

# COOKING PROTESTORS ALIVE: THE EXCESSIVE-FORCE IMPLICATIONS OF THE ACTIVE DENIAL SYSTEM

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## ABSTRACT

*The Active Denial System (ADS) is unlike any other nonviolent weapon: instead of incapacitating its targets, it forces them to flee, and it does so without being seen or heard. Though it is a promising new crowd-control tool for law-enforcement, excessive-force claims involving the ADS will create a Fourth Amendment jurisprudential paradox. Moreover, the resolution of that paradox could undermine other constitutional principles—like equality, fairness, and free speech. Ultimately, the ADS serves as a warning that without legislation, American jurisprudence may not be ready for the next generation of law-enforcement technology and the novel excessive-force claims sure to follow.*

## INTRODUCTION

It goes by different names: “pain ray,”<sup>1</sup> “heat ray,”<sup>2</sup> and “ray gun”<sup>3</sup> are some of its more colorful monikers. The United States military calls it the “Active Denial System”<sup>4</sup> (ADS) and it is unlike any weapon ever used.<sup>5</sup> The ADS, which looks a bit like an old television dish attached to a vehicle, works by shooting a concentrated beam of electromagnetic waves at its target—a person.<sup>6</sup> Once emitted from the

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<sup>1</sup> Ross Kerber, *The Ray Gun, Sci-Fi Staple, Meets Reality*, BOSTON GLOBE, Sept. 24, 2004, at A1, available at 2004 WLNR 3577433.

<sup>2</sup> Patrick Jackson, *How Hot Is The Heat-Ray Gun?*, BBC NEWS (Jan. 26, 2007, 2:49 PM), <http://news.bbc.co.uk/2/hi/americas/6300985.stm>.

<sup>3</sup> Kerber, *supra* note 1.

<sup>4</sup> *Id.* Smaller versions exist. *Id.*

<sup>5</sup> See generally, Andrew Milner, *Non-Lethal Weapon: Active Denial System (ADS)*, YOUTUBE (Mar. 9, 2012), <http://www.youtube.com/watch?v=kzG4oEutPbA>.

<sup>6</sup> Ed Cumming, *The Active Denial System: The Weapon That's A Hot Topic*, THE TELEGRAPH (July 20, 2010, 11:27 AM), <http://www.telegraph.co.uk/science/7900117/The-Active-Denial-System-the-weapon-thats-a-hot-topic.html>.

ADS, the waves penetrate the target's clothes<sup>7</sup> and the outermost layers of the target's skin.<sup>8</sup> Within mere seconds of being hit with the waves, the individual is struck with the sensation of being in a hot oven.<sup>9</sup> Upon experiencing this sensation, the target instinctively moves out of the way of the beam<sup>10</sup>—a result one observer described as “the goodbye effect.”<sup>11</sup> After leaving the beam, however, the feeling of being in a hot oven quickly subsides, exacting no permanent damage or lasting effect upon the subject.<sup>12</sup>

A device that forces an individual to say “goodbye” without causing any serious or lasting harm holds great promise as the next generation of non-lethal crowd-control weaponry. And given the potential of the ADS to become the “holy grail of crowd-control,”<sup>13</sup> it is no wonder that law-enforcement officials have expressed interest in obtaining the military technology for domestic use.<sup>14</sup> At least one prison has already installed the ADS as an experimental nonlethal method of disrupting prison assaults.<sup>15</sup>

But prospective use of the ADS by law-enforcement to control crowds, especially in light of so many recent national and international

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<sup>7</sup>David Hambling, *Say Hello to the Goodbye Weapon*, WIRED (Dec. 5, 2006), <http://www.wired.com/science/discoveries/news/2006/12/72134?currentPage=all>.

<sup>8</sup>Cumming, *supra* note 6.

<sup>9</sup>Jennifer Hlad, *\$120 Million Heat Ray Waiting for First Action*, STARS AND STRIPES (Mar. 9, 2012), <http://www.stripes.com/blogs/strikes-central/strikes-central-1.8040/120-million-heat-ray-waiting-for-first-action-1.171170>.

<sup>10</sup>Cumming, *supra* note 6; Henry S. Kenyon, *Heat Ray Warms Up For Operation*, SIGNAL (Apr. 2009), [http://www.afcea.org/signal/articles/templates/Signal\\_Article\\_Template.asp?articleid=1896&zoneid=257](http://www.afcea.org/signal/articles/templates/Signal_Article_Template.asp?articleid=1896&zoneid=257).

<sup>11</sup>Hambling, *supra* note 7.

<sup>12</sup>*Id.*; Cumming, *supra* note 6; Kenyon, *supra* note 10.

<sup>13</sup>Rania Khalek, *Pepper Spray, Tasers, and LRADs — What's Behind the Explosion of 'Less Lethal' Weapons for Crowd Control?*, ALTERNET, 4 (Dec. 5, 2011), [http://www.alternet.org/occupywallst/153329/pepper\\_spray,\\_tasers,\\_and\\_lrads\\_%E2%80%94\\_what's\\_behind\\_the\\_explosion\\_of\\_'less\\_lethal'\\_weapons\\_for\\_crowd\\_control/?page=4](http://www.alternet.org/occupywallst/153329/pepper_spray,_tasers,_and_lrads_%E2%80%94_what's_behind_the_explosion_of_'less_lethal'_weapons_for_crowd_control/?page=4).

<sup>14</sup>*Id.*

<sup>15</sup>Press Release, Los Angeles Cnty. Sheriff's Dep't, Los Angeles County Sheriff's Department Tested New Device Unveiled Intended to Stop or Lessen Inmate Assaults (Aug. 20, 2010), *available at* [media/detail/?WCM\\_GLOBAL\\_CONTEXT=/lasd+content/lasd+site/home/home+top+stories/aid+unveiled](http://media/detail/?WCM_GLOBAL_CONTEXT=/lasd+content/lasd+site/home/home+top+stories/aid+unveiled).

protests,<sup>16</sup> raises an important question: What are the excessive-force implications of such a cutting-edge, but reportedly safe and effective, law-enforcement device?<sup>17</sup>

This Issue Brief explores that question. It does so by asking the reader to reimagine the now infamous U.C. Davis pepperspray incident<sup>18</sup> as if the police had used the ADS instead of pepperspray. This inquiry reveals that, although the ADS is a promising new law-enforcement weapon, excessive-force claims arising from its use will create a Fourth Amendment jurisprudential paradox: individuals subjected to the ADS are simultaneously seized and not seized under the Fourth Amendment. Resolving this paradox may undermine some of this country's most cherished constitutional principles, such as equality, fairness, and free speech. Ultimately, the ADS serves as a warning that absent legislation, American jurisprudence may not be ready for the next generation of law-enforcement technology and the novel excessive-force claims sure to follow.

## I. ACTIVE DENIAL SYSTEMS AS COMPARED TO OTHER NONLETHAL WEAPONS

Before discussing the excessive-force implications of the ADS, it is important to ascertain a comprehensive understanding of the system and how it works. This Section will conduct a comparison between the ADS and other commonly used nonlethal weapons, and in so doing will illustrate the unique capability of the ADS within the realm of crowd-control technology.

### A. The Active Denial System

The ADS emits a concentrated beam of electromagnetic waves known as millimeter waves.<sup>19</sup> Millimeter waves are also used in other, more accessible technologies, such as airport scanners.<sup>20</sup> Unlike airport scanners, however, the ADS emits a wave capable of piercing clothing as

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<sup>16</sup> See generally Kurt Andersen, *Time Person Of The Year: The Protestor*, TIME, Dec. 14, 2011, available at [http://www.time.com/time/specials/packages/article/0,28804,2101745\\_2102132\\_2102373-1,00.html](http://www.time.com/time/specials/packages/article/0,28804,2101745_2102132_2102373-1,00.html).

<sup>17</sup> Hambling, *supra* note 7.

<sup>18</sup> Jens Erik Gould, *A Sleepy Campus in Crisis: Pepper Spray at UC Davis Sparks Online Uproar, Calls for a Chancellor's Resignation*, TIME (Nov. 21, 2011), <http://www.time.com/time/nation/article/0,8599,2099919,00.html#ixzz1pDfs6uQc>.

<sup>19</sup> Hambling, *supra* note 7. The waves operate at 94 GHZ on the electromagnetic spectrum. *Id.*

<sup>20</sup> *Millimeter Wave Scanner*, WIKIPEDIA, [http://en.wikipedia.org/wiki/Millimeter\\_wave\\_scanner](http://en.wikipedia.org/wiki/Millimeter_wave_scanner) (last visited Jan. 29, 2012).

well as the outer two layers of human skin.<sup>21</sup> When the wave enters a water or fat molecule, the encounter produces a significant amount of heat.<sup>22</sup> The device is capable of raising the temperature of water and fat molecules in the skin by as much as 50°C, or 122°F.<sup>23</sup> One individual who was subjected to testing described the feeling as “unbearably uncomfortable, like opening a roasting hot oven door.”<sup>24</sup> Any individual caught in the beam instinctively moves away from the beam, and with haste.<sup>25</sup> The United States military reports that most individuals could not stand in the beam for more than three seconds, and no one tested resisted the beam for more than five seconds.<sup>26</sup>

As soon as the individual leaves the beam, the heating sensation subsides, and no lasting or permanent injury results.<sup>27</sup> The military performed extensive testing—more than 10,000 individual exposures—to verify that exposure does not have any long term or unanticipated ill effects.<sup>28</sup> In all of the military testing, the worst injury reported was a second-degree burn<sup>29</sup> suffered as a result of a “laboratory accident.”<sup>30</sup> When used in the field, the device, at worst, produced blistering in a few individuals and usually produced no discernible lasting effect.<sup>31</sup> Also, according to the military, there is no indication the device has or even can cause cancer.<sup>32</sup>

To be sure, the device does carry the theoretical and technical potential to cause serious and even life-threatening injury. First, the military’s test subjects were permitted fifteen-second respites from the device, which is something that may not occur during real use.<sup>33</sup> Additionally, according to Dr. Jürgen Altmann at the University of

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<sup>21</sup> Hambling, *supra* note 7.

<sup>22</sup> Cumming, *supra* note 6.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* (internal quotation marks omitted).

<sup>25</sup> See Hambling, *supra* note 7 (calling it “the Goodbye effect”).

<sup>26</sup> *Id.* Note, the military never tested the device on Chuck Norris.

<sup>27</sup> Press Release, Los Angeles Cnty. Sheriff’s Dep’t, *supra* note 15.

<sup>28</sup> Hambling, *supra* note 7.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> *Id.* Concerned with what potential effects the ADS would have on eyes, military scientists tested the device on monkeys. *Id.* Apparently, scientists had to hold open the eyes of the monkeys to achieve any result at all because the monkeys would all instinctively close their eyelids in response to the beam. *Id.* According to the scientists, the cornea fully recovered within twenty-four hours of testing. *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> Cumming, *supra* note 6.

Dortmund, the device is capable of producing second and third degree burns, which can be life threatening if they cover more than 20% of the body.<sup>34</sup> According to the Pentagon's Joint Non-Lethal Weapons Directorate spokesperson, the device contains sensors that enable its operator to know whom the beam is striking and if those individuals are unable to move out of its path.<sup>35</sup> But as Dr. Altmann warns, "[w]ithout a technical device that reliably prevents re-triggering on the same subject, the ADS has a potential to produce permanent injury or death."<sup>36</sup> Pentagon officials are nevertheless confident that the device's rigorous testing and the 80-hour training course for operators will ensure the ADS works as intended, even when deployed in real world situations.<sup>37</sup>

## B. Other Nonlethal Weapons

### 1. *The TASER*

Though the TASER is also classified as a nonlethal weapon, its use is not as harmless or as humorous as the viral "Don't Tase me, bro!" YouTube video suggests.<sup>38</sup> A TASER uses a gas-based propellant to launch a pair of darts from the gun to its target.<sup>39</sup> When the darts attach to the target, they transfer a painful 50,000-volt charge of electricity into the person, forcing the individual's muscles to contract uncontrollably as the electricity disrupts the target's central nervous system.<sup>40</sup> Most targets scream in pain and fall down, giving law-enforcement a momentary

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<sup>34</sup> Khalek, *supra* note 13, at 3.

<sup>35</sup> Cumming, *supra* note 6.

<sup>36</sup> *Id.*

<sup>37</sup> *Id.* Of course, the safety of any typically nonlethal but potentially lethal device depends in part on its proper calibration and use. Manufacturers and operators must remain vigilant to ensure safety. This, by necessity, requires proper testing and training. But even then, as with any electronic device, it can malfunction unexpectedly and even trained operators can abuse it.

<sup>38</sup> Bradlee92, *REMIX: "Can't Tase This" UF Student Tasered*, YOUTUBE (Sept. 20, 2007), [http://www.youtube.com/watch?v=Xzkd\\_m4ivmc](http://www.youtube.com/watch?v=Xzkd_m4ivmc).

<sup>39</sup> Michelle E. McStravick, Note, *The Shocking Truth: Law Enforcement's Use and Abuse of Tasers and the Need for Reform*, 56 VILL. L. REV. 363, 365–66 (2011).

<sup>40</sup> *Id.* at 366.

window of opportunity to safely arrest the target.<sup>41</sup> The TASER's effects subside immediately and usually produce no serious or lasting injuries.<sup>42</sup>

In practice, however, the device exemplifies how a lack of training, abuse, and less than ideal circumstances can produce unanticipated and severe consequences. For example, police officers in Oklahoma reportedly TASERed an 86-year-old woman after the police became afraid when she adopted a "more aggressive posture," while lying in her hospital bed.<sup>43</sup> In another instance, officers TASERed a 14 year old girl with epilepsy as she fled from the police;<sup>44</sup> one of the darts pierced her skull.<sup>45</sup> One man was TASERed while in a tree; he fell and became a paraplegic.<sup>46</sup> Though these stories provide horrifying testimonials, statistics tell the most damning story. Amnesty International reported that over an eight-year reporting period beginning in 2001, 334 people died as result of TASERing.<sup>47</sup> Amnesty argues that this makes the TASER something other than a nonlethal weapon, despite the assurances of the manufacturer to the contrary.<sup>48</sup>

In contrast to plaintiffs' and Amnesty International's position on the use of TASERs, courts and judges have been less skeptical of the weapon. Courts generally declare the use of TASERs excessive only when the arrestee does not resist arrest or has already been detained.<sup>49</sup> But courts are more reluctant to hold the use of a TASER to be excessive when an arrestee "actively resist[s] arrest by physically struggling with, threatening, or disobeying officers."<sup>50</sup> And despite the Ninth Circuit

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<sup>41</sup> See, e.g., WPMT Fox 43, *FOX Reporter Gets Tazed*, YOUTUBE (Oct. 1, 2009),

<http://www.youtube.com/watch?feature=endscreen&v=tJ1FzYZPP74&NR=1> (showing reporter TASERed, but then getting up immediately afterward).

<sup>42</sup> The manufacturer even uses an odometer graphic on its website to boast how many lives the device has supposedly saved, adding a countdown predicting when the next life will be saved. TASER INT'L, INC., <http://www.taser.com/> (last visited Mar. 16, 2012).

<sup>43</sup> McStravick, *supra* note 39, at 363 (citing Complaint at 4, *Varner v. City of El Reno*, No. CIV-00636-F (W.D. Okla. June 21, 2010)) (internal quotation marks omitted).

<sup>44</sup> *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> *Harper v. Perkins*, 459 F. App'x 822, 824 (11th Cir. 2012).

<sup>47</sup> *TASERs--Potentially Lethal and Easy to Abuse*, AMNESTY INT'L (Dec. 16, 2008), <http://www.amnesty.org/en/news-and-updates/report/tasers-potentially-lethal-and-easy-abuse-20081216>.

<sup>48</sup> *Id.*

<sup>49</sup> *Cockrell v. City of Cincinnati*, 468 F. App'x 491, 496 (6th Cir. 2012).

<sup>50</sup> *Id.* at 495.

declaring the use of TASERs an intermediate level of force, requiring a strong governmental justification,<sup>51</sup> Chief Judge Kozinski has sung the TASER's praises. Judge Kozinski believes that although nonlethal force has potential drawbacks and can cause injury, the TASER is not only a particularly safe alternative to deadly force for those subjected to its effects, but it is a much safer alternative for police officers who need not step into harm's way when using it, unlike other nonlethal forms of force such as batons or pepperspray which require up-close application.<sup>52</sup>

## 2. *Pepperspray*

Pepperspray is a sprayable chemical irritant made from some of Earth's spiciest plants, including the cayenne pepper.<sup>53</sup> The active ingredient, cyoleoresin capsicum, incapacitates individuals by producing a burning sensation on the skin, causing shortness of breath, inflaming the respiratory tract, and causing fear and disorientation by producing tears in the eyes and causing the eyelids to swell shut.<sup>54</sup> These effects greatly weaken the subject and provide law-enforcement with a momentary advantage.<sup>55</sup> A National Institute of Justice study concluded that death as a result of pepperspray is extremely rare, and the vast majority of reported pepperspray-related deaths are actually the result of something else, such as drug use.<sup>56</sup>

Still, courts consistently hold that the use of pepperspray constitutes excessive-force when the alleged offense is minor, the "arrestee surrenders, is secure, and is not acting violently," and there exists no threat to the safety of the police officer or anyone else.<sup>57</sup> Conversely, courts consistently hold that the use of pepperspray is reasonable when the arrestee resists arrest or refuses police requests.<sup>58</sup> One court went so far as to say that "pepper spray is a very reasonable alternative to escalating a physical struggle with an arrestee."<sup>59</sup>

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<sup>51</sup> *Bryan v. MacPherson*, 630 F.3d 805, 815 (9th Cir. 2010).

<sup>52</sup> *Mattos v. Agarano*, 661 F.3d 433, 454 (9th Cir. 2011).

<sup>53</sup> NAT'L INST. OF JUSTICE, OLEORESIN CAPSICUM: PEPPER SPRAY AS A FORCE ALTERNATIVE 1 (Mar. 1994), available at <https://www.ncjrs.gov/pdffiles1/nij/grants/181655.pdf>.

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> NAT'L INST. OF JUSTICE, THE EFFECTIVENESS AND SAFETY OF PEPPER SPRAY, 1 (Apr. 2003), available at <https://www.ncjrs.gov/pdffiles1/nij/195739.pdf>.

<sup>57</sup> *Vinyard v. Wilson*, 311 F.3d 1340, 1348 (11th Cir. 2002).

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

### C. Comparing ADS, TASERs, and Pepperspray

When compared to the ADS, both pepperspray and TASERs appear to be very similar to one another. Unlike the ADS, both pepperspray and TASERs are only effective at short range—several yards at most. In stark contrast, the ADS is effective at close, medium, or long range—in excess of a mile away from the target—though police cannot yet carry the ADS on their person like they can pepperspray or TASERs. Also, despite the fact that pepperspray is capable of targeting multiple individuals, no other nonlethal weapon rivals the ADS's ability to control crowds. Unlike either pepperspray or TASERs, the ADS's application of force is completely invisible and totally inaudible.<sup>60</sup> This means that the total exposure one receives cannot be easily tracked. But it also means that the individual subjected to the beam has no idea what is happening to them, unlike with a TASER or pepperspray. Finally, and most importantly for the purpose of excessive-force jurisprudence, instead of using heat to incapacitate its targets, the ADS uses heat to force its targets to flee.<sup>61</sup> This combination of differences makes the ADS truly unique from the other methods of nonlethal enforcement.

In other ways, the three weapons are quite similar. Each device manipulates human biology in such a way that the target is forced to comply, overcoming resistance and giving the police an advantage. Additionally, each weapon is technically capable of causing extreme pain, serious injury, and in rare cases, even death. But for each device, the typical application of force produces only temporary, non-life-threatening pain or injuries. Consequently, each technology is most properly classified as nonlethal.

## II. EXCESSIVE-FORCE JURISPRUDENCE

Excessive-force claims arise under 42 U.S.C. § 1983.<sup>62</sup> To state a valid claim under Section 1983, the plaintiff must show that the defendant, acting under color of state law, deprived the plaintiff of a protected constitutional or statutory right.<sup>63</sup> To resolve a claim, courts perform a three-step inquiry. First, courts identify the specific constitutional right allegedly violated by the defendant's use of force.<sup>64</sup> The constitutional provision recognizing that right becomes the controlling standard for measuring excessiveness.<sup>65</sup> Second, the court

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<sup>60</sup> Jackson, *supra* note 2.

<sup>61</sup> Press Release, *supra* note 16.

<sup>62</sup> 42 U.S.C. § 1983 (2006).

<sup>63</sup> *Id.*

<sup>64</sup> *Graham v. Connor*, 490 U.S. 386, 394 (1989).

<sup>65</sup> *See id.* at 395–96 (describing how § 1983 claims work)

must determine whether the defendant's use of force actually violated the governing constitutional standard.<sup>66</sup> Third, because public officials enjoy qualified immunity, the court must determine whether the constitutional right was "clearly established" at the time of the defendant's actions.<sup>67</sup>

#### A. Choosing the Standard of Conduct Most Appropriate For the Excessive-Force Claim

First, the court must identify the most appropriate statutory or constitutional provision with which to measure the defendant-officer's conduct. According to the Supreme Court in *Graham v. Connor*,<sup>68</sup> the appropriate standard for excessive-force claims is usually the Fourth Amendment's "reasonableness" standard or the Eighth Amendment's "cruel and unusual punishment" standard.<sup>69</sup> If the excessive-force claim arises from a search or seizure, then the Fourth Amendment's reasonableness standard applies.<sup>70</sup>

Seizure occurs "only when there is a governmental termination of freedom of movement through means intentionally applied."<sup>71</sup> As Justice Scalia noted in *California v. Hodari*,<sup>72</sup> a reasonable belief that one is "not free to leave" is necessary before a seizure is said to occur, but is not sufficient by itself to constitute a seizure.<sup>73</sup> Something more must happen before an individual has been "seized" for Fourth Amendment purposes, such as the application of physical force by the police.<sup>74</sup> A seizure can also constitute a show of authority that results in submission or compliance by the person the police are attempting to seize.<sup>75</sup> The mere demonstration of police authority, without compliance by the civilian, is not enough to constitute seizure.<sup>76</sup>

A court may turn to the Fourteenth Amendment's due process clause only after a determination that no other more specific

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<sup>66</sup> *Id.* at 394.

<sup>67</sup> *Anderson v. Creighton*, 483 U.S. 635, 639 (1987).

<sup>68</sup> *Graham v. Connor*, 490 U.S. 386 (1989).

<sup>69</sup> *Id.*

<sup>70</sup> *See id.* at 394–95 (listing investigatory stops, arrests, and "other seizures" as giving rise to Fourth Amendment section 1983 claims).

<sup>71</sup> *Brower v. County of Inyo*, 489 U.S. 593, 595 (1989).

<sup>72</sup> *California v. Hodari*, 499 U.S. 621 (1991).

<sup>73</sup> *Id.* at 628 (quoting *U.S. v. Mendenhall*, 446 U.S. 544, 554 (1980)).

<sup>74</sup> *Id.* at 626.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.*

constitutional provisions apply.<sup>77</sup> The due process clause of the Fourteenth Amendment states that “no State shall deprive any person of life, liberty, or property without due process of law.”<sup>78</sup> Therefore, when a police officer uses force against an individual outside the ambit of either the Fourth or Eighth Amendments’ protections, the due process clause is the only remaining source of constitutional protection for any resulting Section 1983 excessive-force claim.<sup>79</sup>

## B. Deciding Whether Use of Force Violates The Governing Standard

After the court determines the controlling constitutional standard, it must decide whether the use of force violated that standard.

### *1. Excessive-force claims under the Fourth Amendment*

The Fourth Amendment protects citizens against unreasonable searches and seizures.<sup>80</sup> Reasonableness applies in two distinct ways. First, an officer may seize an individual whenever it is reasonable under the circumstances.<sup>81</sup> An arrest based upon probable cause that a crime has been committed, or an investigatory stop based upon reasonable suspicion that criminal activity is afoot, are both examples of when seizure is considered reasonable.<sup>82</sup> Second, even if a seizure is justified, it still must be executed reasonably, because “the reasonableness of a particular seizure depends not only on when it is made, but also on how it is carried out.”<sup>83</sup>

Excessive-force claims concern the unreasonableness of the amount or type of force used, not whether the police were authorized by law to seize the individual in the first place.<sup>84</sup> Accordingly, excessive-

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<sup>77</sup> See *Graham v. Connor*, 490 U.S. 386, 394–95 (1989) (dramatically limiting the use of the Fourteenth Amendment substantive due process to resolve excessive-force claims but not precluding it for that purpose when neither the Fourth or Eighth Amendments would apply to an excessive-force claim).

<sup>78</sup> U.S. CONST. amend. XIV, § 1.

<sup>79</sup> See *Graham*, 490 U.S. at 394–95 (leaving open the possibility that the Fourteenth Amendment could apply to excessive-force claims even when the Fourth and Eighth Amendments do not).

<sup>80</sup> U.S. CONST. amend. IV.

<sup>81</sup> *Terry v. Ohio*, 392 U.S. 1, 9 (1968) (“The question is whether in all the circumstances . . . [the individual’s] right to personal security was violated by an unreasonable search and seizure.”).

<sup>82</sup> *Arizona v. Johnson*, 555 U.S. 323, 330 (2009).

<sup>83</sup> *Graham*, 490 U.S. at 395.

<sup>84</sup> See, e.g., *Cortez v. McCauley*, 478 F.3d 1108, 1126 (10th Cir. 2007).

force claims must have a separate factual basis from an unauthorized search claim to survive summary judgment.<sup>85</sup>

The right to make an investigatory stop or arrest comes with the corresponding right to use an objectively reasonable degree of force to effectuate that stop or arrest.<sup>86</sup> But “reasonableness under the Fourth Amendment is not capable of precise definition or mechanical application.”<sup>87</sup> The reasonableness of any particular use of force is determined by the totality of the circumstances, including, but not limited to, “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.”<sup>88</sup> Courts may also consider the nature of the seizure—that is, whether the seizure was merely an investigatory stop or an actual arrest.<sup>89</sup> Determinations also require a careful balancing of the governmental and private interests at stake.<sup>90</sup> Finally, reasonableness must “allow[] 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.”<sup>91</sup> Thus, the use of force is judged objectively from the perspective of “a reasonable officer on the scene, rather than with the 20/20 vision of hindsight.”<sup>92</sup> It also means that “[n]ot every push or shove” is excessive “even if it may later seem unnecessary in the peace of a judge’s chambers.”<sup>93</sup>

## 2. Excessive-Force Claims Under the Fourteenth Amendment

Prior to *Graham v. Connor*, lower courts regularly evaluated excessive-force claims under the Fourteenth Amendment’s substantive due process clause, with *Johnson v. Glick*<sup>94</sup> serving as the jurisprudential

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<sup>85</sup> *See id.* (“Thus, in a case where police effect an arrest without probable cause or a detention without reasonable suspicion, but use no more force than would have been reasonably necessary if the arrest or the detention were warranted, the plaintiff has a claim for unlawful arrest or detention but not an additional claim for excessive force.”).

<sup>86</sup> *Graham*, 490 U.S. at 396.

<sup>87</sup> *Id.*

<sup>88</sup> *Id.*

<sup>89</sup> *Cortez*, 478 F.3d at 1126 (*en banc*).

<sup>90</sup> *Id.* at 1125.

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

<sup>93</sup> *Id.*

<sup>94</sup> *Johnson v. Glick*, 481 F.2d 1028 (2d Cir. 1973).

model.<sup>95</sup> In *Johnson v. Glick*, the court adopted a four-factor test to resolve Section 1983 excessive-force claims.<sup>96</sup> As described by the Supreme Court in *Graham v. Connor*, this test requires the court to consider the following four factors when determining whether force was excessive under the substantive due process clause: (1) “the need for the application of force,” (2) “the relationship between that need and the amount of force that was used,” (3) “the extent of the injury inflicted,” and (4) “[w]hether the force was applied in a good faith effort to maintain and restore discipline or maliciously and sadistically for the very purpose of causing harm.”<sup>97</sup>

Alternatively, a court could apply the *Rochin v. California*<sup>98</sup> “shocks the conscience” standard—the standard that inspired the *Johnson v. Glick* four-factor test. In *Rochin*, the Supreme Court held that the due process clause of the Fourteenth Amendment required reversal of a conviction that depended upon evidence obtained by forcibly pumping a suspect’s stomach.<sup>99</sup> In reversing, the Court concluded that such conduct “shocks the conscience,” reasoning that the action involved was constitutionally indistinguishable from “the rack and screw.”<sup>100</sup>

### C. Overcoming Qualified Immunity

Even if the conduct violates the controlling constitutional standard, public officials are not liable for civil damages unless they “violate clearly established statutory or constitutional rights of which a reasonable person would have known.”<sup>101</sup> An action violates a clearly established rule when the unlawfulness of the action, upon consideration, would be apparent to a reasonable public official.<sup>102</sup> To answer this question in the context of excessive-force, a court looks to excessive-force precedent at the time the force was applied and determines whether

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<sup>95</sup> See *Graham*, 490 U.S. at 393 (noting that a majority of federal courts have applied this standard without considering whether a more appropriate constitutional standard might apply).

<sup>96</sup> *Johnson*, 481 F.2d at 1033.

<sup>97</sup> *Graham*, 490 U.S. at 394.

<sup>98</sup> *Rochin v. California*, 342 U.S. 165, 172 (1952).

<sup>99</sup> *Id.*

<sup>100</sup> *Id.*

<sup>101</sup> *Pearson v. Callahan*, 555 U.S. 223, 231 (2009). See also *Anderson v. Creighton*, 483 U.S. 635, 638 (1987) (explaining that the doctrine of qualified immunity exists to balance the need for holding irresponsible public officials accountable with the equally important need for protecting reasonable public action in the face of legal uncertainty).

<sup>102</sup> See *Anderson*, 483 U.S. at 640 (stating with precision the level of generality meant by “clearly established”).

the officer had fair warning that his or her actions would constitute excessive-force under those or similar circumstances.<sup>103</sup>

### III. THE U.C. DAVIS PEPPERSPRAY INCIDENT REIMAGINED

This Section will examine the ADS as if it had been used instead of pepperspray at the now infamous UC Davis pepperspray incident.<sup>104</sup> Part A provides a brief description of the actual event. Part B then uses those facts to reimagine the incident as if the police had used the ADS instead of pepperspray.

#### A. The Real U.C. Davis Pepperspray Incident

In the fall of 2011, protest was in the air.<sup>105</sup> What began as a small group of protesters in New York City quickly gained steam to become a national Occupy Wall Street (OWS) movement.<sup>106</sup> But OWS was not a stereotypical protest movement with citizens marching in the streets during the day and then going home at night. To the contrary, the signature protest tactic of OWS was to, as its name suggests, occupy public spaces indefinitely.<sup>107</sup> Though it was this innovative tactic that arguably helped the movement gain strength, it was also this tactic that concerned public officials and brought many protestors face-to-face with law-enforcement.<sup>108</sup>

Before November 18, 2011, students participating in the OWS movement at U.C. Davis erected tents and occupied the university quad.<sup>109</sup> When the University's Chancellor ordered the students to remove the tents and leave the quad, many refused.<sup>110</sup> In response, on

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<sup>103</sup> See, e.g., *Rahn v. Hawkins*, 73 F. App'x 898, 901 (8th Cir. 2003) (holding that a right was clearly established as part of its excessive-force analysis by looking to case precedent).

<sup>104</sup> Methodological problems aside, because no ADS has ever been deployed by police against civilians, and because this note seeks to anticipate the legal consequences of doing so, a "what if" hypothetical tethered to the facts of a real case is the best one can do.

<sup>105</sup> See generally Andersen, *supra* note 16.

<sup>106</sup> See Ishaan Tharoor, *Occupy Wall Street: A New Era of Dissent in America?*, TIME, Oct. 12, 2011, available at <http://globalspin.blogs.time.com/2011/10/12/occupy-wall-street-a-new-era-of-dissent-in-america/> (describing rise of Occupy Wall Street movement).

<sup>107</sup> Chris Hawley, *After raids, Wall Street Protesters Shift Tactics*, ST. LOUIS POST-DISPATCH, Dec. 1, 2011, at A9.

<sup>108</sup> *Id.*

<sup>109</sup> Gould, *supra* note 18.

<sup>110</sup> Jason Cherkis, *UC Davis Police Pepper-Spray Seated Students In Occupy Dispute*, HUFFINGTON POST (Nov. 19, 2011, 10:59 AM), <http://www.huffington>

November 18, 2011, university police armed with riot gear, pepperspray bullets, and pepperspray cans attempted to remove tents and other encampment items on the quad.<sup>111</sup> On their way to the quad, a sizable group of students formed a large human circle around the officers.<sup>112</sup> Several dozen of those students sat down in a line on a concrete sidewalk directly in the path of the oncoming officers.<sup>113</sup> Despite a police warning to get out of the way, those students remained seated, locked arms, and refused to move.<sup>114</sup> At that point, officers conspicuously shook bright orange cans of pepperspray, alerting everyone that the students would be sprayed if they failed to comply.<sup>115</sup> Before administering the pepperspray, one officer attempted to pull one of the students in the line from her sitting position, but was unable to do so.<sup>116</sup> Shortly thereafter, another officer stepped over the line of students to join another group of officers who were already on the other side.<sup>117</sup>

What happened next shocked many across the nation. With at least four cameras recording and a large crowd of students observing, two police officers began to walk parallel to the sitting line of students, and began spraying orange pepperspray directly into their faces from only a few feet away.<sup>118</sup> Observing students shouted “shame” and attempted to render first aid to the peppersprayed protestors.<sup>119</sup> After administering the pepperspray, the police successfully pulled the arm-locked students apart from each other.<sup>120</sup> Video shows police arresting some of these students but leaving others behind as the crowd of students swelled and pushed in on the officers, forcing the officers away from the area.<sup>121</sup>

Although campus police argued that its actions were justified because the line of sitting students cutoff the police’s movement,<sup>122</sup> no

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post.com/2011/11/19/uc-davis-police-pepper-spray-students\_n\_1102728.html (updated Nov. 20, 2011, 7:22 PM).

<sup>111</sup> *Id.*

<sup>112</sup> *Id.*

<sup>113</sup> Andy Baio, *UC Davis Pepper Spray Incident, Four Perspectives*, YOUTUBE (Nov. 21, 2011), <http://www.youtube.com/watch?v=WO4406KJQM> (showing a “circle” of sitting students surrounding the police officers).

<sup>114</sup> *Id.*

<sup>115</sup> *Id.*

<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> *Id.*

<sup>120</sup> *Id.*

<sup>121</sup> *Id.*

<sup>122</sup> *UC Davis November 18, 2011 “Pepper Spray Incident” Task*

violence occurred—with the exception of that committed by the police officers.<sup>123</sup> County prosecutors refused to prosecute the protestors, citing insufficient information in the U.C. Davis police reports.<sup>124</sup> The two officers who peppersprayed the students, however, were suspended pending an investigation.<sup>125</sup> Despite calls for her resignation, the Chancellor of U.C. Davis survived a no-confidence vote after apologizing for the incident.<sup>126</sup> Not surprisingly, on February 22, 2012, seventeen students, represented by the American Civil Liberties Union, filed a Section 1983 lawsuit in the Northern District of California alleging the use of excessive-force by various university administration officials.<sup>127</sup> In March of 2012, the University released the results of its investigation in “The Reynoso Task Force Report.”<sup>128</sup> In addition to stating that the incident “should have and could have been prevented,” the report declared the officers’ use of force to be “objectively unreasonable.”<sup>129</sup> On September 13, the University announced that it had reached a settlement with the ACLU and the students, though the details of that settlement have not been made available to the public.<sup>130</sup>

## B. The Real Event Reimagined

Now, imagine that the two police officers who peppersprayed the protesting line of sitting students had used the ADS instead:

The police order the students off the side walk, warn them that failure to do so will result in their being shot (this time with the ADS, not pepperspray), then make at least one attempt to remove a protestor or two by hand. This does not work, so law-enforcement’s next step is to

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*Force Report*, THE REYNOSO TASK FORCE, at 18, <http://reynosoreport.ucdavis.edu/reynoso-report.pdf> (March 2012).

<sup>123</sup> Sam Quinones, *Pepper Spray Use On Campus Probed, Video Of Response To UC Davis Protesters Goes Viral, Chancellor Calls For An Inquiry*, L.A. TIMES, Nov. 20, 2011, at 37, available at 2011 WLNR 24040086.

<sup>124</sup> Lauren Keene, *Yolo DA Won’t Prosecute Occupy UC Davis Protesters*, DAVIS ENTER., Jan. 20, 2011, at A3, available at 2012 WLNR 1408188.

<sup>125</sup> Bob Egelko, *UC Davis Police Sued Over Pepper-Spraying*, S.F. CHRON., Feb. 23, 2012, at C2, available at 2012 WLNR 3859256.

<sup>126</sup> Terence Chea, *UC-Davis Chancellor Wins Vote Of Confidence*, WASH. POST, Feb. 18, 2012, at A04, available at 2012 WLNR 3549010.

<sup>127</sup> Complaint, Baker v. Katehi, No. 12CV00450 (E.D. Cal. filed Feb. 22, 2012), 2012 WL 593159.

<sup>128</sup> THE REYNOSO TASK FORCE, *supra* note 122.

<sup>129</sup> *Id.* at 2, 19.

<sup>130</sup> Larry Gordon, *UC To Pay Settlement In Davis Pepper Spray Case*, L.A. TIMES (Sept. 13, 2012), <http://articles.latimes.com/2012/sep/13/local/la-me-uc-pepper-spray-20120914>.

use the ADS. The arm-locked students resist at first, but within five seconds the heating sensation caused by the ADS becomes so great that they release their arms and run out of the way. The only thing a video camera can record is a verbal warning, a brief pause, then a scattering of the sitting students and any other students caught in the beam. The students, after being immediately relieved from the heat, might consider sitting down again and continuing the protest. This, however, would prove fruitless after a short while, when time and time again they would be subjected to the ADS produced oven-like heat. All the while, the ADS would be entirely out of sight, potentially thousands of feet away. Any officers standing near the students would probably stand still while on guard in order avoid the millimeter wave beam. In a short while the protest would be over and the students would not even know what hit them.

This scenario may be too rosy; a less idyllic scenario is certainly possible. Army field tests show that the amount of time individuals can tolerate the heat varies. Those individuals more capable of withstanding the heat who lock arms with fellow protestors might hold on to those less capable of withstanding the heat and causing those less capable to experience excruciating, if temporary, pain. Also, though a standing individual might be able to run away from the beam, a sitting individual might not. If a human body could do nothing but run when subjected to the beam, then that might leave sitting protestors, incapable of running simply because they are sitting, writhing on the ground in pain. Even if sitting individuals could escape the beam, the additional time it takes to stand and run might result in second or third-degree burns, which the ADS is technically capable of producing with excessive exposure. Unless the police are capable of tracking the exposure intervals of those subjected to the beam—something reports indicate the ADS is not yet capable of doing—then a few protestors could be subjected to repeated exposure, excruciating pain, and maybe even serious burns. Indeed, the army provided fifteen-second intervals between exposures to its test subjects. If someone does receive burns, like a sunburn, she might not know of it immediately, and might subject herself to continued exposures without knowing she is being severely burned. Finally, in the chaos that would likely follow use of the beam, onlookers risk being trampled by fellow students, which might cause severe or life-threatening injuries.

Though, to date, the ADS has never been used in such a real-world crowd-control situation, imagining such a scene is necessary because the device is theoretically and technically capable of producing such consequences. To be sure, the potentially adverse consequences of using the ADS for crowd-control are disturbing. But even the typical, non-injurious case is legally noteworthy.

#### IV. APPLICATION OF EXCESSIVE-FORCE JURISPRUDENCE TO ADS

##### A. The Standard of Conduct Most Appropriate for a Section 1983 Claim

Whether the Fourth Amendment would apply to the reimagined event is unclear. During the real event, the two police officers standing but a few feet from the students walked up and down the line of sitting students applying bright orange pepper-spray to their faces. But in the reimagined event, the officers are standing some distance away from the students to avoid being affected by the ADS beam, the officer's application of force (the beam) is completely invisible and totally inaudible,<sup>131</sup> and, instead of incapacitating the students, the beam produces a heating sensation that forces the students to instinctively flee.<sup>132</sup>

Upon review, the police could argue that the students had been seized when they complied with police commands to move, and had thereby submitted to the show of authority by the police. This of course, would be a fiction. The students did not move voluntarily at all. They only moved because they were peppersprayed, or in the reimagined scenario, subjected to the ADS. And if the police concede that the movement was involuntary, then that fact only reinforces the case that the ADS, although completely unseen, is still physical force for the purposes of Fourth Amendment seizure.<sup>133</sup>

Use of the ADS would thus create a Fourth Amendment jurisprudential paradox: an individual is simultaneously seized and not seized under the Fourth Amendment. Recall that, under *Hodari*, the necessary and sufficient conditions of seizure are the following:

- Sufficient Conditions: The individual submits to a show of authority by the police or the police apply physical force to the individual.

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<sup>131</sup> Jackson, *supra* note 2.

<sup>132</sup> Press Release, *supra* note 16.

<sup>133</sup> This is arguably a fiction. An arrestee may not ever see a bullet or the electrons rushing into their body from a TASER. Still, the individual is likely to see a gun, a TASER, the prongs of the TASER, etc. Here, an individual may never see the ADS and certainly will not see the millimeter waves. That, in combination with the fact that officers near those exposed to the beam would appear to those around them as not administering the force, makes for a legally unprecedented situation.

- Necessary Condition: A reasonable person would not feel free to leave.<sup>134</sup>

Normally, these two conditions exist in harmony. But the ADS uses physical force specifically designed to make people flee, without incapacitating them. Physical force is used (sufficient condition of seizure), but the force makes it unreasonable for a person to believe that he or she is free to stay (necessary condition of seizure). This means the sufficient condition is met at the same time the necessary condition is not. Hence, a legal paradox.

Some may question how use of the ADS is any different from hosing down a crowd. While it is true that a water hose uses force to disperse a crowd, unlike hosing down a crowd, the ADS acts invisibly, inaudibly, and without giving the individual subjected to the beam any indication of what is happening. The individual is fine one moment, but not the next. One moment the individual is protesting, the next the individual is heating up, rapidly, and with no indication of how or why. There is no water, no noise, no fire truck: just a sudden and intense feeling of being in a hot oven, followed by an inexorable command from the brain to the body to flee. In such a situation, it is unclear whether a person even has the mental capacity to consider whether she “felt free to leave,” let alone whether, upon review, a reasonable person would or would not have felt free to leave. The ADS thus raises doubts about the proper meaning and application of the “free to leave” standard in a way that water hoses do not.

Before Section 1983 analysis can continue, a threshold question of law must be resolved. At this point, the Supreme Court appears unwilling to jettison either the necessary or sufficient condition, if only because the Court has described the conditions as “necessary” and “sufficient.”<sup>135</sup> If the Fourth Amendment does not apply, then only the Eighth and Fourteenth Amendments are left. And because the Eighth Amendment obviously does not apply to a pre-conviction use of force, the only remaining standard is the Fourteenth Amendment due process clause.

Without knowing with certainty which standard applies, it is necessary to analyze the Section 1983 claim under both the Fourth Amendment and the Fourteenth Amendment.

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<sup>134</sup> *California v. Hodari D.*, 499 U.S. 621, 628 (1991).

<sup>135</sup> *Id.*

## B. Deciding Whether Use of Force Violated Governing Standard

### *1. Applying the Fourth Amendment*

If the Fourth Amendment governs the seizure, the ultimate question is whether the force used by the police officers was reasonable under the circumstances from the perspective of a reasonable officer.<sup>136</sup>

The analysis begins with the facts and circumstances surrounding the use of force. In this case, those facts and circumstances are part hypothetical and part real. The first factor to consider is the severity of the crime at issue. Unfortunately, whether any crime occurred in either the original or reimagined scenario is unclear. There are a few possibilities. The first possibility is that the students commit a crime by encircling the police and preventing them from performing their official police duties. But the officers appeared to be concerned only with the students sitting in a line along the university pathway. If encircling the police and preventing them from performing their duties is a crime, then every student, not just those in the walkway, would be subject to seizure and the use of force to effectuate that seizure. Of course, police discretion could explain why the police choose to focus on only those students sitting down in front of them. A second possibility is that the offense occurs when the protestors block university traffic by sitting in the middle of a university pathway and refuse to move when ordered by the police. This would explain why only those students sitting on the pathway are ordered to move and why the police focus all their attention on these students. In either scenario, the crimes at issue are minor at best.

The facts and circumstances of both scenarios also favor the students when considering the second factor: whether the individual poses an immediate threat to the safety of others, including police. In neither scenario do the suspects pose an immediate threat to the safety of the officers or others. At no time do the sitting students display any potential to commit violence against the officers or attempt to do so. At no time prior to the use of the crowd-control device do the officers act as though they are being threatened or as though their safety is at risk. The officers act dispassionately, calmly, and even slowly. At one point, they stand around for several minutes, doing nothing at all. Video shows one officer even stepping over the line without anyone even so much as attempting to block him. Furthermore, all of these events occur on campus with students, not off campus with totally unknown persons.

Regarding the third factor—actively resisting arrest—it is unclear in either scenario whether the students are resisting arrest or just

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<sup>136</sup> See *supra* Part II.B.1.

the police officers' commands to move. It is clear, however, that the students are not *actively* resisting arrest. The only attempt by the police to effectuate arrest is met with the limp arm of a student whose other arm is locked with those of fellow students. Such conduct fits the classic definition of passive resistance.<sup>137</sup>

Though not a listed factor, that the police have non-confrontational alternatives in either scenario suggests that the use of force is unreasonable. It is unclear why the police do not attempt to walk around the line of protestors sitting on the sidewalk. A video recording of the Davis confrontation shows numerous holes in the so-called "circle" of protestors that would have allowed for easy passage by the police.<sup>138</sup> The video also shows the police even step over the line of sitting protestors without fanfare or resistance. By all appearances, the officers could have avoided the confrontation altogether and gone about their work of removing the tents from the quad. In the reimagined scenario, there is no reason to believe the officers' actions would be any different.

Under either scenario, then, the officers' actions appear unreasonable under the totality of the circumstances. This conclusion is bolstered by the findings of the University's independent investigation of the incident, which concluded that the police officers' use of pepperspray on the line of sitting students was objectively unreasonable.<sup>139</sup> Use of the ADS would likewise constitute excessive-force, even if the ADS is less harmful than pepperspray. Of course, a court might, and probably should, take into consideration the lesser degree of harm caused by the ADS in the reimagined scenario. Still, no one knows whether this difference alone could or would outweigh the factors concerning both protestor and police behavior that point toward the latter's unreasonableness. For the purposes of this analysis, it suffices to say that the decision would be a

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<sup>137</sup> See *Drews v. Maryland*, 381 U.S. 421, 425 (1965) ("Then all five members of the group briefly linked arms, and, in a further show of passive resistance, the three men dropped to the ground. They did not, the police officers testified, offer anything in the way of active resistance to either arrest or ejection. As Judge Oppenheimer observed: 'In resisting the command of the officers to leave the park, the defendants used no force against the officers or anyone else; they held back or fell to the ground.' Nor did they argue with the police, or use profanity; indeed, the only words spoken were in the nature of a plea for forgiveness of one of the mob. All they did was refuse to assist in their own ejection from a segregated amusement park.") (citations omitted).

<sup>138</sup> Baio *supra*, note 113.

<sup>139</sup> See *UC Davis November 18, 2011 "Pepper Spray Incident" Task Force Report*, *supra* note 129 at 18–19 (performing a reasonableness analysis of the police officers' actions on November 18, 2011, and concluding their actions were objectively unreasonable).

close one, and that the outcomes of excessive-force lawsuits would likely diverge.

## 2. Applying the Fourteenth Amendment

If the Fourteenth Amendment due process clause applies, then the court must apply either the four-part *Johnson v. Glick* test or evaluate the police conduct under the “shocks the conscience” standard. Use of the ADS would most likely survive either standard.

It is unlikely that use of the ADS would constitute excessive-force under the *Johnson v. Glick* four-factor test. First, in both scenarios, the need to use force is admittedly low. The police do not need to disperse the line of students because the police could safely step over or walk around them. But, once police choose to disperse the line of protestors—a choice outside the scope of an excessive-force inquiry—the police officers would, and do, have difficulty removing the students without using some degree of force. Hence, a “need” to use force.

Second, even if the need to use force may be minimal, that factor is offset by the fact that the ADS does not typically cause serious or lasting injury. As long as the device works as intended, the students’ pain would dissipate within seconds and leave no injuries, save perhaps for an occasional blister. As with any other nonlethal device, a worst-case scenario could mean the ADS produces excruciating pain and leaves lasting, potentially even lethal injuries. But like TASERs and pepperspray, the dangerousness of a device for the purposes of excessive-force claims under this factor is judged by the typical case, not by the worst possible outcome.

Third, the actual injuries inflicted are likely to be non-existent after a few seconds of the application of force. Greater injuries, though not likely, are considered here if they arise. This Issue Brief assumes typical, non-injurious results.

Finally, though some may claim that the officers act maliciously in each scenario, there is no evidence that the officers’ real purpose is to cause harm. The officers act dispassionately and with patience, not rashly or out of passion. The police warn the students and give them ample opportunity to leave. The officers do not execute a sadistic plan to cause harm to students. To the contrary, they manifest a lawful motive: intent to effectuate a valid law-enforcement objective, namely, the seizure and arrest of protesting students who fail to abide by what the officers believe to be lawful commands. To be sure, the apparent existence of non-confrontational alternatives makes it appear that the police choose confrontation. Still, even if such alternatives were judged real and practical, a choice by police to use force to effectuate a lawful or even

arguably unlawful arrest is a far cry from evidencing malicious or sadistic intent on the part of the officer. Without more, it is highly unlikely a judge would find that the officers acted maliciously, given their cool-headed demeanor and repeated warnings before using force.

We are thus left with the “shocks the conscience” standard, the predecessor to and inspiration for the *Johnson v. Glick* test. Applying a device to a student protestor that essentially cooks her alive might be shocking to many. Indeed, the “shocks the conscience” standard connotes a kind of psychological repugnance not accounted for in the *Johnson v. Glick* test. When the Supreme Court articulated this standard in *Rochin*, it was applying it to the forceful pumping of an arrestee’s stomach for evidence—something less physically painful than it is mentally “shocking” to the rest of society. Thus, even if, like stomach pumping, the ADS does not cause lasting injury in the vast majority of exposures, its use may still “shock the conscience,” especially when applied to non-violent student protestors on a university campus.

Though the thought of “cooking someone alive” is quite disturbing, when one actually watches video of a person exposed to the ADS, the imagery bears little resemblance to the barbarism of the rack and screw or the repugnance of a the police forcing a tube into a person’s stomach.<sup>140</sup> When a person is exposed to the ADS, one moment the person is behaving normally, the next moment she is running, and the next moment she appears to be back to normal.<sup>141</sup> Such a display looks especially benign in comparison to the lasting injuries and pain produced by chemical irritants like pepperspray.<sup>142</sup> One might even argue that the use of anything other than the ADS is excessive, thus flipping on its head the argument that the ADS is *per se* excessive-force. And because the use of chemical irritants like pepperspray also produces a burning sensation, it is hyperbolic to suggest that a less painful, more abbreviated, and immediately subsiding infliction of “heat” would “shock the conscience” if pepperspray, TASERs, or other commonly used nonlethal weapons do not.

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<sup>140</sup> See, e.g., Milner, *supra* note 5 (demonstrating the ADS on various individuals and on a crowd who on occasion laugh and smile when they are subjected to the beam).

<sup>141</sup> See *id.* (showing targeted persons departing the beam calmly).

<sup>142</sup> See, e.g., chris01659, *Pepper Spray Demo*, YOUTUBE (Dec. 27, 2008), <http://www.youtube.com/watch?v=tT18uWukCCY> (demonstrating the serious and lasting effects of pepperspray on a person).

### C. Overcoming Qualified Immunity

The qualified immunity inquiry would focus on whether the constitutional rights of the arm-locked student protestors were clearly established at the time of the use of force. Here, it is not even clear which constitutional standard governs, let alone whether law-enforcement's actions are consistent with that governing standard. In such an unprecedented situation, qualified immunity is sure to apply even if a reviewing court holds the law-enforcement's application of force to be unconstitutionally excessive. In future cases, however, qualified immunity will cease to protect officers for that same conduct, so any additional qualified immunity analysis irrelevant for the purposes of this Issue Brief.

### V. IMPLICATIONS FOR EXCESSIVE-FORCE JURISPRUDENCE

The application of current excessive-force jurisprudence to the ADS under the U.C. Davis hypothetical raises major questions about the ADS and the state of excessive-force jurisprudence.

First, excessive-force jurisprudence is not ready for the ADS. Because the ADS is a form of physical contact that makes it reasonable—biologically mandatory, in fact—for a person to leave, a person is simultaneously seized and yet not seized under existing Fourth Amendment jurisprudence. Courts, reluctant to jettison long standing precedent, are likely to struggle with this issue. Consequently, resolution of this paradox will likely have far reaching effects and consequences due to how vital and central seizure doctrine is for day-to-day law-enforcement activities.

Second, if the Fourth Amendment does not apply, then the Fourteenth Amendment would—producing dramatically different results for almost identical police conduct. As revealed by the analysis in Part III.B.2, an arguably unreasonable use of force would not come close to “shocking the conscience” and would probably not violate *Johnson v. Glick*. This disparity in result among similarly situated people cannot adequately be explained by reference to the fact that the ADS uses heat to force someone to flee while other nonlethal weapons use heat to incapacitate. It is even less adequate if something goes wrong and the ADS produces severe burns or even death. To say that someone who dies as a result of being electrocuted by a TASER is entitled to relief while someone who dies as a result of being burned by the ADS is not, offends basic notions of fairness and justice.

Third, the invisibility of the ADS changes the game.<sup>143</sup> Although video cameras like those at the U.C. Davis incident bring clarity to the situation and hold protestors and officers accountable, the ADS works invisibly and inaudibly. As a result, the ADS presents a far less compelling and sympathetic image of protestors.<sup>144</sup> Instead of watching imagery reminiscent of Mohatma Ghandi or the great nonviolent protests of the civil rights era, television and internet viewers will see what looks to be a strange, perhaps even humorous scene, where one minute student protestors are standing their ground and the next they are scattering for no discernible reason. As long as the ADS is used correctly and the device works as intended, students will not have bright orange pepperspray, swollen eyelids, red skin, and sobs to display for the camera.<sup>145</sup>

Fourth, and related to the third, though pepperspray and TASERS are arguably a crude and occasionally excessive means of disrupting protestors, they at least provide protestors with a means of gathering media attention and sympathy for their cause.<sup>146</sup> The ADS seems poised to arm the police with a weapon that will completely silence their protest by not only preventing them from holding their ground, but by dispersing them in such a humane way that there is almost no way to garner sympathy or media attention. Due to the nature of how the ADS works, it will be more difficult for protestors to sacrifice themselves for a greater cause, or make themselves a symbol for a protest movement. Thus, one might argue that the real threat of the ADS is not the distortion of excessive-force jurisprudence, but the virtual elimination of a venerable form of free speech.

Ultimately, legislation is likely the most appropriate way to resolve some of these problems. Carefully tailored legislation can meet the need for safe and effective law-enforcement while still respecting prevailing social norms related to human dignity and freedom of speech. Legislation might also create a statutory framework for resolving excessive-force claims, eliminating the need for courts to resolve difficult constitutional questions each time a new technology—like the ADS—threatens to create a paradox out of Fourth Amendment jurisprudence.

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<sup>143</sup> Kenyon, *supra* note 10 (calling the ADS a “game changer”).

<sup>144</sup> Special thanks to my good friend Dylan Borchers at the Moritz College of Law at Ohio State University for noting this possibility.

<sup>145</sup> *See, e.g.*, chris01659, *supra* note 142.

<sup>146</sup> *See* Cherkis, *supra* note 110 (noting how the police actions garnered more support for the Occupy Davis cause).

## CONCLUSION

The ADS is unlike any other nonlethal weapon. Instead of incapacitating its targets, it forces them to flee, and it does so without being seen or heard. Overall, its potential as the “holy grail of crowd-control” is quite promising, at least from a law-enforcement perspective. But when the ADS is finally used, its use in dispersing protestors will leave courts and society in a quandary. Not only would excessive-force claims arising from its use create a Fourth Amendment jurisprudential paradox, but there is a risk that the resolution of that paradox would undermine other constitutional principles such as equality, fairness, and free speech. Ultimately, the likelihood that law-enforcement will use the ADS to control protestors serves as a warning that absent legislation, American jurisprudence may not be ready for the next generation of law-enforcement technology and the novel excessive-force claims that are sure to follow.