 2025.[80] If the US military uses autonomous robots en masse, these robots are very likely to enter the arsenal of civilian police forces through the 1033 Program.[81]

D. Current Theories of Robot Criminal Liability Mandate a Discussion of Qualified Immunity When Applied to Police Officers

Determining the standard for criminal culpability for the bad actions of robots runs into challenges since almost every criminal act requires the showing of a certain mens rea.[82] Robots, however, cannot currently exhibit a mens rea. The Rome Statute of the International Criminal Court, which governs use of autonomous robots in military combat, has yet to adopt a standard for determining criminal liability

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74. *Id.* at *5.

75. Matthew Rosenberg & John Markoff, *The Pentagon's 'Terminator Conundrum': Robots That Could Kill on Their Own*, N.Y. TIMES (Oct. 25, 2016), https://www.nytimes.com/2016/10/26/us/pentagon-artificial-intelligence-terminator.html?_r=0 [https://perma.cc/JJJ4-DDXB].

76. *Id.*

77. *Id.*

78. *Id.*

79. *Id.*

80. Jon Lockett, *US Military Will Have More Combat Robots Than Human Soldiers by 2025*, N.Y. POST (June 15, 2017, 4.58 PM), https://nypost.com/2017/06/15/us-military-will-have-more-combat-robots-than-human-soldiers-by-2025/ [https://perma.cc/47B7-8EUN]; *see also* Rosenberg & Markoff, *supra* note 75.

81. Joh, *supra* note 18, at 528; *see* Henry H. Perritt, Jr. & Eliot O. Sprague, *Drones*, 17 VAND. J. ENT. & TECH. L. 673, 735 (2015) (predicting that manufacturers of military-grade drones will likely adapt the technology for civilian use).

82. Joh, supra note 18, at 536; *see* Gabriel Hallevy, *"I, Robot – I, Criminal"—When Science Fiction Becomes Reality: Legal Liability of AI Robots Committing Criminal Offenses*, 22 SYRACUSE SCI. & TECH. L. REP. 1, 7 (2010).

when robots are in use; however, the International Court of Justice and International Criminal Tribunal for the Former Yugoslavia suggest that the operator should be held liable.[83] Indeed, a model code that views robots as purely innocent actors at the control of a human element may work, but only to a certain extent.[84] Under such a model, the "operator" of the robot (in this case, the police officer) would face full culpability,[85] which may work as a model for regulating police robots *currently* in use. Culpability would therefore rest solely on the police officers for the actions of robots under human control, but such a standard will not work when police departments begin using robots with AI, as they will not have operators. Allowing AI systems to make decisions raises questions;[86] the answers to those questions become more important when AI decisions have potentially irreversible consequences.

E. Qualified Immunity: Heavy Deference to Police Officers, but Do Robots Deserve the Same Deference?

Legal standards governing use of force by police departments assume that police officers act under an imminent threat to their safety.[87] In fact, the Supreme Court operated under that assumption in establishing precedent that defers heavily to police officers in granting qualified immunity.[88] As a result, successful suit against police departments requires a showing of deliberate indifference to constitutional violations, and successfully suing the officers that authorized a particular use of excessive force requires overcoming an

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83. *See* Kelly Cass, *Autonomous Weapons and Accountability: Seeking Solutions in the Law of War*, 48 LOY. L.A. L. REV. 1017, 1058–59 (2015); *see also id.* at 1057–58 ("Because an autonomous weapon is not capable of committing a war crime [under the Rome Statute], the question is . . . who should be held accountable when the *use* of an autonomous weapon fails to comply with the Law of War." (emphasis in original)).

84. *See* Hallevy, *supra* note 82, at 9.

85. *Id.* at 10–11.

86. *See, e.g.*, Michael Guihot, Anne F. Matthew & Nicolas P. Suzor, *Nudging Robots: Innovative Solutions to Regulate Artificial Intelligence*, 20 VAND. J. ENT. & TECH. L. 385, 404 (2017) ("These AI systems present a spectrum of immediate issues that may require a regulatory response. Some are likely to be dealt with by developers as they come to their attention, and end users of the system may deal with others as they refine their use of the system and work with developers in overcoming issues as and when they arise.").

87. Joh, *supra* note 18, at 537.

88. *See* Karen Blum, *Qualified Immunity in the Fourth Amendment: A Practical Application of § 1983 as It Applies to Fourth Amendment Excessive Force Cases*, 21 TOURO L. REV. 571, 575 (2005); *cf.* Graham v. Connor, 490 U.S. 386, 396–97 (1989) ("The calculus of reasonableness must embody allowance for the fact that police officers are often forced to make split-second judgments—in circumstances that are tense, uncertain, and rapidly evolving—about the amount of force that is necessary in a particular situation.").

onerous qualified immunity standard.[89] In *Bivens v. Six Unknown Named Agents*, the Supreme Court established a cause of action against federal officials who violate citizens' constitutional rights, while 42 U.S.C. § 1983 establishes the same cause of action against state and local officials.[90] This Note, however, only focuseson state and local officials under § 1983. Using deadly force against a suspect constitutes a seizure that implicates the Fourth Amendment.[91] In excessive force cases, the Supreme Court applies an objective reasonableness standard to determine whether qualified immunity attaches.[92]

1. Sue the Police Departments? Good Luck!

Victims of excessive force already face difficulties in recovering against police departments and municipalities.[93] The Supreme Court established a standard for municipal qualified immunity under 42 U.S.C. § 1983.[94] In order to hold a municipality liable under § 1983, the plaintiff must establish that (1) a constitutional violation took place, (2) a government policy or custom caused the constitutional violation, and (3) the policy represents deliberate indifference to constitutional violations that may reasonably occur as a result of the policy.[95] This creates a steep burden of proof for plaintiffs trying to recover for excessive force violations.

2. Sue the Officers Who Authorized the Force? Good Luck with That, Too.

Another option for victims is to sue the individual police officer who authorized the force, but that can also be difficult.[96] In *Graham*

89. Blum, *supra* note 88, at 575.

90. *See* 42 U.S.C. § 1983 (2012); Bivens v. Six Unknown Named Agents of Fed. Bureau of Narcotics, 403 U.S. 388, 389 (1971).

91. U.S. CONST. amend. IV; Tennessee v. Garner, 471 U.S. 1, 2 (1985).

92. *Graham*, 490 U.S. at 396 (holding that determining whether the force used to effect a particular seizure is "reasonable" under the Fourth Amendment requires a careful balancing of "the nature and quality of the intrusion on the individual's Fourth Amendment interests" against the countervailing governmental interests at stake).

93. Monell v. Dep't of Soc. Servs., 436 U.S. 658, 694 (1978). Note that local governments do not receive the benefits of qualified immunity; however, the hurdle to sue governments under *Monell* essentially establishes the same barrier for suits against municipalities. *See id.* at 701.

94. *See* City of Canton v. Harris, 489 U.S. 378, 388–89 (1989); City of Los Angeles v. Heller, 475 U.S. 796, 799 (1986) (per curiam); *Monell*, 436 U.S. at 694.

95. *See Harris*, 489 U.S. at 388–89; *Heller*, 475 U.S. at 799; *Monell*, 436 U.S. at 694.

96. *See* Pearson v. Callahan, 555 U.S. 223, 227 (2009) (holding that the rigid *Saucier* procedure is not the mandatory test for qualified immunity against § 1983 claims); Saucier v. Katz, 533 U.S. 194, 197, 206 (2001); *Graham*, 490 U.S. at 399 ("The Fourth Amendment inquiry

v. Connor, the Court held that courts must analyze all excessive force claims under § 1983 using a standard of objective reasonableness under the Fourth Amendment, as opposed to a due process standard.[97] Police officers enjoy considerable levels of deference in situations similar to the facts of *Graham*, wherein the Court held that the "calculus of reasonableness" in determining whether a particular use of force passes muster "must embody allowance for the fact that police officers are often forced to make split-second judgments—in circumstances that are tense, uncertain, and rapidly evolving—about the amount of force that is necessary in a particular situation."[98] Factors courts consider when determining objective reasonableness include the severity of the crime allegedly committed, whether the suspect poses an immediate threat to the safety of either officers or others, and whether the suspect is actively trying to resist arrest or flee.[99] The Fourth Amendment authorizes police use of deadly force when police have probable cause to believe that the suspect is a violent felon and probable cause to believe that the suspect is armed and dangerous.[100]

In litigating excessive force claims against police officers, the qualified immunity analysis must be done separately from the excessive force analysis.[101] In *Saucier v. Katz*, the Supreme Court presented a two-part test for determining whether an officer enjoys qualified immunity for disputed actions.[102] First, the facts alleged in the complaint must suggest that the officer violated a constitutional right.[103] Second, the constitutional right allegedly violated must have been clearly established at the time of violation.[104] A constitutional right is clearly established if every reasonable officer in that particular situation would have understood that his conduct violated that particular right.[105] If the constitutional right was not clearly established, the officer enjoys qualified immunity by virtue of the position he holds.[106] Subsequently, the Court's decision in *Pearson v.*

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is one of 'objective reasonableness' under the circumstances, and subjective concepts like 'malice' and 'sadism' have no proper place in that inquiry.").

97. *See Graham*, 490 U.S. at 399.

98. *Id.* at 396–97.

99. *Id.* at 396.

100. Tennessee v. Garner, 471 U.S. 1, 11–12 (1985).

101. *See Saucier*, 533 U.S. at 206.

102. *See id.* at 201.

103. *See id.*

104. *See id.*

105. *See* Ashcroft v. al-Kidd, 563 U.S. 731, 741 (2011); Anderson v. Creighton, 483 U.S. 635, 640 (1987).

106. *See Saucier*, 533 U.S. at 207.

Callahan allowed for a grant of qualified immunity without performing a *Saucier* analysis.[107] *Pearson* held that lower courts may decide which prong of the *Saucier* test to analyze first and may exercise greater discretion in granting qualified immunity.[108] Put differently, if a reasonable officer could have justified the conduct considering the circumstances, courts do not have to discuss whether the plaintiff's constitutional rights were violated.[109] However, a defendant who benefits from qualified immunity may still have its actions reviewed for whether the actions established a constitutional violation.[110] In loosening the *Saucier* standard, the Court intended to encourage judicial efficiency and protect officers' decisions in the line of duty.[111]

Parties litigate qualified immunity at the summary judgment stage.[112] Summary judgment is typically appropriate upon a showing of no disputed facts, which entitles the movant to judgment as a matter of law.[113] Qualified immunity for excessive force claims against police officers is especially difficult to litigate at the summary judgment stage because the fact-heavy nature of determining whether the right was clearly established makes it difficult to litigate as a matter of law.[114] This task is further complicated when robot actors are involved. The question of whether the constitutional right was clearly established prior to the alleged violation is more fact dependent in excessive force cases than it is in other suits against public officials because it depends on what the officer knew at the time regarding the suspect's dangerousness.[115] The objective unreasonableness standard of determining a clearly established right is oftentimes more of a "subjective unreasonableness" standard because it depends heavily on what the officer on the scene believed, what facts were known to officers at the time, and, most importantly, what the situation actually was.[116]

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107. *See* Pearson v. Callahan, 555 U.S. 223, 236 (2009) (holding that the rigid *Saucier* procedure is not the mandatory test for qualified immunity against § 1983 claims).

108. *Id.*

109. *See id.*

110. Camreta v. Greene, 563 U.S. 692, 713 (2011).

111. *See id.* at 707.

112. Ravenell, *supra* note 11, at 135–36.

113. FED. R. CIV. P. 56.

114. *See* Diana Hassel, *Excessive Reasonableness*, 43 IND. L. REV. 117, 121 (2009); John C. Jeffries, *What's Wrong with Qualified Immunity?*, 62 FLA. L. REV. 851, 855 (2010); Ravenell, *supra* note 11, at 136.

115. *See* Jeffries, *supra* note 114, at 861.

116. *Id.*

For these reasons, qualified immunity cases are heavily fact dependent.[117] In *Willingham v. Loughnan*, the Eleventh Circuit granted qualified immunity to police officers who shot a suspect twice during the course of intervening in a confrontation between the suspect and the suspect's brother.[118] The court reasoned that although the police officers' conduct violated the Fourth Amendment, the right at issue was not clearly established at the time because every reasonable officer would not have known that said use of force was excessive considering the circumstances.[119] Similarly, in *Bing ex rel. Bing v. City of Whitehall*, the Sixth Circuit held that deploying a second flashbang grenade to get a suspect out of his house—ultimately setting the suspect's home on fire—violated the suspect's Fourth Amendment rights, but the right was not clearly established.[120]

In *Milan v. Bolin*, the Seventh Circuit upheld the denial of qualified immunity for police who used flashbang grenades pursuant to a search for a suspect who allegedly sent threats to police officers via the Internet.[121] The suspect sent the threats from the plaintiff's WiFi network, but the police failed to ascertain that the network was an open network that others nearby could access.[122] A day after the flashbang grenade search, an investigation by police showed that the actual intended suspect—who possessed a violent past criminal history—lived in a different home on the same street and accessed the open network.[123] The court cited the totality of the circumstances as the reason for denying qualified immunity: the flashbang grenades, the fact that the search happened prior to a more detailed investigation, and that a proper investigation could have identified the actual suspect and correct house.[124] The Supreme Court recently granted certiorari to several qualified immunity excessive force cases,

117. Hassel, *supra* note 114, at 121; *see, e.g.*, Wilson v. Layne, 526 U.S. 603, 614 (1999) (concluding after a fact-intensive discussion that "it is a violation of the Fourth Amendment for police to bring members of the media or other third parties into a home during the execution of a warrant").

118. Willingham v. Loughnan, 261 F.3d 1178, 1188 (11th Cir. 2001) (holding that qualified immunity attached when police shot an unarmed suspect after the suspect had thrown a kitchen knife and bottles at the police), *vacated*, 537 U.S. 801 (2002), *modified*, 321 F.3d 1299 (11th Cir. 2003); Jeffries, *supra* note 114, at 864.

119. *Willingham*, 261 F.3d at 1187; Jeffries, *supra* note 114, at 864; *see* Willingham v. Loughnan, 321 F.3d 1299, 1304 (11th Cir. 2003) ("Our earlier conclusion remains unaffected by the Supreme Court's decision . . . . We reinstate our prior opinion and judgment and supplement our earlier discussion of qualified immunity with this opinion.").

120. Bing *ex rel.* Bing v. City of Whitehall, 456 F.3d 555, 560 (6th Cir. 2006).

121. Milan v. Bolin, 795 F.3d 726, 730 (7th Cir. 2015).

122. *Id.*

123. *Id.*

124. *Id.*

ultimately upholding qualified immunity in all of them.[125] Out of twenty-nine qualified immunity cases where the Supreme Court applied the objective reasonableness test, the Court only found violations of clearly established constitutional rights in two of them.[126] Two other cases were "partial victories" for plaintiffs.[127]

3. Illegal Motive Pleading Requirements and Summary Judgment Make It Even More Difficult—Robots Cannot Express a Mental State

Plaintiffs alleging excessive force against police robots face an even steeper road in jurisdictions that require pleading either illegal motive or malice to defeat a qualified immunity claim.[128] As robots with AI capabilities enter the police force, the question of whether a human operator can even be held liable for a machine's decisions may be raised.[129] Autonomous robots merely simulate human thinking; therefore, they are not entitled to constitutional protection of their "bodies."[130] A police officer's safety is incredibly important, while the issue of whether a drone makes it out of a dangerous situation still functioning is a lesser concern for a court to protect. Even when placing total responsibility on the "human supervisor" using a full culpability model, mere negligence would not overcome qualified immunity due to the "clearly established right" requirement.[131] Questions of who authorized the force—whether the robot merely "malfunctioned" or was "piloted" by an officer to use the force—often cannot be litigated at the summary judgment stage because facts are typically in dispute at that stage of the proceeding.

4. The Supreme Court Has Been Unwilling to Discuss Modifications of Qualified Immunity

A proposed modification of qualified immunity, in the form of a provocation doctrine, came before the Supreme Court in *County of Los Angeles v. Mendez*.[132] In *Mendez*, police entered the plaintiff's home

125. *See* White v. Pauly, 137 S. Ct. 548, 550 (2017); Mullenix v. Luna, 136 S. Ct. 305, 312 (2015); City & Cty. of San Francisco v. Sheehan, 135 S. Ct. 1765, 1778 (2015).

126. William Baude, *Is Qualified Immunity Unlawful?*, 106 CALIF. L. REV. 45, 82–83 (2018).

127. *Id.*

128. *See* Cass, *supra* note 83, at 1062.

129. *Cf.* Guihot, Matthew & Suzor, *supra* note 86, at 418–19 (discussing (and dismissing) a "light touch" approach to assigning tort liability for autonomous vehicles in which the least cost avoider assumes liability for any harm caused by the vehicle).

130. *See* Cass, *supra* note 83, at 1058.

131. *See* discussion *supra* Part I.D; *see also* Pearson v. Callahan, 555 U.S. 223, 231 (2009).

132. Cty. of Los Angeles v. Mendez, 137 S. Ct. 1539, 1546 (2017).

without notice or a warrant.[133] At the time of entry, the plaintiff had pulled out a BB gun, and the police ultimately shot the plaintiff and his wife, leading to the eventual amputation of his right leg.[134] Neither party disputed the reasonableness of the shooting.[135] Before the Ninth Circuit, the plaintiff argued—and won—that but for the police's Fourth Amendment violation in entering the home, there would have been no need for the him to pull out a BB gun: the illegal entry proximately caused the need for the force.[136] The Supreme Court held that a prior Fourth Amendment violation cannot provide the basis for defeating qualified immunity on the excessive force claim.[137] However, the Court did not address the "every reasonable officer" standard for determining clearly established rights in excessive force cases as put forth in *Graham*.[138] The Court merely held that because the Ninth Circuit's provocation doctrine was invalid and the shooting was independently reasonable, an analysis of the "clearly established right" prong was unnecessary.[139]

II. ANALYSIS

Modification of existing precedent around excessive force in cases where a robot uses unconstitutional force is the most politically plausible and effective means to regulate the use of police robots. The restriction or elimination of tactical equipment distribution through the 1033 Program is not politically plausible because the program enjoys popularity from both political parties and police unions.[140] Professor Christopher Slobogin's exigency and proportionality principles, on the other hand, may provide a framework for analyzing the constitutionality of a particular incident of robotic use of force.[141] Applying the exigency and proportionality principles to robotic use of force suggests a modification to the qualified immunity standard when a robot actor applies the force. A modification to the qualified immunity standard gives victims of robotic police excessive force an easier path to recovery, protects police officers acting in dangerous

133. *Id.* at 1544.
134. *Id.* at 1544–55.
135. *Id.* at 1548–49.
136. *Id.*
137. *Id.* at 1549.
138. *Id.* at 1547.
139. *Id.* at 1546–47.
140. *See* discussion *infra* Part II.A.
141. *See* discussion *infra* Part II.B.

split-second situations, and conforms to the Supreme Court's policy motivation in its application of qualified immunity.[142]

A. Regulating or Eliminating the 1033 Program Is Not Politically Plausible

Proposed methods to curb tactical gear distributions by the 1033 Program include limiting access to only those tactical purposes originally statutorily enumerated—counterdrug and counterterrorism activities—and elimination of the 1033 Program altogether.[143] However, restriction of tactical gear distributions through the 1033 Program or elimination of the Program in its entirety are not currently politically plausible ways to regulate the use of police robots. The 1033 Program enjoys a great deal of political support.[144] The United States' largest police union, the Fraternal Order of Police (FOP), supports and lobbies for further removal of restrictions on tactical gear distribution from the 1033 Program.[145] On August 28, 2017, at the FOP convention in Nashville, Tennessee, Attorney General Jeff Sessions announced that President Donald Trump planned to rescind restrictions on the distribution of military weapons by police officers.[146]

B. The Exigency and Proportionality Principles May Suggest a Framework

One theory of regulation for police robots is Professor Slobogin's exigency and proportionality principles.[147] Under the proportionality principle, the requisite level of police certainty—probable cause as to a particular element, reasonable

142. *See* discussion *infra* Part III.B.

143. *See* Manmeet Dhindsa, Comment, *The Illegality of the DOD 1033 Program: When the Federal Government Attempts to Side-Step the Posse Comitatus Act*, 12 J.L. ECON. & POL'Y 107, 108 (2016); Laura Withers, Note, *How Bearcats Became Toys: The 1033 Program and Its Effect on the Right to Protest*, 84 GEO. WASH. L. REV. 812, 835–36 (2016).

144. *See* Musgrave et al., *supra* note 33; Withers, *supra* note 143, at 835; Tess Owen, *America's Largest Police Union Wants Trump to Give Military Gear to Cops Again*, BUS. INSIDER (Dec. 21, 2016, 9:19 PM), http://www.businessinsider.com/us-largest-police-union-wants-trump-to-give-military-gear-to-cops-2016-12 [https://perma.cc/MC38-NVDM].

145. Owen, *supra* note 144.

146. Joel Ebert, *Jeff Sessions in Nashville Outlines Plan to Send Surplus Military Weapons, Equipment to Local Police*, TENNESSEAN (Aug. 28, 2017, 9:51 AM), http://www.tennessean.com/story/news/politics/2017/08/28/jeff-sessions-nashville-outlines-plan-send-surplus-military-weapons-equipment-local-police/603661001/ [https://perma.cc/RU6C-RMB6].

147. Christopher Slobogin, *The World Without a Fourth Amendment*, 39 UCLA L. REV. 1, 68 (1991).

suspicion, or a quantum less than reasonable suspicion—depends on both the magnitude of the seizure conducted and the particularity of who is searched.[148] An exigency exception attaches when exigent circumstances exist, creating an exception to the proportionality principle.[149] For example, a police checkpoint to stop possible drunk driving is a relatively minor seizure of a driver: the average stop time is very short (one drunk-driving checkpoint featured average stop lengths of twenty-five seconds) unless the police officer detects possible intoxication, and police stop every car.[150] Police must apprehend drunk drivers before they cause significant harm, creating high exigency in the situation.[151] As the seizure is mild and the exigency is high, drunk driving checkpoints do not require reasonable suspicion or probable cause.[152] In comparison, the arrest of a suspect represents a far greater seizure than a drunk driving checkpoint.[153] Therefore, it requires probable cause—a much greater degree of certainty than a drunk driving checkpoint requires.[154]

Using potentially lethal force to effect a search or an arrest requires probable cause that the suspect committed a crime and is dangerous.[155] The Supreme Court mandates exigent circumstances before police may use deadly force against a suspect.[156] The proportionality principle also applies to the degree of force used against suspects: the deployment of a SWAT team and flashbang grenades to execute a warrant requires a greater level of certainty that the individual poses a threat to officers or others than using standard police procedure.[157]

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148. *Id.* at 75.

149. *Id.*

150. *Id.* at 91.

151. *See id.* at 54–55.

152. *Id.* at 90–91 ("The brief detention of motorists that occurs at the type of roadblock at issue in [*Michigan Department of State Police v. Sitz*, 496 U.S. 444 (1990)] clearly is not as intrusive as an arrest. Nor is it as invasive as a stop on the street if, as the Court required, every car is stopped (thus reducing the potential for harassment and stigmatization) and the occupants are questioned for only a few moments and allowed to remain in their car (thus reducing the insult to privacy).").

153. The Supreme Court explicitly mentions that drunk driving checkpoints are less intrusive than arrests. Mich. Dep't of State Police v. Sitz, 496 U.S. 444, 450–51 (1990). In holding drunk driving checkpoints constitutional, the Court held that drunk driving checkpoints did not require particularized suspicion. *Id.* at 455.

154. *See* Slobogin, *supra* note 147, at 68.

155. *Id.*

156. Tennessee v. Garner, 471 U.S. 1, 11–12 (1985) (holding that a police officer must have probable cause that a fleeing suspect "poses a threat of serious physical harm, either to the officer or to others," before using deadly force to prevent escape).

157. *See id.* at 14; Slobogin, *supra* note 147, at 68.

While Professor Slobogin intended the exigency and proportionality principles to function in the absence of the Fourth Amendment, these concepts can provide a framework and justification for regulating robotic police force.[158] Dallas Police Chief David Brown acted under extremely exigent circumstances when authorizing the use of a police robot to kill Michael Xavier Johnson: Johnson, a sniper with combat experience, had already killed two police officers and gravely injured several others.[159] Using a robot to deploy lethal force presented the police with a means to end the standoff without additional loss of police or civilian life.

Envision that police used a robot similar to the Remotec Mark V-A1 to enter a home at 5:30 AM with a valid search warrant founded on probable cause but not exigent circumstances.[160] Police officers outside used the Mark V-A1's camera features to see that the suspects were asleep.[161] After viewing the occupants sleeping on camera, the police detonated a flashbang grenade. Under Professor Slobogin's theory, not much exigency exists here because the suspect was not fleeing, the suspect was not threatening the officers, and the suspect has not just committed a crime. Moreover, the fact that police had time to procure a warrant suggests that exigent circumstances did not exist (Supreme Court precedent authorizes warrantless entry only when exigent circumstances exist).[162] Detonating a potentially deadly flashbang grenade in a suspect's home while he sleeps likely constitutes a very intrusive seizure.[163] If the robot entered the home and detonated the flashbang grenade, the officer did not place his body into the direct line of danger and uncertainty. Therefore, if deadly force is presumably a last resort, police have more options before turning to such extremes. Exhausting these options reduces risk for all parties in a police interaction.

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158. *See* Slobogin, *supra* note 147, at 68.

159. *See* Sidner & Simon, *supra* note 16.

160. *See Mark 5A-1*, *supra* note 31.

161. *See id.*

162. *See, e.g.*, Payton v. New York, 445 U.S. 573, 590 (1980) (holding that absent exigent circumstances, the Fourth Amendment mandates a warrant for police entry into a suspect's home to execute a routine felony arrest); *see also* Maryland v. Buie, 494 U.S. 325, 327 (1990) (authorizing protective sweeps for evidence when apprehending a suspect in his home under exigent circumstances). In *Buie*, the police apprehended a suspect who was in his home after fleeing an armed robbery, and the police did not need a warrant to enter his home. *Buie*, 494 U.S. at 327–28.

163. *See, e.g.*, Estate of Escobedo v. Bender, 600 F.3d 770, 784–89 (7th Cir. 2010); *see also* Slobogin, *supra* note 147, at 75–77.

III. SOLUTION

A. Plaintiffs Must Plead That a Robot Executed the Unconstitutional Force and That Exigency Did Not Exist

The Supreme Court should modify the *Saucier* test, relaxed by *Pearson*, for qualified immunity in excessive force cases where a police robot commits a violent act. In bringing a § 1983 excessive force claim, a court should require that a plaintiff sufficiently plead three elements to establish a rebuttable presumption that no reasonable officer would have authorized the force: (1) the alleged malignant force was committed by a robot, not a human; (2) the robot's use of force violated the petitioner's constitutional rights; and (3) a reasonable officer would not have found exigent circumstances or imminent danger at the time.[164] Defeating qualified immunity does not mean that the plaintiff automatically wins the suit—the plaintiff must still substantively prove that no reasonable officer would have authorized the force in light of the circumstances—but the plaintiff gets the benefit of litigation to determine the facts to do so.[165] The plaintiff will further enjoy the benefits of a jury trial to aid in that process. If the plaintiff successfully pleads all three prongs, a rebuttable presumption of unreasonableness attaches to the action. To bar discovery, the defendant police officer must then prove that the action was reasonable under the circumstances. Mitigating factors in favor of defeating the presumption may include the dangerousness of the subject (e.g., whether he is likely to be heavily armed or has a violent criminal past), the dangerousness of other occupants in the house, and the criminal act making up the basis of the warrant (e.g., a petty shoplifting case as opposed to a suspected armed robbery). The plaintiff will still have to prove the existence of a clearly established constitutional right in order to prevail on the merits, but he receives the added benefit of fact-based litigation.

Consider this example of a routine police activity that would fall within the purview of the presumption of unreasonableness: Police deploy a robot to scout the premises before executing a routine no-knock search warrant at a suspect's home. The police do not have reasonable suspicion to believe the suspect is violent. The robot enters the home and immediately deploys a flashbang grenade while human officers wait outside. The flashbang grenade injures both the suspect

164. *Cf.* Pearson v. Callahan, 555 U.S. 223, 236 (2009) (concluding that district courts "should be permitted to exercise their sound discretion" when performing the qualified immunity analysis).

165. *See* Graham v. Connor, 490 U.S. 386, 393–99 (1989).

and his child. After the explosion, the police check footage from the robot and realize the suspect had been sitting on the living room couch watching television with his child. No other occupants were in the home. Deploying a flashbang grenade without first checking the premises likely violates the Fourth Amendment.[166] Under the current jurisprudence, the officer controlling the robot likely enjoys qualified immunity in light of the facts available to the plaintiffs because the constitutional right was not clearly established such that every reasonable officer would have seen the use of the purported force as inappropriate.[167] Under this Note's proposed standard, by contrast, the plaintiffs must plead only that use of the flashbang grenade violated their Fourth Amendment rights, that a robot deployed the flashbang grenade, and that no exigent circumstances existed in order to enable the presumption of unreasonableness and permit discovery. While this may appear to be a low standard, the goal is to allow these heavily fact-dependent claims—especially in light of a lack of human actors—to reach the summary judgment stage.

The primary counterargument to lowering the standard is the potential deterrent effects stemming from the fear of litigation. Police departments may hesitate to implement the use of robots if such use leads to an increased chance of potentially costly litigation. Plaintiffs bringing claims under § 1983 may also recover attorneys' fees, making litigation costlier for municipalities and police departments that lose excessive force suits.[168] Municipalities often indemnify their officers, however, though coverage does not typically include bad faith conduct.[169] As a result, cities may hesitate to allow funding for police departments to purchase the equipment. But even cities' hesitation for funding is not much of a deterrent because many departments can probably obtain the equipment significantly below cost through the 1033 Program. Further, the lower standard is unlikely to deter the use of police robots because the primary purpose of the technology is to make the job of police officers safer, an important goal for police departments and state and local governments. Ultimately, the value

166. *See, e.g.*, Boyd v. Benton Cty., 374 F.3d 773, 779 (9th Cir. 2004) (holding that failure to inspect an area before throwing a flashbang grenade is unreasonable); *see also* Dukes v. Deaton, 852 F.3d 1035, 1042 (11th Cir. 2017) (holding that an officer's deployment of a flashbang grenade "constituted excessive force in violation of the Fourth Amendment"), *cert. denied*, 138 S. Ct. 72 (2017); Krause v. Jones, 765 F.3d 675, 679 (6th Cir. 2014) (deploying a flashbang grenade in an area occupied by innocent parties also weighs against reasonableness); *cf. Bender*, 600 F.3d at 784–85 (suggesting possible criteria under which the deployment of a flashbang grenade could be reasonable).

167. *See Graham*, 490 U.S. at 396–97; *Dukes*, 852 F.3d at 1042.

168. *See* 42 U.S.C. § 1988(b) (2012).

169. Joanna C. Schwartz, *Police Indemnification*, 89 N.Y.U. L. REV. 885, 888, 901 (2014).

of preserving human lives by deploying police robots as opposed to humans will likely outweigh the potential costs of additional lawsuits—not at all a bad thing. Cities will likely use the robots and risk the lawsuits, which both saves lives and enables a greater chance of recovery when police operate robots inappropriately or, for robots possessing AI capacities, when the robots *themselves* act inappropriately.

When exigent circumstances exist, the presumption of unreasonableness would not apply and the ordinary *Graham-Pearson-Saucier* framework would apply.[170] This exigency exception is crucial to the test's conformity with past Supreme Court precedent.[171] The Supreme Court carved out an exception to the Fourth Amendment's search and arrest warrant requirements for when exigent circumstances exist.[172] Through the creation of this exigency exception, police officers are unlikely to face substantial constraints on the use of police robots in the most dangerous situations. This subjects police officers and departments to decreased risk of liability in situations where time is of the essence, such as police officers' "split-second decisions" that enjoy particular deference from the Supreme Court.[173] Threats of imminent danger—where robots possess the greatest potential to save lives, such as hostage negotiations, active shooters, bomb threats, apprehensions of fleeing felony suspects, and responding to other in-progress violent crimes—enjoy protection under the exigency exception to traditional Fourth Amendment violations. The exigency exception also protects robot action in situations that originated as routine police work (e.g., the execution of a search warrant) but later devolve into situations of imminent danger.

B. Supreme Court Precedent and the Premises of Summary Judgment Support the Presumption of Unreasonableness

Supreme Court precedent supports the attached presumption of unreasonableness. The revised *Graham* standard proposed in this

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170. Pearson v. Callahan, 555 U.S. 223, 231 (2009) (citing Harlow v. Fitzgerald, 457 U.S. 800, 818 (1982)); Saucier v. Katz, 533 U.S. 194, 194 (2001).

171. *See* Payton v. New York, 445 U.S. 573, 583 (1980) (carving out an exigent circumstances exception for warrantless searches of the home); Warren v. Hayden, 387 U.S. 294, 298 (1967) (holding that a warrant was not necessary to enter the house in which a fleeing suspected armed robber matching the description of a robbery that had just occurred entered the house).

172. *See Payton*, 445 U.S. at 583.

173. *See* Graham v. Connor, 490 U.S. 386, 396–97; Dukes v. Deaton, 852 F.3d 1035, 1042 (11th Cir. 2017), *cert. denied*, 138 S. Ct. 72 (2017).

Note balances society's interest in allowing police officers ample discretion to do their jobs while recognizing that robots are, simply put, not humans and thus should not enjoy the same protections as police officers acting in self-defense or in the defense of others.

The Supreme Court decision in *Hope v. Pelzer* does not require the previous litigation of a set of facts for a right to be clearly established.[174] The Supreme Court held that officials can be on notice that their conduct violates the law and defeats qualified immunity, even when dealing with a novel set of facts.[175] Excessive force by robots—nonhuman actors—is a novel set of facts, at least for now. Permitting the litigation of facts following denial of a motion to dismiss provides plaintiffs the opportunity to litigate motives, policies, and other relevant information. It also incentivizes municipalities to thoroughly train their police officers in proper use of robot aides in order to avoid a costly litigation process.

Finally, lessening the burden on the plaintiff to defeat a claim of qualified immunity by attaching a presumption of unreasonableness when a robot actor uses excessive force helps keep legal analysis separate from factual analysis. Since parties litigate qualified immunity at the summary judgment stage, questions of material fact should theoretically defeat a grant of summary judgment.[176] Qualified immunity in excessive force cases is one of the most fact-dependent qualified immunity analyses.[177] However, whether an official enjoys qualified immunity is an issue of law, not fact.[178] When dealing with robot liability—a frontier of new technology with very little settled law—allowing a highly fact-dependent excessive force analysis to take place at the summary judgment stage contradicts the principles behind summary judgment.

The use of robots in police work has the potential to make policing significantly safer for the officers involved.[179] With the decreased risk to life and limb from use of a police robot in a nonexigent circumstance, and the doctrinal spirit of qualified

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174. Hope v. Pelzer, 536 U.S. 730, 739 (2002) (holding that no qualified immunity attached when prison guards left an individual outside on a post under the hot sun for seven hours without a shirt, water, or bathroom breaks—despite no clearly established law against this conduct—because a reasonable officer would understand such conduct violates the individual's Eighth Amendment rights).

175. *See id.*

176. *See* FED. R. CIV. P. 56.

177. *See* discussion *supra* Part I.E.3.

178. Pearson v. Callahan, 555 U.S. 223, 232 (2009) ("Accordingly, 'we repeatedly have stressed the importance of resolving immunity questions at the earliest possible stage in litigation.'" (quoting Hunter v. Bryant, 502 U.S. 224, 227 (1991) (per curiam))).

179. Joh, *supra* note 18, at 538.

immunity intended to protect officers, a heightened standard for granting qualified immunity in these circumstances protects the rights granted to all citizens through the Fourth Amendment.

IV. CONCLUSION

The Dallas police department's use of a police robot to inflict lethal force arguably saved many lives. It also raises questions as to how much deference courts should give police officers when police robots inflict excessive force on civilians. Police use of excessive force remains a high-profile issue in US society.[180] However, current Supreme Court precedent on qualified immunity for constitutional violations committed by officials fails to take into account acts committed by nonhuman actors. Lessening the burden of proof for plaintiffs to defeat a qualified immunity claim when police use a robot in nonexigent circumstances still supports the need for police officers to be able to make split-second decisions without the prospect of litigation. Moreover, it supports the designation of summary judgment as a forum for legal analysis in light of the still-unsettled question of robot liability.

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180. *See, e.g.*, Steven Hale, *Why DA Glenn Funk Didn't Press Charges in Jocques Clemmons Shooting*, NASHVILLE SCENE (May 11, 2017, 3:00 PM), http://www.nashvillescene.com/news/pith-in-the-wind/article/20861241/why-da-glenn-funk-didnt-press-charges-in-jocques-clemmons-shooting [https://perma.cc/LAF4-UCSW]; Tracey Read, *City of Euclid Wants Excessive Force Police Lawsuits Dismissed*, NEWS-HERALD (Jan. 30, 2018, 1:23 PM), http://www.news-herald.com/general-news/20180130/city-of-euclid-wants-excessive-force-police-lawsuits-dismissed [https://perma.cc/NVB3-FTTQ].

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