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THE FOURTH AMENDMENT IN A DIGITAL AGE: DEFINING BOUNDARIES IN LAW ENFORCEMENT SURVEILLANCE OF THE HOME

Josh Hoffman¹ and Jared Xia²

I. INTRODUCTION

In 2013, federal agents surveilled the home of Travis Tuggle for 18 months as part of an ongoing investigation of a methamphetamine distribution conspiracy. Officers fixed three video cameras on poles in public property that captured around-the-clock footage of the exterior of Tuggle's home. Using this footage as evidence, the government secured a search warrant and indicted Tuggle for possessing and distributing methamphetamines. Tuggle sought to suppress this video evidence by claiming that this long-term, secret video surveillance of his home constituted a warrantless search that violated his rights protected by the Fourth Amendment. Tuggle appealed in the 7th Circuit on the basis that the camera recordings amounted to an illegal search and, therefore, a breach of his Fourth Amendment rights. His appeal was denied.³

The issues that motivated the establishment of the Fourth Amendment can be traced back to the colonial era, when the casual

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3 United States v. Tuggle, 2019 WL 3915998 (C.D. Ill, 2019)

and extensive usage of general “writs of assistance” granted English authorities access into any home to search for prohibited goods. In response, the Founders sought to establish clear boundaries to protect citizens’ freedom from unusual searches and seizures. Intending to protect “all the comforts of society”⁴ and to make “every man’s house his castle,”⁵ the Founders instated the key clause of the Fourth Amendment that protected citizens’ “rights to be secured in their persons, their houses, their papers, and their other property, from all unreasonable searches and seizures, [which] shall not be violated by warrants issued without probable cause.”⁶

The various interpretations of the language of this amendment have raised questions as to what constitutes a search. In *Olmstead v. US* (1928), the Supreme Court deemed that fourth amendment rights could only be infringed upon by a physical intrusion into one’s home or the seizure of physical items.⁷ However, the Supreme Court’s interpretation of a search changed in *Katz v US* (1967)⁸ when the Court held that when a person has a reasonable expectation of privacy, even eavesdropping on conversations could constitute an unreasonable search. As part of their ruling, the Court created the Reasonable Expectation of Privacy (REP) test, a two-part test that defines an illegal search as having occurred when (1) a person “has exhibited an actual (subjective) expectation of privacy”

4 95 Eng. Rep. 817, 818 (1705)

5 Thomas M. Cooley, *A Treatise on the Constitutional Limitations Which Rest Upon the Legislative Power of the States of the American Union* (2d ed. 1871)

6 U.S. Const. amend. IV

7 *Olmstead v. United States*, 277 U.S. 438 (1928)—In this case, the defendant’s call was surreptitiously recorded and used as evidence against him. In their opinion, the Supreme Court stated that the Fourth Amendment should not be stretched to forbid hearing and sight as well.

8 *Katz v. United States*, 389 U.S. 347 (1967)—In this case, Katz was convicted of transmitting wagering information across state lines via telephone. Although the Court of Appeals ruled that the call recorded by the government did not constitute a search (there was no physical breach of privacy), the Supreme Court overruled their decision and created the REP test in the process.

and when (2) society is prepared to recognize that this expectation is (objectively) reasonable.⁹

As our country enters a new digital age when personal information is easily shared with and accessed by outside parties, Fourth Amendment interpretation has been reevaluated. Where surveillance was once limited to the physical capacity of police officers and other personnel, cameras can monitor 24/7 without need for rest or reprieve. Likewise, new technologies such as thermal imaging now allow law enforcement to extend through the walls of previously shielded homes, threatening privacy more than ever before.¹⁰ Officers can also easily get a hold of one's cell phone history and use its location features to track its user's movements.¹¹ Because of technology's ever-expanding encroachment on American private life, Fourth Amendment rights in this digital age have become increasingly important.

When dealing with privacy issues similar to those in Tuggle's case, courts across the nation have come to differing conclusions about the constitutionality of using surveillance and tracking technologies while conducting criminal investigations. This stems from fundamental differences in court opinions over how to apply the REP test and whether the duration of law enforcement surveillance plays a role in that test.¹² Without a reevaluation of what a "search" is in a digital age, the eighteenth-century diction of the Constitution will not provide the needed clarity to tackle twenty-first century privacy issues.

9 *Id.*

10 *Kyllo v. United States*, 533 U.S. 27, 32 (2001)

11 *Carpenter v. United States*, 138 S. Ct. 2206 (2018)

12 Petition for Writ of Certiorari, *Tuggle v. United States* (2021), (No. 21-541) In their cert petition, Williams & Connolly LLP cite the First, Sixth and Seventh Circuits as concluding that long-term, hidden video surveillance of a private residence does not violate the Constitution. The Fifth Circuit and some state supreme courts have declared such a search unconstitutional. This paper will later address some of these decisions.

II. CLAIM

Travis Tuggle’s case is a prime example of this clash of developing technology and constitutional rights. As law enforcement gets greater access to increasingly intrusive technology, questions have inevitably been raised as to what the limits are when it comes to government surveillance of the home. Without Supreme Court precedent on the issue of law enforcement’s usage of this kind of long-term video surveillance, courts remain divided about the constitutionality of this practice. However, by analyzing the original Founders’ intent when writing the Fourth Amendment and applying logic used by the Supreme Court in cases of similar nature, this paper seeks to support that hidden, long-term video surveillance of a private residence is a violation of the Constitution and constitutes an illegal search.

III. COURTS ARE DIVIDED

In trying to provide an answer about the limits for government technology usage in surveillance of the home, courts of various levels have reached different conclusions. For example, in determining the constitutionality of using long-term, secret home surveillance via pole-cam, the Fourth, Sixth, and Tenth circuits ruled in favor of the usage of the cameras on poles for secret surveillance.¹³ Some of these decisions were made because the specific perspective of the camera was about equivalent to what any nearby neighbor or passerby could observe. In another instance, the courts ruled in favor of the usage of surveillance both outside and within one’s apartment because it didn’t collect the entirety of a defendant’s actions

13 United States v. Vankesteren, 553 F.3d 286, 287 (4th Cir. 2009)—“a hidden, fixed-range, motion-activated video camera placed in the [defendant’s] open fields” was not in violation of Fourth Amendment. *See Also*, United States v. Trice, 966 F.3d 506, 516 (6th Cir. 2020)—government surveillance from pole camera on public property of a defendant’s home over 10 weeks was not in violation of Fourth Amendment. *See Also*, United States v. Jackson, 213 F.3d 1269, 1282 (10th Cir.)—audio recordings made under FBI cars and video from telephone poles are not in violation of the Fourth Amendment

throughout the day.¹⁴ As a result of many of these rulings made by federal courts, some state courts have also decided to rule in favor of the usage of pole cameras in searches.¹⁵

On the other hand, other state supreme and regional appellate courts have ruled that the usage of pole cameras is in violation of the Fourth Amendment. The Fifth Circuit ruled in *United States v. Cuevas-Sanchez* that its pole camera surveillance was unconstitutional because it gave the government an otherwise unavailable view into the defendant's backyard, which was surrounded by a fence.¹⁶ The South Dakota Supreme Court ruled that law enforcement's usage of video surveillance gave them access to information that wasn't attainable by traditional surveillance tactics, such as stakeouts.¹⁷ The Colorado Supreme Court ruled in *People v. Tafoya* that the surveillance 'involved a degree of intrusion that a reasonable person would not have anticipated.'¹⁸ Other courts ruled against the constitutionality of this secret surveillance due to its long duration and continuous nature.¹⁹ In light of these disagreements between courts, it will be important to take a closer look at the processes determining the constitutionality of a search in order to make a decision pertaining to the constitutionality of long-term, secret video surveillance.

14 *United States v. Harris*, No. 17-CR-175, 2021 WL 268322 (E.D. Wis. Jan. 27, 2021)

15 *State v. Duvernay*, 2017-Ohio-4219, 92 N.E.3d 262, 269–70, at ¶ 25 (3d Dist.)—Ruled that law enforcement's usage of cameras outside a residence for 9 days did not violate 4th Amendment.

16 *Cuevas-Sanchez*, 821 F. 2d 248 (5th Cir. 1987).

17 *State v. Jones*, 903 N.W.2d 101 (S.D. 2017)—In this case, a camera continuously recorded and uploaded videos of a suspect's residence over the span of two months.

18 *People v. Tafoya*, 494 P.3d 613 (Colo. 2021)—In this case, a video camera was mounted on a utility pole by law enforcement and aimed at Tafoya's property. The camera captured constant footage of both Tafoya's house and backyard, which was covered by a six-foot-tall fence.

19 *State v. Jones*, 903 N.W.2d 101 (S.D. 2017)—An example in which the court referenced the ability of a camera to collect an "aggregate" of a person's movements in and around their home.

IV. PROOF OF CLAIM

A. *The Applications of the REP Test*

The Fourth Amendment protects against “unreasonable searches and seizures”.²⁰ Since 1967, courts have relied on the implementation of the “REP test” to analyze whether a search or seizure was conducted unreasonably. This test originated in the Supreme Court case *Katz v. United States*, in which the petitioner was convicted of transmitting wage information across state lines via telephone. The Court ruled in favor of Katz and, in the process, created the “REP test” to define what constitutes an unlawful search.²¹

Under the two aforementioned guidelines of the REP test, once an individual has demonstrated an expectation of privacy that society recognizes as reasonable, any search or seizure conducted in that sphere should be classified as unreasonable and a breach of Fourth Amendment rights. Despite the differing court opinions about how the expectation of privacy is determined, this paper posits that individuals should be able to expect privacy in and around the confines of their homes, a place which has long been regarded by the Court as a sacred sphere of human life.²² This expectation is also one that society is prepared to recognize as reasonable.²³

In the case of *Tuggle v. United States*, the Seventh Circuit’s decision rests on the fact that Tuggle exhibited no “actual...expectation of privacy”. This decision would limit the Fourth Amendment’s protection of the home to only those individuals with the time and means to erect a fence or barrier around their property. Yet the

20 U.S. Const. amend. IV.

21 *Katz v. United States*, 389 U.S. 347 (1967)

22 *Boyd v. United States*, 116 U.S. 616 (1886)—Quotation from the Court opinion on this case: “... they apply to all invasions on the part of the government and its employees of the sanctity of a man’s home and the privacies of life.”

23 Michael Allen Fox, *Why is home so important to us?*, Oxford University Press (February 14, 2023), <https://blog.oup.com/2016/12/home-place-environment/>

home is the only location singled out in the Fourth Amendment (“The right of the people to be secure in their persons, houses...”).²⁴ This fundamental protection of the home does not rely upon any stipulation of “an individual’s ability to afford to install fortifications and a moat around his castle.”²⁵

The Court has also previously held that “what [one] seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected.”²⁶ Thus, even an individual’s yard may be considered protected under the Fourth Amendment if it can be argued that it is a place the individual has exhibited an expectation of privacy in. Yet, as stated previously, courts are divided as to what showing a reasonable expectation of privacy should be when it comes to one’s own home. The issue of whether the curtilage itself is accessible to the public is not in question so much as the intent of the homeowner.

Where once homeowners could rely on the fact that police forces had neither the time nor resources to surreptitiously monitor their homes around the clock, technology has eliminated that reassurance. Under the current status quo, police forces can continually adopt ever more invasive technology practices, so long as society has accepted that their privacy will shrink in sectors involving said technology. When interpreting Fourth Amendment rights, the Court has often referred to the original intent of the writers of the Constitution. Yet without intervention from the Court, rights meant to be protected by the Fourth Amendment are quickly vanishing under ubiquitous law enforcement surveillance.

The ability of pole cameras to capture constant footage of the daily habits and rituals of families inside and around their homes can give law enforcement unprecedented access to the details of their private lives. This access is even more permeating when a pole

24 U.S. Const. amend. IV

25 *Mora*, 150 N.E.3d at 366-67—In this case, mounted cameras monitored the homes of two people and led to the indictment of three. The Massachusetts Supreme Court ruled that long term, hidden video surveillance of a private residence constituted a search and was unconstitutional.

26 *Katz v. United States*, 389 U.S. 347 (1967)

camera is pointed over a fence or at any place that isn't typically visible to a passerby. Although it is reasonable to expect your house to be open to the view of any person on the street, a pole camera's range of view and clandestine nature breaches the privacy many people enjoy in their homes.

The Supreme Court has also implied that the length of surveillance greatly impacts the constitutionality of the action.²⁷ Where one might understand that they'll be noticed going to and from their home, no one expects to have their movements dogged and recorded day in and day out. Long-term utility pole cameras monitoring a private residence violate the REP test because no one expects to be watched by an unblinking police force that needs no sleep, rest, or break.²⁸ Individuals can expect privacy in the sum aggregate of their movements in and around their home, even if they may not be able to reasonably suspect that all their movements in their curtillage go undetected.

B. The Applications of Mosaic Theory

In order to provide a clearer definition of what constitutes an unlawful search, the Supreme Court has decided to employ "mosaic theory" in their ruling for *US v Jones*, which dealt with the use of a GPS to track the movements of a suspected drug trafficker over a wide span of time and geography.²⁹ The mosaic theory presents the idea that more can be learned from a collection of information that provides a broader context than from singular pieces of information. As such, in *US v Jones*, the Supreme Court decided that, due to the cumulative nature of information obtained by the government over time, this constituted a search and was thus in violation

27 United States v. Jones, 565 U.S. 400, 407 (2012).

28 *State v. Jones*, 903 N.W.2d 101 (S.D. 2017)—In their opinion, the South Dakota Supreme Court said this regarding the uploading of footage via pole camera surveillance: "More importantly, this type of surveillance does not grow weary, or blink, or have family, friends, or other duties to draw its attention"

29 United States v. Jones, 565 U.S. 400, 407 (2012).

of rights protected by the Fourth Amendment. This ruling set a key precedent in determining whether the principle of defining a search lies in the means of its conduction or its duration.

In another case, *United States v. Maynard*, the Supreme Court ruled that the collection of one's location through a cellular device uncovered 'an intimate window into a person's life.'³⁰ The cumulative nature of this collection of information violated the person's expectation of privacy because it gave access to "the whole of a person's movements over the course of a month," revealing not only his particular movements, but through them his 'familial, political, professional, religious, and sexual associations.' By applying mosaic theory, the Supreme Court concluded that the likelihood that a stranger could gather all this information would be "essentially nil."

Although the Supreme Court has used the mosaic theory in many of its key decisions pertaining to the Fourth Amendment, "the Supreme Court has not bound lower courts to apply the mosaic theory."³¹ This is because many experts in the Fourth Amendment have questioned whether the constitutionality of an action should depend on its duration. As a result, many of the decisions of the lower courts have been made primarily on their perceived invasion of an individual's privacy rather than the length of surveillance. Because of these conflicting opinions, decisions reached by different jurisdictions adhere to inconsistent standards of judgment. While the logic of *US v. Maynard* pertaining to the low likelihood of someone observing the entirety of the surveillance data over a long-term period could still apply in many cases, some lower courts maintain that the means of these long-term searches fall within constitutional bounds.

In Travis Tuggle's case, he appealed that the long-term 18-month surveillance of his home without a warrant constituted an unlawful search under the Fourth Amendment. However, the Seventh Circuit decided that, although the cameras were able to capture many important pieces of Travis Tuggle's everyday life outside

30 *United States v. Maynard*, 615 F.3d 544 (D.C. Cir. 2010).

31 *Petition for Writ of Certiorari, Tuggle v. United States* (2021), (No. 21-541).

his home, it didn't reach the level of comprehensively in which the Supreme Court applied the mosaic theory. They also argued that there were key differences in the nature of the technology used in Tuggle's case versus other cases in which the mosaic theory was applied. In Tuggle's case, law enforcement only posted cameras after suspicion of Tuggle's dealings was raised; they did not access any log of pre-recorded footage. However, the 7th Circuit found that—even though law enforcement did not compile a “mosaic” of Tuggle's movement from pre-existing footage—the duration of the long-term surveillance of Tuggle (18 months), was “concerning, even if permissible.”³² This raises the question of whether there is a threshold of duration that would qualify this type of surveillance as a search under the mosaic theory, a question which is still undecided among courts today.

C. The Application of Originalist Constitutional Interpretation

Modern tools (such as the REP test and mosaic theory) provide a means of analyzing current Fourth Amendment cases, but—in order to best judge the constitutionality of hidden, long-term video surveillance of a private residence—it's also important to consider the motivation behind and meaning of the Fourth Amendment when penned.

In the case *United States v. Di Re*, Justice Robert Jackson stated, “but the forefathers, after consulting the lessons of history, designed our Constitution to place obstacles in the way of a too permeating police surveillance.”³³ The original intent of the framers of the Constitution was to reduce the ability of police force to permeate the lives of citizens. Technology has only recently allowed authorities to expand their surveillance abilities. As new technology is introduced, it's necessary to understand how new tools and practices fit into the vision held by those who penned our civil rights.

32 United States v. Tuggle, 2019 WL 3915998 (C.D. Ill, 2019).

33 United States v. Di Re, 332 U.S. 581, 595 (1948).

In this instance, hidden surveillance cameras allow law enforcement to peer into any home through an open blind or door. This unwavering surveillance goes beyond the powers of traditional law enforcement monitoring. And to those who would say that, theoretically, a police officer placed on a pole for six months could accomplish the same surveillance, the court of appeals in Travis Tuggle's case stated, "courts should not rely" on impracticalities such as these "to limit the Fourth Amendment's protections."³⁴ Tuggle's case proves that the American Judicial System—as it grapples with new technology—has failed in its prerogative to uphold those original intentions.

As part of his analysis of the Fourth Amendment in *Morgan v. Fairfield Cty., Ohio*, Justice Tharbad stated, "the ordinary meaning of 'search' has remained unchanged since the people ratified the Fourth Amendment over two hundred years ago. To search is 'to look into or over carefully or thoroughly in an effort to find something.'"³⁵ Under this definition, officers conduct a search whenever they engage in an intentional investigative act. With *Katz v. United States* and the creation of the REP test, the Supreme Court has shifted the focus away from whether a search occurred. The REP test fails to address whether a search occurred in the first place. Instead, courts currently center their focus on whether law enforcement violated a person's "(subjective) expectation of privacy" that "society is prepared to recognize as reasonable."³⁶ This approach offers far less protection than the Fourth Amendment was originally intended to provide. By returning their focus to the original meaning and intention of the Fourth Amendment, courts wouldn't need to determine whether a person has a "reasonable expectation of privacy."³⁷ This shift would remove the ambiguity often associated with weighing the validity of a person's expectation of privacy,

34 United States v. Tuggle, 2019 WL 3915998 (C.D. Ill, 2019).

35 *Morgan v. Fairfield Cty.*, No. 17-4027 (6th Cir. May 2, 2018).

36 *Katz v. United States*, 389 U.S. 347 (1967)

37 *Id.*

resulting in more consistent³⁸ protection of Fourth Amendment rights. Placing a greater emphasis on the principles that guided the creation of the Fourth Amendment would provide boundaries to the acceptable practices available to investigating authorities without the need for judicial conjecture on a person's expectation of privacy.

V. IMPLICATIONS OF UNITED STATES V. TUGGLE RULING

According to the 7th Circuit's ruling, the use of hidden surveillance cameras to monitor a household for up to 18 months is permissible. Rulings such as this will continue to push police surveillance towards an Orwellian state, one in which law enforcement power far outreaches the original authority granted in the Constitution.

The REP test, although once an effective proof to determine whether a search has occurred, is becoming incapable of protecting basic Fourth Amendment rights. The REP test relies too heavily on the perception of the public; any technology deemed commonplace will—by definition of the REP test—be legitimized as a component of police surveillance activities. When a new piece of technology becomes commonplace (such as door cameras, social media, or CCTV), the public's ability to expect privacy in that sector diminishes. To maintain privacy rights in an increasingly digital age, the Supreme Court should eliminate the REP test and return the focus of Fourth Amendment application to determining the occurrence of a search. By doing so, the Supreme Court will better protect the fundamental rights guaranteed in the Fourth Amendment.

With more of life documented through footage (such as sophisticated satellites, security cameras, police body cameras, door cameras, etc.), what was once considered private is now becoming increasingly accessible to the public. Although sacrificing privacy at work, stores, and municipalities is deemed, by most, acceptable, the home stands apart. People form their most intimate relationships at home, raise their children at home, and have the right to

38 Morgan v. Fairfield Cty, No. 17-4027 (6th Cir. May 2, 2018): "And the ordinary meaning of "search" has remained unchanged since the people ratified the Fourth Amendment over two hundred years ago." (Quotation taken from Justice Thapar's decision).

expect privacy in those pursuits. Those rights have traditionally been the most fiercely protected by the Supreme Court.³⁹ Yet, cases like Tuggle’s show that without Supreme Court intervention (ruling against the use of long-term, hidden video surveillance of the home and eliminating the REP test to focus on determining the occurrence of a search), courts will continue to grant overreach to investigating authorities.

VI. CONCLUSION

By analyzing the original meaning of “search” when the Fourth Amendment was written and by applying logic used by the Supreme Court in cases of similar nature, this paper seeks to support that hidden, long-term video surveillance of a private residence is a violation of the Constitution and an illegal search under the Fourth Amendment. Although the REP test is helpful in analyzing Tuggle’s case and others of a similar nature, it is becoming increasingly ineffective at protecting Fourth Amendment rights. Societal expectations of privacy have proven to fall below the rights granted in the Fourth Amendment and offered by our Founding Fathers.

In order to protect Fourth Amendment rights while moving into a digital age, the Supreme Court should remove the REP test and focus instead on determining the occurrence of a search. By re-evaluating the guidelines used to apply the Fourth Amendment, the Court will provide clarity on an issue fundamental to one of our most sacred rights.

39 *Miller v. United States*, 357 U.S. 301 (1958)—In their opinion, the Court writes, “Such action invades the precious interest of privacy summed up in the ancient adage that a man’s house is his castle”