# “I APPROVED IT…AND I'LL DO IT AGAIN”: ROBOTIC POLICING AND ITS POTENTIAL FOR INCREASING EXCESSIVE FORCE

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**ABSTRACT**

July 7th, 2016 marked the first time in U.S. history where a robot was intentionally used by a Police Department, to kill a human being. The human subject in this case was Micah Xavier Johnson. Johnson was an African American male and Afghan War veteran. Johnson fatally shot five officers and wounded several others before being wounded by police gun fire then being cornered into a standoff. During the standoff, the Dallas Police Department deployed a bomb diffusing robot which was outfitted with a pound of C-4 explosives. Johnson was killed instantly in the resulting blast. Many commentators indicate that detonating a pound of C-4 on a cornered and wounded shooting suspect was a use of excessive force. Ironically Johnson was alleged to have targeted police in retaliation to incidents of lethal force which is disproportionately used against African Americans. For decades Police Department across the United States have been receiving surplus military equipment from the Department of Defense. These transfer programs have been the source of debate among politicians and policy makers, as this new rush to militarization has the potential to change the civilian peace keeping mission of community law enforcement. Among the technologies that police are receiving are military grade robots. Studies on killing and human psychology have examined the act of killing. Studies have demonstrated that despite training killing, other human beings, is the one act that human beings have the strongest aversion in carrying out. Studies conducted by military psychologists, have placed the willingness of human beings to kill, on points of a distance spectrum. The furthest point in the range spectrum is maximum range. Maximum range is defined as “a range in which the killer is unable to perceive his individual victims without using some form of mechanical assistance. The maximum range involves up close killing in which the killer can personally sense his target. The process of killing is facilitated in proportion to the distance that the killer maximizes between himself and his target. Another enabler in the killing process is the compartmentalization of the killing process though the means of group absolution. In short, the more technical and specialized the role he has in performing his task, the less inhibited he is about following through with it. Thus, a killer is less likely to kill someone with his bare hands than to thrust a knife; he is less likely to thrust a knife than to throw a spear; and he is less likely to throw a spear than to squeeze a trigger. This increase in willingness to kill, co-relates with the level of physical distance and mechanical complexity the would-be-killer can place between him and his target. In this respect, Robots present a unique challenge to civilian law enforcement agencies. By design, robots are created to automatize tasks that human beings are unable or unwilling to perform. By reducing the killing process to pressing a key designed to activate a pre-programmed killing machine, you have significantly increased the likelihood of the human controller to use deadly force. As technology rapidly develops in the robot field, we are presented with a second problem, which is the problem of A.I. In addition to endemic instances

of use of excessive force, Law Enforcement agencies across the nation also are plagued by instances of racial profiling. Racial profiling are generalizations that departments, or officers make about race, when they are conducting their policing duty. By their very nature, the basis of most A.I. technology is to teach machines to process data in terms of generalizations. Inputs made into computers, do not occur independent of the circumstances of the human being who inputs the data. Thus, if a police department has a decades long track record in racially biased policing, an A.I. system will simply learn to further accomplish this trend, with more efficiency. A.I. chat machines employed by private companies have displayed their tendency to 'learn' racist, sexist, and xenophobic dialogue and a A.I. robot would not be immune from this tendency. An excellent use of robotic policing, and A.I. however, would be data collection. Although data collections against this might be carried out in ways which respect the fourth amendment, what I am speaking to is data collection of police practices. There is a sparsity of uniformly available raw data as it pertains to policing practices. Many police departments collect data via-body cams, but the challenge lies in who ultimately has authority over the footage of the body cams. Police may have issues with what appears to be a big brother type scenario in which their everyday moves are monitored and subject to scrutiny by superiors. While it can be argued that this is what many departments subject civilians to on a routine basis, a more compelling argument would be to set up a triple tier method of footage release. The first form of footage release would be for departmental debriefing or personal training purposes. The second form of release would be in the event of allegations of misconduct. In such an event, the video would be accessible by civilian oversight agencies. The third tier would be a voluntary release in which an officer may want to release a surveillance file for investigation or community relations. By analyzing the 2016 Dallas Shooting incident, this research explores whether the Dallas Police Department has committed an isolated incident, or whether DPD has set a trend for the dehumanization of policing across the handling of the Dallas shooting could be used as a training exercise in how not to utilize military-robotic technology available to police departments. Or it could serve as a harbinger of things to come. Either way it serves as:1) A platform to study the ethical considerations at stake; 2) A case study in increased use of excessive force by the robotization of policing; or 3) A template as to what rules and regulations need to be put into place. A detailed analysis could help researchers successfully integrate this technology. Successful integration would be in the interests of promoting a law enforcement model which will serve the interests of humanity as opposed to brutality.

**KEYWORD:** Robot, Police Militarization, Racial Bias and Robotic Police, Excessive Force.

## 1. INTRODUCTION

According to a 2014 Pew Research Center study, less than 10% of the population surveyed believes that police do an excellent job in using the appropriate amount of force for each situation; and less than 10% believed that police officers treated racial and ethnic groups equally. These opinions reflect real statistics conducted in studies which indicates that after controlling for crime rates by race, an African American male is 3.49 times more likely to be shot by police, than an unarmed white man. (Ross, 2015)A surge of police killings of unarmed African Americans in the early to mid 2000's led to protests across cities in the U.S. The protests in Ferguson, Missouri were among some of the most noteworthy. In the wake of such protests and

what many considered to be an excessive militarized response by local police, president Barack Obama issued executive order (EO 13688) which created a federal oversight board which implemented protocols around military weapons procurement by local law enforcement. This order would be rescinded by president Donald Trump, effectively removing any restrictions of the transfer and oversight of military equipment. In 2017, ranking member Adam Smith (D-WA) and Readiness Subcommittee Ranking Member Madeleine Bordallo (D-GA) called for a temporary suspension of the 1033 transfers program which provides excess military equipment to civilian law enforcement agencies, but as these calls are being debated the militarization of local civilian police forces continues. Among the technologies that local civilian police forces are receiving through the 1033 transfer program, are military grade robots. These robots are typically used to dispose of explosive and hazardous materials. But an incident in Dallas, Texas provides us with the first instance in which a bomb disposal robot was used to dispatch lethal force against an armed civilian suspect. Following the patterns of the co-relations between deadly force and race, the victim in this case was an armed African American male, who was purportedly targeting police officers in a counter campaign against the extra judicial killings of unarmed African American males. Psychological studies examine the killing process as points in a distance spectrum. The furthest point in the range spectrum is maximum range. Maximum range is defined as "a range in which the killer is unable to perceive his individual victims without using some form of mechanical assistance. This mechanical assistance may be in the form of binoculars, radar, periscope, or remote TV camera. (Grossman, 1996) Unmanned Aerial Vehicles (Drones), bomb disposing robots, and the mechanical two-way communication devices attached to police vehicles all employ the device of remote cameras. When a police officer interacts with the public by means of a remote camera this officer is at the furthest range of the distance spectrum and thus more likely to utilize deadly force. Human controlled robots are extensions of the human beings that operate them. As such they are subject to the same prejudices and sensibilities of those who control them. Thus, if the Dallas police department has a history of using deadly force against African Americans, this will not be remedied by introducing more technology into their policing arsenal. Robots can be programmed to operate independently of direct human control. One of the problems with any system of artificial intelligence (AI) is that without any inputs as to their function of programming, at its basic level AI is taught to engage in generalizations. (Masri, 2019) Generalizations are precisely the form of profiling which police departments, who are engaged in reform, are attempting to avoid.

## 2. MILITARIZATION AND MINORITY COMMUNITIES

Police robotization is a direct by product of police militarization. Police militarization began with the creation of SWAT teams. SWAT teams were formulated to quell the race rebellion in U.S. urban areas, particularly Watts in 1965. The first SWAT operation was in 1969 against the Los Angeles office of the Black Panther Party. The renewal of this practice continued with the 'war on drugs' of the 1970's and 80's. By the 1990's the police militarization was entrenched into American policing. The Defense Supply agency. Known as DLA disposition services, overseas the disposal of surplus military equipment and weaponry. State and local governments receive the bulk of such weaponry through the Law Enforcement Support Office (LESO). The LESO is responsible for the administration of 10 U.S.C. §257a. and this transfer is overseen by the 1033 Program. Military grade firearms and munitions are approved within these transfers. DLA Disposition Services estimates that since 1990, more than $4.2 billion worth of property has been transferred to state and local law enforcement agencies. With the creation of the

department of homeland security more small towns, with populations of 5,000 and under, were given grants to create SWAT teams to fight the 'war on terror'. In 2011, the Center for Investigative Reporting ("CIR") conducted a report on the DHS grants and found that since its inception, the DHS has provided civilian law enforcement with grants of $34 billion. (Doherty, 2016)

The American public became fully aware of the extent of police militarization in 2014 during the protests in Ferguson, Missouri. Civilians, protesting police brutality against people of color, were met by camouflage and body armor-clad police officers, wearing gas masks, wielding M-16 A2 rifles, and sitting atop Mine Resistance Armored Vehicles. Studies indicate that the presence of paramilitary units within police departments has changed police culture drastically. Furthermore, as opposed to merely stockpiling military gear for emergency sake, police departments are incentivized to use such military equipment. Receipt of additional funds or equipment is contingent on demonstrating that the police made use of such equipment within one calendar year. (Coscarelli, 2014) Police department typically deploy their military hardware during standard police raids. According to a 2014 ACLU report, a disproportionate number of the raids were aimed at minority communities (42 percent African American, 12 percent Latino). (ACLU, 2014) Militarization of police is bad both for law enforcement and the public. When police officers are protected by a layer of insulation from the public and given the capacity to produce a military response in the face of civil protest, the officers tend to "feel more powerful, more invincible, more militaristic, and ready to attack. Conversely when a civilian sees this force they respond in-kind with fight or flight, and it elicits a response from observers that "hey this is war." (ACLU, 2014)

Through the use of gas masks or identity concealing masks, police officers create what psychologists refer to as deindividualization, which is an immersion in a group to the point that one loses a sense of self awareness and feels lessened responsibility for one's actions. (Grinnel, 2015) Specialized military units implement these mechanisms to ensure an increased likelihood that a combatant will use deadly force on an enemy combatant. When employed by officers, these same factors may also increase the likelihood of a police officer to use excessive or even lethal force on civilians.

### 2.1. Remote Killing

Killing a fellow human being is one of the strongest aversions that exists in the human psyche (Cushman, 2012) Because this is the primary function of combat soldiers, much of military psychology has been dedicated towards decreasing, ideally eliminating, this natural aversion among its combat personnel. Despite decades of these anti-killing aversion campaigns, soldiers and combat personnel polled point o several combat situations in which combat personnel invariably chose to engage in riskier life-threatening tasks rather than resort to killing another being. One of the classical methods employed to overcome the aversion is to dehumanize of the enemy. Another method is to increase the distance spectrum between the killer and his target. There is a positive co-relation between the length between a would be killer and his victim, and his willingness to kill the victim. In combat, bomber crews, and artillerymen can engage in countless campaigns without the same amount of perception as an infantryman fighting in close combat. The above-mentioned combat personnel can perceive their victims not as people but as buildings, facilities, and coordinates, without giving much thought to the people within.

Among the three factors that facilitate the act of killing are group absolution, mechanical distance, and physical distance. (Grossman, 1996)

### 2.2. Group absolution

Aside from peer pressure, playing one of several roles in the killing process increases the likelihood you will kill. This group absolution is demonstrated in bombing crews. In bombing crews, the pilot, navigator, weather reconnaissance person, and gunner all have their role. This phenomenon is also present in an artillery team, machine gunner team, and sniper team. Sniper teams go forth in teams of two. A spotter chose the target and the sniper fires on the target. This way both the sniper and the spotter have a level of absolution from the act.

### 2.3. Mechanical Distance

In combat, mechanical distance are traditionally represented, by binoculars, or a rifle scope. In modern warfare mechanical distance is also represented by video screen. The layer of mechanical separation between the viewer decreases the inhibitions a viewer may have, acting upon or witnessing the fate of the subject in view. A comparative analogy can be found in voyeurism. Even if they can go undetected, many would not have the audacity to physically peep on their neighbors engaging in intimate acts. The same people would have less reservations of watching similar acts of voyeurism if recorded or streamed into their personal desktops.

### 2.4. Physical Distance

Long range refers to a distance to which the average soldier can see the enemy but cannot kill him without a specialized form of weaponry-Sniper rifle, anti-armor missile, or tank fire. (Grossman, 1996) During the American Civil War, a soldier armed with a rifled musket, was able to increase his combat range from 50 to 350 yards, drastically increasing the killing range of your average combatant. (McCaul, 2019) In each subsequent war the physical distance gap has been closed by newer technology in weaponry.

### 2.5. Robotic killing of civilians by police: an analysis of the Micah Johnson killing

Micah Johnson was a 26-year old member of the Army Reserves, and an Afghan war veteran. Like many citizens Johnson was angered at the most recent wave of extrajudicial killings of unarmed black men by police. On the evening of July 7$^{th}$, 2016, the Dallas community marched in protest of police killings of unarmed black men. Although unaffiliated with the marches, Johnson shared their grievances, if not their methodology. Johnson thus, chose that day and that venue to launch his attack on police officers. Twelve years earlier in 2004 Congress refused to extend the Violent Crime Control and Law Enforcement Act (Flexner, 2017). The act would have imposed a ten-year ban on the civilian use of military grade weapons. However, the act was not in force during the time that Johnson, like other mass shooters before him, acquired his arsenal. As per protocol, the Dallas police were dispatched to monitor and direct the march routes and provide protection to the marchers. As the protest march neared El Centro Community College, Johnson, in full body armor, parked his SUV, and casually spoke with one officer before cutting down three officers and injuring two civilians with his AK-47 semi-

automatic rifle. (Wanebo, 2018) Johnson's tactics included the infantry urban warfare technique of shot and move, which confused officers into thinking there were multiple shooters. Eventually Johnson gained entrance into the community college, but not before being shot and wounded by police. The wound left a trail of blood from the entrance through the library. Police followed the trail until they cornered Johnson at the end of a hallway and had him locked in a standoff. Ultimately the standoff ended when Dallas Police decided to retrofit a Mark V-A1 bomb disposal robot with a bomb. (Sankar, 2018) The police department attached one pound of C-4 explosives to its robotic claw and detonating it after remotely maneuvering the robot to his position. The Dallas police, in their lethal use of a robot to kill gunman Micah Johnson, exhibited all three maximizing layers of the distance spectrum which facilitated their killing. The first layer was their group absolution. A team is used to operate bomb diffusing robots and each team member can monitor and command the operator from his position. The second layer was the physical distance from the robot. The robot used was a bomb diffusing robot that is designed to be operated remotely and from far off distances. With the full knowledge that the robot would be used to detonate, as opposed to diffuse, an entire pound of C-4, the police operated the robot from a control center and drove it to their human target in another building. The third layer of insulation was the mechanical appendage of the robot itself. The final level of insulation was the remote camera. The operators observe the action through a screen. Johnson was an Afghan war veteran who had undergone a personal regimen of special forces training on his return. In contrast Dallas police, like most police departments in the U.S. are only trained for self defense. In the lead up to the explosion the police had cornered and managed to wound Johnson. Even though Johnson stated he was targeting police officers, police officers had none the less, in accordance with their training, protected the civilians inside the building as well. With the shooter trapped and wounded, whatever reduced risk he posed to police officers was diminished by the time they made the decision to end the standoff by using the robot. The Mark V-A1 robot is utilized by the U.S. Army, Israeli Defense Forces, and the Uruguayan Army Bomb Squad. Its use by military operators in the combat theatre is defensive, thus it is ironic that among the first offensive usage of the robot was committed by a civilian police department, against a civilian. The Dallas police could have stuck to their defensive mission by retrofitting the robot with non-lethal tools including surveillance tools. Among the defensive arsenal the robot could have been fitted with, are stun grenades, flash bang grenades, CS gas or 3-methelfentanyl gas, the sleep gas which was used to end the 2002 Moscow theatre crisis. By choosing C-4 the Dallas police, not only resorted to lethality as a first resort, they resorted to the most dangerous and lethal option possible. Near instance approval of this choice set a dangerous precedent for future police encounters.

### 2.6. How lethal robots can change the police mission from self-defense to combat

As mentioned in the beginning section, much of the high-tech equipment including UAVs, and bomb disposal robots, are inherited from the Department of Defense. Unlike police officers, soldiers have little expectations that their training is in preparation for killing enemies. The militarization of police forces across the nation have led to an increase in the perception among police, that the public which they serve and protect are their potential enemies. Robots, even of the non-lethal variety, complicate this mission by providing police with several layers of distance when dealing with the public. Ruben Brewer, a senior robotics researcher at the nonprofit SRI International in Menlo Park, California posed a solution for routine traffic stops, called the Go-Between. The Go-Between robot is advertised as a device which will allow police

officers to issue citations from the comfort and safety of their vehicle. (Post, 2019) The robot is attached to the officer's vehicle by an extendable aluminum pole which extends to the driver's window. This allows the officer to communicate via video screen. The device has a driver's license scanner, two-way communications radio, and a ticket printer. The device has no offensive capability, but it has the capability of placing a spike trap under the motorist's car to disable the vehicle in the event the motorists attempts to drive away before the officer issues the ticket. The Go-Between is advertised as a device that can reduce the violent assaults between motorists and police. A 2001 study in the Journal of Criminal Science indicates that homicides and assaults during routine traffic stops are infrequent. (Lichtenberg, 2001) Studies of the sort reveal the gap between perception of the danger that police face on a day to day basis, and the actual numbers. It also reveals how willing companies and agencies are to implement expensive and excessive protective measures which only minimally increase police safety and only at the expense of the safety police are charged with protecting. Technologies like the Go-between are likely to have a negligible effect in increasing officer safety, and only at the price of dehumanizing routine traffic stops. While the Go-between technology is defensive and non-lethal, the Micah Johnson incident has demonstrated how little time and consideration it takes for a police department to rig a non-lethal robot for lethality thus increasing the officer's likelihood in use force. However, with every technological advancement in remote control robotics there are disadvantages which spring forth from over reliance on the technology, this is certainly the case when it comes to Artificial Intelligence.

## 3. RACIAL PROFILING AND AI

Human controlled robots are extensions of the human beings that operate them. As such, they are subject to the same prejudices and sensibilities of those who control them. Thus, if the Dallas Police department has a history of using deadly force against African Americans, this will not be changed by simply introducing more technology.

Robots can be programmed to operate independently of direct human control. One of the problems with any system of artificial intelligence is that without being given inputs towards function of programming, at the basic level AI is taught to engage in generalizations. (Masri, 2019) Generalizations are precisely the form of profiling which reform-seeking police departments are attempting to avoid. An example of how AI is capable of exacerbating racial profiling problems can be found with Microsoft Tay Tweets. Microsoft created an artificial intelligence application called Tay Tweets. Tay Tweets was an AI chatbot that was capable of commenting on images and telling jokes, based on the aggregation of social media feeds available on the internet. Microsoft had to shut down this project soon after it began, due to Tay's inability to recognize the offensiveness and racism of its comments. Tay AI, which retweeted comments such as *"GAS THE KIKES RACE WAR NOW!" "Hitler did nothing wrong* "and *"Mexicans and Blacks are the worst race."* Tay however was a product of her own inputs and social media commentary. An AI robot employed by the police forces would likely also be a product of the departments open inputs and departmental policies. The danger in AI gone awry is that rather than the mere publication of offensive words in a chat room screen, these robots would be charged with the executable actions of law enforcement. Thus, an AI robot employed by police is guaranteed to reinforce pre-existing policing practices, which is not necessarily good, considering that the function of AI is to make sweeping generalizations. While conducting research for MIT research labs, Joy Buolamwini, head of the Algorithmic Justice League,

discovered that facial imaging software could not identify her face until she wore a white mask. The same state of the art software could not recognize the faces of Serena Williams, Michelle Obama, and Oprah Winfrey. Furthermore, the software, which could determine sex, classified the three aforementioned ladies as males. (Buolamwini, 2019). AI imaging software which cannot predict gender on facial input on darker subjects, pose serious problems for Law Enforcement Officers trying to reform their departments to eliminate racial biases. This problem is known as biased datasets. (Murray, 2019) For instance, if you feed an AI database thousands of mug shots, the data base will pick up on the skin tones and hair textures of the arrestees and may be inadvertently programmed to seek out those who match this color profile for extra scrutiny. Thus, a societal discrepancy in incarceration of minorities will become the means by which AI continues this discrimination in a more efficient basis. Microsoft showed that its AI would quickly spiral out into the current culture of those who program it. A simple chat box employed by Microsoft quickly transformed into a racist sexist neo-Nazi after following the inputs of the users. Police culture similarly would not necessarily change with the introduction of a robot, any more than it has changed with the introduction of body cams. The technology would need to have some form of civilian oversight to be truly neutral.

## 4. UAV CAMERA SURVEILLANCE AND 4TH AMENDMENT CONSTITUTIONAL ISSUES

Another tool that law enforcement has inherited from the military are UAV's or Unmanned Aerial Vehicles, which are often referred to as drones. Drones are becoming increasingly smaller and inexpensive. One of the popular armed drones utilized by police is the Shadow Hawk, this drone resembles a small helicopter, operates for 3 hours at a time, and is operated via mobile computer control. (Thresher, 2017)Shadow Hawk can carry high resolution cameras as well as shotguns and grenade launchers. The police primarily use this drone for surveillance. Many drones are equipped with high resolution cameras which can record and live stream video from low and high altitudes. A drone can be programmed to operate on a flight plan while its imaging capturing capability can be downloaded to a police database, much like a mobile security camera. Hillary B. Farber articulated the concerns of police drone use this way: Drones can provide police with the details of a person's daily routine, easily allowing them to create a profile of the person's associations, religious affiliation, health conditions, professional and recreational activities, and family and economic status. When all this information concerning hundreds, if not thousands, of people can be gathered from thousands of feet in the sky, it is hard to resist the claim that society has succumbed to an Orwellian vision far beyond George Orwell's imagination. (Thresher, 2017) Likewise, however, a data gathering drone can be put to positive use by simultaneously monitoring the agencies which have employed its use for law enforcement purposes.

## 5. POTENTIAL BENEFITS OF DATA

Automation is not without benefits. Automated image capturing can assist in statistical gathering and reviewability by non-government actors such as civil liberties groups. As cameras have become more portable and pervasive it has become more common place for citizens to record their police encounters as well as the police encounters of third parties. The First, Seventh, Eleventh, and Ninth Circuits have all held that the right to photograph police officers in the performance of their duties is protected under the First Amendment. (Raoul, 2017) Many individual officers may bristle at the idea of being recorded and often may state or misrepresent

state wiretapping laws in their effort to discourage the activity. Part of this reluctance could be attributed to the fact that unlike police body cams, the police have no control or access over the footage being recorded. A third-party monitoring recorded interaction and providing access to all soliciting parties, might help both officers and civilians maintain a balance between fulfilling law enforcement duties and protecting civil liberties. Police departments in cities like Boston, have seen an overall improvement in solving homicides by hiring a civilian data analyst. (Meuller, 2017) A key to the process is that civilian oversight ensures that the employees work with police without succumbing to the general police culture and chain of command which discourages independent inquiry.

## 6. CIVILIAN OVERSIGHT SOLUTIONS

Police are public civil servants thus there are very few reasons why the information they gather should not be available to the public they serve. Agencies and lawmakers can address privacy concerns by successfully employing data management techniques to identify and preserve critical video evidence, and allow non-critical video to be deleted under data-retention policies. (Lin, 2016) Although Rep. G.A. Hardaway and Senator Sara Kyle have introduced bills in the Tennessee state legislature that would make it a felony for officers to intentionally turn off their body cameras to obstruct justice. (Griggs, 2019) as it stands now most police departments allow officers to turn off body cameras at their discretion. Furthermore, some police departments are not obliged to release footage. Cameras that are be programmed to activate, once a police officer turns on a siren, or once he unholsters his sidearm or taser would be useful in documenting emergency situations. This footage should be made available to civilian agencies charged with monitoring police conduct. The most frequent interaction citizens have with police are traffic stops. Over 20 million motorists are pulled over every year, yet only 10 states require police to log the race of the motorists. (Lab, 2019)Police robots could make this information readily available to citizens, police department leadership, and community relations leaders. Raw data can be instantly uploaded to a public database and after making the necessary personal edits for the sake of privacy, the general statistics can be made available to police community action organizations and local community advocacy groups. This would, more than simply employing the technology, allow community members to get a good glance at policing practices, empathize with police concerns, as well as the statistical occurrences of such encounters. For instance, if civilian officials, legal and social rights activists, and elected officials had ready access to the informatics, and even programming of such robots then the police officers would be further encouraged to take a proactive role in responding to the needs of public inquiry. Now that the Police Officers will also be protected by the technology's implementations, the new focus can be on proper policing. These videos and the information collected could be used as a training tool. Without this civilian community oversight, the technology won't have a similar effect. A.I. police robots can handle the balance between open records requests and privacy rights by means of data management. As early as 2008, Google Inc., made us of an algorithm with scans the image bank on Google Maps street view, then blurs the faces of pedestrians, this technology can be readily deployed on Computer Robots which capture images for police stops on public roads.

Despite them being public servants, concerns that police may have about over monitoring of their work are not entirely invalid. These concerns can be ameliorated by a tiered system of footage release. The First tier could be personal or departmental. Apple has released a

wristwatch which can monitor heart rate levels. (Arnow, 2016). This technology can be further upgraded to activate body cam recording when the wearers heart level reaches a rate which indicates a spike in adrenaline. This way at the end of the day the officer can keep a personal log of transactions which triggered an increased in his heart rate. The officer can then debrief by reviewing such interactions and safely learn to distinguish which situations were truly dangerous from those from which he was reacting out of pre-conceived ideas. The second tier is video and audio data which is subpoenaed in response to a complaint or allegation of misconduct. The third could be voluntary submissions. Outside the normal process of courtroom discovery, many police departments do not require that body-cam wearing officers record and hand in their recordings. A voluntary submission could be used for two purposes. The first could be investigatory and the second could be for community relation purposes. An officer might want to keep a log of his charitable or community building acts. The fact that this self-reporting option may be in the officer's personal interests does not negate the fact that the officer's requisite acts (for the submission) are also beneficial to the community. The frequent sight of police officers volunteering to change tires, buy an ice cream cone for a child, or help an elderly pedestrian cross the street can help re-enforce a sense of trust between police departments and communities.

## 7. CONCLUSION

Robotic policing increases dehumanization through automation and increasing psychological distance. This intersection leads to an increased likelihood that police will use excessive force. The phenomena will have devastating impacts on and negative policing in African American and minority communities in the U.S. In the Micah Johnson incident is a case study in which, mechanical distance, group absolution, and physical distance all converged. This convergence facilitated police deployment of fatal and excessive force against a cornered wounded shooting suspect. Robot technology is becoming more accessible and affordable to maintain. As local police forces continue to acquire military grade weaponry and technology the usage of robots in policing will become more and more common. Notwithstanding the 4$^{th}$ amendment privacy issues triggered by unauthorized data gathering, it is wise for local and national governments to refrain from granting civilian police forces lethal military weaponry for use against the civilians they are supposed to serve and protect. Reports indicate that police departments already suffer from deployment of excessive force, which is exacerbated by the 1033 transfer programs. These transfer programs place excess military equipment in the hands of civilian police forces, the programs incentivize unnecessary usage of the equipment. In order to receive future transfers, police departments must demonstrate that they used the equipment from the previous year. Further studies also indicate that there is a negative correlation between the proximity of an actor, its target, and the actor's willingness to use deadly force against its target. Camera-subject interaction by means of remote-control robots increase the physical and psychological distance between the subject and the actor. This leads to a process of dehumanization of policing, which in turn increases the likelihood that an officer will use deadly force. The research also explored the double edge sword that camera recording raises concerning data gathering and 4$^{th}$ Amendment protection. It remains to be seen whether Dallas Police department will remain an anomaly in the case studies of police abuse of robotics, or whether it is a harbinger for things to come. Like other work, police work will also be subject to various forms of robotization over the years. If the technology of surveillance and data gathering is employed equally and used to monitor police practices as well the practice will be a check and balance to policing practices.

Creation of a civilian oversight program will be key to maintaining a unbiased analysis of aggregated data. Such an oversight program, if properly implemented, can be of great benefit to both civilian human rights activists as well as law enforcement agencies.

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