Technology and the Fourth Amendment: The Past, Present, and Future

University Honors Capstone

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Abstract:

Enshrined in the Fourth Amendment of the U.S. Constitution is the idea that individuals and their "persons, papers, houses and effects" are protected from unreasonable searches and seizures conducted by government agents. From Supreme Court's decisions, in separate cases, there has evolved two main tests to determine if the Fourth Amendment is applicable when government agents are using technology. The first test was established by the decision *Olmstead v. United States,* 277 U.S. 438 (1928). The second test, which was seen to overturn the *Olmstead* test, was established in 1967 in the decision *Katz v. United States,* 389 U.S. 347 (1967). Traditionally, the Court has chosen to use either the *Katz* test or the *Olmstead* test, based upon the timeframe during which the case was heard; prior to 1967 the Court used *Olmstead* and after 1967 the Court has followed the test set forth in *Katz.* However, new and emerging technologies, such as Global Positioning Satellites and wiretaps, have been particularly problematic for the Supreme Court to address using these frameworks. In particular, this was exemplified in *United States v. Jones,* 132 S. Ct. 945 (2012). In this case, the Supreme Court used both of the tests in order to determine if the Fourth Amendment was applicable. This paper discusses the development of the two tests, and the implications of the holding in *Jones* as applies to the use of new and emerging technologies in criminal procedure.

Fourth Amendment and Technology

The Fourth Amendment guarantees "the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures."[1] However, the evolution of technology has forced the Court to grapple with the question of in exactly what circumstances the Fourth Amendment is applicable. The Court initially determined this through a test established by the decision in *Olmstead v. United States,* 277 U.S. 438 (1928). In this decision, Court held that in order for the Fourth amendment to be applicable there must be a tangible intrusion by the government, on an individual's "paper, houses, persons, and effects." [2] However in 1967 the decisions in *Katz v. United States,* 389 U.S. 347 (1967), changed the test to determine the applicability of the Fourth Amendment. Under *Katz* the Fourth Amendment was applicable if the government infringed upon an individual's intangible "reasonable expectation of privacy." [3] Traditionally, the Courts have chosen to use either *Olmstead* or *Katz* to determine if the Fourth Amendment is applicable.[4] However, *Olmstead* and *Katz* when used in tandem, provide a more comprehensive way to determine if the Fourth Amendment is applicable to situations involving emerging technologies. An examination of the recent Fourth Amendment case *United States v. Jones,* 132 S. Ct. 945 (2012), demonstrates this and adds credence to the idea that as technology advances the test to determine if the Fourth Amendment is applicable must evolve as well.

In this age of new technology, the debate over what constitutes a search and seizure has been widely discussed. Existing scholarship ranges from discussion on what can be defined as a search and seizure to how specific technologies, such as Global Position Satellites (GPS), have

[1] U.S. Const. amend. IV.
[2] U.S. Const. amend. IV.
[3] *Katz v. United States,* 389 U.S. 347, 359 - 360 (1967).
[4] *Olmstead v. United States*, 277 U.S. 438, 466 (1928).
Katz 389 U.S. at 359 - 360.

redefined searches and seizures. Although the amount of scholarship involving the Fourth Amendment and technology is growing, as Orin Kerr, a scholar in this field noted, it is still fairly sparse.[5] The literature that exists, however, can be classified into three main categories: a discussion about a specific aspect of technology, an examination of the implications of a given case such as *Jones*, or a discussion of what reforms should be made to the Fourth Amendment. This paper, unlike the other categories of literature, focuses solely on precedent, which has been set by the Court. Moreover, it focuses solely on the tests, which have been used to determine if the Fourth Amendment is applicable. Finally, this paper uses the holding in *Jones* discusses a trend which the Court should take in the future in order to determine if the Fourth Amendment is applicable.

Prior to discussing cases and the precedent the Court established, it is imperative to define the scope of this paper. To begin with, this paper will look only at cases reviewed by the Supreme Court, which is the highest court in the United States and sets the precedent and direction of the lower courts. Therefore, by looking solely at Supreme Court cases a more clear and present trend will be able to be determined. In addition, this paper will only examine cases in which the Supreme Court questions the applicability of the Fourth Amendment,[6] and this paper will, with the exception of *Jones,* discuss only the majority opinions.[7] This again, is to narrow the scope of the paper. Additionally, due to the holding in *Hudson v. Palmer,* 468 U.S. 517

[5] Orin S. Kerr. *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution.* 102 Mich. L. Rev. 801 - 888 (2004).

[6] Determining Fourth Amendment applicability is based on the question of whether a search and seizure took place. Applicability does not discuss whether there was violation of the Fourth Amendment. Moreover, it does not seek to determine whether if a search and seizure took place if it was conducted in a reasonable manner or if a warrant was needed. Applicability simply examines the question of whether a search and seizure occurred that would make the Fourth Amendment applicable to that case. (See Figure One for additional guidance).

[7] This paper will also draw from the concurrence in *Katz*. The purpose of drawing upon this concurrence is to be able to use the Harlan concurrence. This concurrence instituted a two-part test, which was used by the courts to determine what was considered to be a "reasonable expectation of privacy." *Katz 389 U.S.* at 359-360.

(1984), which held that prisoners have a different expectation of privacy while in detention, this paper will look solely at individuals not in custody at the time of the incident. [8] The narrow scope of this paper will allow for a more in depth understanding of how the Court has held in regards to an individual's Fourth Amendment protection from government agents.

Although the Fourth Amendment is a right enshrined in the United States' Bill of Rights, the origins of its idea can be traced back to British Common and early U.S. Colonial Law.[9] In fact, the origins of the Fourth Amendment can be traced back to *Semayne's Case,* [1604] 5 Eng. Rep. 91*,* from 1604. [10] This British Common Law case established the principle that "every man's house is his castle" and therefore, should be afforded certain protections. [11] This fundamental decision established two underlying principles, which can be found in the Fourth Amendment: first, the idea that a person has the right to be secure in his house and second, that despite the aforementioned right, the government does, in certain instances, have the right to impede on that liberty. [12] Although *Semayne's Case* established the foundations of the Fourth Amendment, it was later cases, such as *Entick v Carrington,* [1765] 95 Eng. Rep. 807*,* and *Wilkes v. Wood* [1763] 98 Eng. Rep 489*,* that further expanded the scope of the Fourth Amendment to protect an individual's house, papers and effects. [13]

Entick and Wilkes were alleged to be publishing libelous pamphlets, and so, the British Secretary of State, Lord Halifax authorized a warrant that led to the seizure of Entick, Wilkes

[8] *Hudson v. Palmer,* 468 U.S. 517, 517 (1984).
[9] William J. Stuntz. *The Substantive Origins of the Fourth Amendment*, 105 Yale L.J. 393, 393 (1995).
[10] *The Constitution of the United States of America: Analysis and Interpretation* 1199 (U.S. Government Printing Office, 1992, ed. 1992).
[11] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1199.
[12] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1199.
[13] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
U.S. Const. amend. IV.
See Stuntz *Id* at 393.

and all their books and papers.[14] Both Entick and Wilkes, believing that the government had committed trespass, sued for damages.[15] In both cases, Lord Camden, the presiding magistrate, emphasized the idea that "issuance of a warrant for the seizure of all of a person's papers rather than only those alleged to be criminal in nature [runs] ''contrary to the genus of the law of England'" because "papers are the owner's goods and chattels: they are his dearest property."[16] As such, Lord Camden argued, papers should be protected from the unwarranted trespass of the government.[17] Lord Camden's holding expanded upon the idea of the *Seymane's Case,* and as such, extended the scope of Fourth Amendment protection from unwarranted searches and seizures.

It is, however, important to note that Lord Camden, in his holding, highlighted the inherent right to privacy that accompanies protection of person's "houses, papers, and effects."[18] In his decision, Lord Camden emphasizes "that they were *papers,* and papers were of such a private nature that "so far from enduring a seizure, . . . they will hardly bear an inspection."[19] Lord Camden introduced the idea that individuals not only have a right to be protected in their "papers, houses, persons, and effects" but also that those tangible items should be afforded a certain amount of privacy from government observation.[20] It is imperative, however, to note that

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[14] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
See Stuntz *Id* at 393.
[15] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
See Stuntz *Id* at 393.
[16] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
See Stuntz *Id* at 393.
[17] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
See Stuntz *Id* at 393.
[18] U.S. Const. amend. IV.
Katz 389 U.S. at 359-360.
[19] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
See Stuntz *Id* at 393.
[20] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
See Stuntz *Id* at 393.
U.S. Const. amend. IV.

in Lord Camden's notion of privacy from the government extended only to those items, which were tangible.[21] This idea of an individual's right to privacy, however, remained a subsidiary idea until 1890 when Justice Samuel D. Warren and Louis D. Brandeis published an article entitled, "The Right to Privacy" 4 Harv. L. Rev. 193-199 (1890).[22] Despite the lack of discussion on the right to privacy in earlier British and Colonial Law, cases such as the *Writs of Assistance* again brought for the idea of protecting an individuals "houses, papers, and effects" from unwarranted government intrusion.[23]

The *Writs of Assistance Case* was an early Colonial Law case.[24] This case questioned the validity of the Act of Frauds of 1696.[25] The Act of Frauds of 1696 allowed customs officers to enter any dwelling in the colonies, unannounced, if they had suspicion that there were illegal goods present.[26] The customs officers could then seize anything they believed was illegal.[27] James Otis, representing the merchants, and believing this act to be an infringement upon his rights, brought this case before the Boston Supreme Court.[28] Otis argued:

> one of the most essential branches of English liberty, is the freedom of one's house. A man's house is his castle; and while he is quiet, he is as well guarded as a prince in his castle. This writ, if it should be declared legal, would totally annihilate this privilege.[29]

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[21] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
See Stuntz *Id* at 393.
U.S. Const. amend. IV.
[22] Samuel D. Warren and Louis D. Brandeis *The Right to Privacy* 4 Harv. L. Rev. 193, 199 (1890).
[23] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
U.S. Const. amend. IV.
[24] See Stuntz *Id* at 393.
[25] See Stuntz *Id* at 393.
[26] See Stuntz *Id* at 393.
[27] See Stuntz *Id* at 393.
[28] See Stuntz *Id a*t 405.
[29] See Stuntz *Id* at 405.

Despite Otis' argument, which was founded in British Common Law, the Boston Supreme Court held that the Act of Frauds of 1696 were not unconstitutional.[30] However, as William Stuntz notes, Otis' argument resonated with the John Adams, who was in attendance.[31] Adams took Otis' argument and incorporated it in the Fourth Amendment.[32] Otis' argument, however, was not the only guiding principle behind the Fourth Amendment, in fact, as previously noted, the ideas set forth in *Seymanes Case, Entick,* and *Wilkes* also played a role in shaping the Fourth Amendment.[33]

By understanding the history of the British government's infringement on property, effects, houses, and papers it becomes evident that the authors of the Fourth Amendment endeavored to prevent the government from unwarranted searches and seizures from occurring.[34] As such, drawing from the aforementioned cases the authors of the Bill of Rights created the Fourth Amendment.[35] In order to determine if and how the ideas behind the Fourth Amendment have changed since its implementation, the holdings of Supreme Court cases that discuss the scope and application of the Fourth Amendment must be examined.

One of the first cases that discusses the Fourth Amendment and its application to criminal procedure is the 1806 case *Ex Parte Burford.*7, U.S. 448 (1806).[36] This case, following a strict interpretation of the Fourth Amendment, affirmed the idea of an individual to be secure in his persons.[37] In this case, John Burford was taken into custody.[38] The warrant listed no offense and

[30] See Stuntz *Id* at 405.
[31] See Stuntz *Id* at 405.
[32] See Stuntz *Id* at 405.
[33] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1199.
[34] U.S. Const. amend. IV.
[35] See Stuntz *Id* at 439.
[36] *Ex Parte Burford.*7, U.S. 448, 448 (1806).
[37] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1199.
[38] *Ex Parte Burford.*7, U.S. at 448.

had no substantial evidence.[39] The warrant merely stated that Burford "had been brought before a meeting of many justices who had required him to find sureties for his good behavior. It [did] not charge him of their own knowledge, or suspicion, or upon the oath of any person whomever."[40] As such, Burford contended that his detention was a violation of the Fourth Amendment because it deprived him of his ability to be secure in his persons.

This is one example of the Court affirming the need to protect an individual's Fourth Amendment's right to be "secure in their persons, houses, papers, and effects."[41] The Court reasoned that the government's actions violated Burford's Fourth Amendment right to be secure in his persons.[42] It did so because the warrant failed to be supported by oath and specify any crime it was illegal.[43] Although the Fourth Amendment was not explicitly mentioned in the text of the holding, this decision substantiated and affirmed the principle of an individual to be secure in their persons from unwarranted detention and custody.[44] This, however, is only one example of Court affirming the need to protect an individual's Fourth Amendment's right to be "secure in their persons, houses, papers, and effects."[45] An example where the Court further emphasized this right is *Boyd v. United States,* 116 U.S. 616 (1886).

In 1886, *Boyd* again supported the right of the individual to be secure in their material possessions, as outlined by the Fourth Amendment. In this case, Boyd & Sons, an importing company, was accused of fraud by means of shorting the government on the duties on a shipment of plate glass.[46] Under § 12 of the 1874, "Act to amend the customs revenue laws and to repeal

[39] *Ex Parte Burford* , 7 U.S. at 449 - 450.
[40] *Ex Parte Burford* , 7 U.S. at 450.
[41] U.S. Const. amend. IV.
[42] *Ex Parte Burford* , 7 U.S. at 449 - 450.
[43] *Ex Parte Burford* , 7 U.S. at 449 - 450.
[44] *Ex Parte Burford* , 7 U.S. at 449 - 450.
[45] U.S. Const. amend. IV.
[46] Owing to the fact that the United States was now an independent colony the *Writs of Assistance* were not longer applicable law.

moieties," which required "the defendant or claimant to produce in court his private books, invoices and papers, or else the allegations of the attorney to be taken as confessed," the District Attorney of the United States in the Southern District of New York, compelled Boyd & Sons to produce the duty invoice.[47] *Boyd* claimed that the production, and subsequent seizure, of the invoice violated his Fourth Amendment rights.

The Court held that the Act was unconstitutional because it violated the Fourth Amendment's protection against unwarranted searches and seizures. Although *Boyd* referenced precedent set forth in historical cases such as *Entick* because it served as "a guide to an understanding of what the Framers meant in writing the Fourth Amendment;" in its decision the Court underscored that the mandatory compulsion of documents was primarily at issue.[48] The Supreme Court reasoned that "a compulsory production of a man's private papers" […] is a material ingredient and effects the sole object and purpose of search and seizure."[49] Therefore, the Act's requirement to produce the papers constituted a search and seizure.[50] This, the Court argued, violated the Fourth Amendment because it took away the right of the individual to be secure in his papers.[51] As such, individual's right to be secure in his papers and effects as affirmed by historical basis of the Fourth Amendment was reaffirmed through this holding.[52]

Although not a case which was heard before the Supreme Court, in 1890 two Supreme Court justices, Samuel D. Warren and Louis D. Brandeis published an article entitled "The Right to Privacy."[53] Unlike Lord Camden who in the *Entick* decision only discussed privacy as it related to tangible items, Warren and Brandeis argued that the right to privacy extends not only

[47] *Boyd v. United States*, 116 U.S. 616, 617 (1886).
[48] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1200.
[49] *Boyd* 116 U.S.at 622.
[50] *Boyd* 116 U.S.at 621.
[51] *Boyd* 116 U.S.at 621.
[52] U.S. Const. amend. IV.
[53] See Warren and Brandeis *The Right to Privacy Id* at *199.*

to tangible items, but also to intangible items.[54] In their article, Warren and Brandeis underscore that "the law […] it extends [privacy] protection to the personal appearances, saying, acts, and to personal relation, domestic or otherwise."[55] This, in effect, expanded the right to privacy to protect intangible items such as an individual's speech and acts.

Despite this article, the idea of privacy extending to intangible things such as an individual's speech and acts was not adopted into case law until *Katz.* [56] Instead, over the next forty-two years cases that reaffirmed the idea that the purpose of the Fourth Amendment was to protect an individual's proprietary and material interests. However, in the 20th century, and the emergence of new technology forced the Court to grapple with the question of how to balance the government's need to collect information and when to apply the protection guaranteed under the Fourth Amendment. One of the first cases, which dealt with this question, was *Olmstead v. United States* 277 U.S. 438 (1928) which was decided in 1928. [57]

In the case, Olmstead, "the leading conspirator and the general manager of the business," was believed to be conspiring to violate the National Prohibitions Act or Volstead Act H.R. 6810, 66th Congress (1919) "by unlawfully possessing, transporting and importing intoxicating liquors and maintaining nuisances, and by selling intoxicating liquors."[58] In order to ascertain evidence against Olmstead, the police placed a wiretap on Olmstead's telephone. [59] The police did this by inserting small wires along ordinary telephone lines. The installation of the wiretaps was "made without trespass upon any property of the defendants." [60] The question before the

[54] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1199.
[55] See Warren and Brandeis *The Right to Privacy Id* at *199.*
[56] *Katz 389 U.S.* at *passim.*
[57] *Olmstead v. United States*, 277 U.S. 438, 438 (1928).
[58] *Olmstead*, 277 U.S. at 456.
[59] *Olmstead*, 277 U.S. at 455.
[60] *Olmstead*, 277 U.S. at 457.

Court was whether or not the wiretap and evidence obtained through listening to private telephone conversations constituted a search and seizure.

Following a strict interpretation of the Fourth Amendment, the Court held that listening to an individual's phone conversations by placing a wire tap on external telephone lines was neither a search nor a seizure and therefore the Fourth Amendment was not applicable.[61] The reasoning behind this holding was founded on the principle that:

> one who installs in his house a telephone instrument with connecting wires intends to project his voice to those quite outside, and that the wires beyond his house and messages while passing over them are not within the protection of the Fourth Amendment.[62]

Essentially, the Court was noting that even though the conversation that is taking place originated a piece of property that is protected by the Constitution, by using the telephone his voice left the confines of the Constitutionally protected area and therefore was not protected. Based on this reasoning, the Court emphasized, "there was no searching. There was no seizure. The evidence was secured by the use of the sense of hearing and that only."[63] As there was no tangible infringement on the petitioner's property, there was no search or seizure. The lack of a search or seizure, in this case, makes the Fourth Amendment not applicable.

This ruling served to define the Fourth Amendment's scope in light of new technology. It set the precedent that in order for the Fourth Amendment to be applicable there must be a tangible intrusion, by the government on to a person's "houses, papers, and effects."[64] This

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[61] *Olmstead*, 277 U.S. at 464.
[62] *Olmstead*, 277 U.S. at 466.
[63] *Olmstead*, 277 U.S. at 464.
[64] See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1199. U.S. Const. amend. IV.

holding served as a guide of the scope of the Fourth Amendment until the decision in *Katz* in 1967.[65]

One of the first cases after *Olmstead* that dealt with the Fourth Amendment and the use of technology was *Goldman v. United States,* 316 U.S. 129 (1942).[66] In *Goldman,* two individuals were being investigated for bank fraud.[67] Two federal agents "with the assistance of the building superintendent, obtained access at night to [one of the petitioner's] office."[68] Upon entering the office the agents attached a listening device, allowing them to overhear the conversation while being stationed in an adjacent room.[69] When the agents returned the next day, the device was not functioning.[70] In order to listen to the conversation, which was taking place at that time, the agents used a detectaphone, which is a highly sensitive device that amplifies sound waves.[71] By placing the device on the wall of the adjacent room, the agents were able to listen to the petitioner's conversations.[72] The question in the case was whether the use of a detectaphone, a listening apparatus, to hear a conversation in another room constituted a search and seizure.[73]

The Court held that the use of a listening device, placed on the exterior of an adjacent room's wall, did not constitute a search and seizure and therefore the Fourth Amendment was not applicable.[74] The Court dismissed the notion that the instillation of device constituted a search and seizure by noting that not only was the Government granted permission to enter the building

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[65] *Katz 389 U.S.* at 347.
[66] *Goldman v. United States,* 316 U.S. 129, 129 (1942).
[67] *Goldman,* 316 U.S.at 130.
[68] *Goldman,* 316 U.S.at 131.
[69] *Goldman,* 316 U.S.at 131.
[70] *Goldman,* 316 U.S.at 131.
[71] *Goldman,* 316 U.S.at 131.
[72] *Goldman,* 316 U.S.at 132.
[73] *Goldman,* 316 U.S.at 132.
[74] *Goldman,* 316 U.S.at 133.

but also said listening device was not used listen to the conversation. [75] Thus, because of the lack of tangible intrusion by the government the Fourth Amendment is not applicable. The Court also reasoned that:

> the listening in the next room to the words of [the petitioner] as he talked into the telephone receiver was no more the interception of a wire communication […] than would have been the overhearing of the conversation by one sitting in the same room.[76]

The use of the detectaphone was tantamount to overhearing a conversation on the street; thus, there was no seizure of information that could not have otherwise been heard. [77] Based on this, the Court held that no search or seizure had been committed. [78] Therefore, the Court held that in *Goldman* the Fourth Amendment is inapplicable.

This holding affirmed the idea set forth in *Olmstead* by underscoring the notion that as long is there is no government infringement on tangible goods, in particular an individual's "persons, papers, house, or effects," the use of technology to overhear a communication does not constitute a search or seizure. [79] As this does not constitute a search or seizure the Fourth Amendment is not applicable.[80] This baseline standard of requiring an actual physical search or seizure by the technology in order to constitute a Fourth Amendment violation can be seen again in the holding of *On Lee v. United States,* 343 U.S. 747 (1952).

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[75] *Goldman,* 316 U.S.at 134.
[76] *Goldman,* 316 U.S.at 134.
[77] U.S. Const. amend. IV.
[78] *Goldman,* 316 U.S.at 136.
[79] *Goldman,* 316 U.S.at 136.
U.S. Const. amend. IV.
Olmstead, 277 U.S. at 466.
[80] *Goldman,* 316 U.S.at 136.

The Court heard *On Lee* in order to determine if the use of a wired informant in order to gain information constituted a violation of the Fourth Amendment. [81] The wired informant engaged in conversation with On Lee in order to ascertain evidence that On Lee was a drug dealer. [82] This conversation, with the aid of a radio transmitter, was transmitted the information to agents who were stationed outside. [83] The petitioner argued that the use of this transmitted information constituted not only a search and seizure but also amounted to trespass.[84] The question before the Court is whether the use of a wired informant and the subsequent radio transmission of conversations between the informant and the petitioner constituted a violation of the Fourth Amendment.

The Court held that there was neither a search or seizure nor was there a trespass. [85] As such, the information obtained by the wired informant was constitutional. The Court held that no search or seizure was committed because the:

> petitioner was talking confidentially and indiscreetly with one he trusted, and he was overheard. This was due to aid from a transmitter and receiver, to be sure, but with the same effect on his privacy as if agent Lee had been eavesdropping outside an open window. [86]

Therefore, since the use of the radio transmitter merely amplified a conversation, which could have been overheard by anyone, the use of the device was not considered a search or seizure. [87] Moreover, the Court rejected the petitioner's notion that the "undercover man's entrance was a trespass because consent was obtained by fraud, and that the other agent was a trespasser because

[81] *On Lee v. United States,* 343 U.S. 747, 747 (1952).
[82] *On Lee* 343 U.S. at 748.
[83] *On Lee* 343 U.S. at 749.
[84] *On Lee* 343 U.S. at 750 - 751.
[85] *On Lee* 343 U.S. at 757 - 758.
[86] *On Lee* 343 U.S. at 754.
[87] *On Lee* 343 U.S. at 754.

by means of the radio receiver outside the laundry he overheard what went on inside."[88] The Court rejected this notion because not only did he have consent to enter the laundry but also that under the McGuire principle the informant did not commit trespass *ab initio*.[89] See *McGuire v. United States,* 273 U.S. 95 (U.S. 1927) (which held that the authority abused must be an authority granted by law and not by an individual and that there must be some positive act of misconduct, and not a mere omission or neglect of duty).[90] Also, there was no physical intrusion by the agent onto the petitioner's property; therefore, there no trespass was committed.[91] Following the precedent established by *Olmstead,* the Court held that because of the lack of physical intrusion the petitioner's Fourth Amendment rights were not violated. The trend of using *Olmstead* as a framework can again be seen in the case *Silverman v. United States,* 365 U.S. 505 (1961).[92]

In *Silverman,* the police were investigating individuals for gambling operations. In order to obtain evidence the police were given permission to enter an adjacent row house.[93] The police inserted a microphone with a spike "about a foot long attached to it" "into the baseboard in a second-floor room of the vacant house."[94] The police extended this microphone until the

> spike hit something solid 'that acted as a very good sound board.' The record clearly indicates that the spike made contact with a heating duct serving the house occupied by the petitioners, thus converting their entire heating system into a conductor of sound.[95]

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[88] *On Lee* 343 U.S. at 766.
[89] *Trespass Ab Initio.* US Legal.com (March 20, 2013, 12:00 pm), http://trespass.uslegal.com/trespass-ab-initio/.
[90] *Trespass Ab Initio.* US Legal.com (March 20, 2013, 12:00 pm), http://trespass.uslegal.com/trespass-ab-initio/.
[91] *On Lee* 343 U.S. at 752 - 753.
[92] *Silverman v. United States,* 365 U.S. 505 (1961).
Olmstead, 277 U.S. at 466.
[93] *Silverman* at 506.
[94] *Silverman* 365 U.S. at 506.
[95] *Silverman* 365 U.S. at 506 - 507.

The petitioner claimed that the use of the spike and the physical contact with their heating duct constituted a violation of their Fourth Amendment right to be "secure in their persons, papers, houses, and effects." [96]

The Court held that the use of the spike microphone without a warrant violated the petitioner's Fourth Amendment rights and constituted a search and seizure. [97] The Court reasoned this because "a fair reading of the record in this case shows that the eavesdropping was accomplished by means of an unauthorized physical penetration into the premises occupied by the petitioners." [98] This "physical penetration into the premises occupied by the petitioner" constituted a Fourth Amendment violation.[99] This case is particularly significant because for the first time the Court delineated what constitutes a physical intrusion by the government. [100] Through the application of this test, it becomes apparent, that even the Court believed that even the smallest and slightest intrusion into an individual's "persons, papers, houses, or effects" made the Fourth Amendment applicable.[101]

Following *Silverman,* the Court heard *Lopez v. United States* 373 U.S. 427 (1963). *Lopez* was heard before the Supreme Court in 1963.[102] Davis, an Internal Revenue Service Agent, for

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[96] U.S. Const. amend. IV.
[97] *Silverman* 365 U.S. at 512.
[98] *Silverman* 365 U.S. at 509.
[99] *Silverman* 365 U.S. at 509.
[100] *Silverman* 365 U.S. at 509.
The Court took care to distinguish this holding from that of *Goldman* and *On Lee* by underscoring the notion in those cases "the eavesdropping had not been accomplished by means of an unauthorized physical encroachment within a constitutionally protected area." *Silverman* 365 U.S. at 509. However, in *Silverman* the eavesdropping was only possible through physical encroachment the act constituted a search and seizure. *Silverman* 365 U.S. at 510.
[101] U.S. Const. amend. IV.
Olmstead, 277 U.S. at 466.
Silverman 365 U.S. at 506.
[102] The Court distinguished this case from *On Lee* because in *On Lee* recording was transmitted to an agent outside of the premises. In this case, the discussion was recorded.

potential tax evasion, was investigating Lopez. [103] Lopez attempted to bribe Davis into ignoring the tax evasion. [104]Davis reported this to his superiors who urged him to "play along with the scheme" in order to obtain evidence. [105] Davis, equipped with "two electronic devices, a pocket battery-operated transmitter (which subsequently failed to work) and a pocket wire recorder" subsequently had a meeting with Lopez. [106] The aforementioned devices recorded that conversation. Lopez argued that the use of the devices constituted a violation of his rights under the Fourth Amendment. [107] The question before the Court was whether or not the use of a recording device constituted a search and seizure.

The Court held that the use of these recording devices did not constitute a search and seizure and therefore the Fourth Amendment was not applicable. [108] The Court reasoned this primarily on the idea that "the device was not planted by means of an unlawful physical invasion of petitioner's premises under circumstances which would violate the Fourth Amendment." [109] As there was no physical intrusion by a government agent, in order to plant the device, the Court held that the Fourth Amendment was not applicable. As such, *Lopez,* following the holding in *Olmstead,* demonstrated that in order for an individual's Fourth Amendment to be applicable the government must infringe upon something tangible, and that the mere recording of a conversation did not satisfy this requirement. [110]

Based on the *Olmstead v. United States*, 277 U.S. 438 (1928), *On Lee v. United States,* 343 U.S. 747 (1952), *Silverman v. United States,* 365 U.S. 505 (1961), and *Lopez v. United*

[103] *Lopez v. United States,* 373 U.S. 427, 427 (1963).
[104] *Lopez* 373 U.S. at 430.
[105] *Lopez* 373 U.S. at 430.
[106] *Lopez* 373 U.S. at 430.
[107] *Lopez* 373 U.S. at 429.
[108] *Lopez* 373 U.S. at 440.
[109] *Lopez* 373 U.S. at 439.
[110] *Lopez* 373 U.S. at 439.
Olmstead, 277 U.S. at 466.

States, 373 U.S. 427 (1963) it becomes evident that prior to *Katz* the test for determining if the Fourth Amendment was applicable was based on whether or not the government had infringed upon something tangible while using a technological device. Moreover, this precedent emphasized a strict interpretation of the Fourth Amendment. It limited the instances in which the Fourth Amendment was applicable to only those situations in which the government infringed upon an individual's tangible "papers, houses, and effects." [111] However, the decision in *Katz v. United States,* 389 U.S. 347 (1967) expanded the scope of the Fourth Amendment and overturned the decision in *Olmstead.*[112]

The decision in *Katz* was rendered in 1967. [113] The petitioner, Katz, was convicted of "transmitting wagering information by telephone from Los Angeles to Miami and Boston." [114] This conviction rested on the evidence that was obtained through the use of an electronic listening device that allowed Federal Bureau of Investigation agents to hear the petitioner's conversation while using a public telephone booth. [115] It is important to note that there was "no physical entrance into the area occupied by [the petitioner]." [116] The question before the Court was whether the attachment of the listening device constituted a search and seizure.

The Court found that the application of the recording device on the exterior of a public phone booth constituted a search and seizure, as defined by the Fourth Amendment. [117] The Court reasoned this based on the principle that "one who occupies [a public telephone booth], shuts the door behind him, and pays the toll that permits him to place a call is surely entitled to

[111] U.S. Const. amend. IV.
[112] *Kaiser v. New York* 394 U.S. 280, 282 (1969).
[113] *Katz 389 U.S.* at 347
[114] *Katz 389 U.S.* at 348.
[115] *Katz 389 U.S.* at 348.
[116] *Katz 389 U.S.* at 349.
[117] *Katz 389 U.S.* at 359.

assume that the words he utters into the mouthpiece will not be broadcast to the world." [118] Based off this principle the Court went on to note that the Fourth Amendment:

> protects people, not places. What a person knowingly exposes to the public, even in his own home or office, is not subject of Fourth Amendment protection. But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected. [119]

As such, the holding in *Katz* set forth the idea that an individuals Fourth Amendment rights should be based on what people attempt to keep private. [120] Thus, the Court reasoned that by shutting the phone booth's door, Katz had a "reasonable expectation to privacy." [121] This "reasonable expectation of privacy" the Justices argued was a right implicitly granted in the text of the Fourth Amendment. [122]

However, the concept of a "reasonable expectation to privacy" is subjective; therefore, Justice Harlan set forth a test in order to determine in what instances an individual has a "reasonable expectation to privacy." [123] This test held that a "reasonable expectation to privacy" was based on two criteria: the first, was that "a person must exhibit an 'actual (subjective) expectation of privacy' and the second was that the "expectation [must] be one that society is prepared to recognize as reasonable." [124] By shutting the door of the telephone booth, the individual intended to be secure in his personal conversation and, the Court argued, society would accept this premise as reasonable. [125] As such, the Court held that not only was the Fourth

[118] *Katz 389 U.S.* at 352.
[119] *Katz 389 U.S.* at 353.
[120] *Katz 389 U.S.* at 353.
[121] *Katz 389 U.S.* at 359 - 360.
[122] *Katz 389 U.S.* at 359 - 360.
[123] *Katz 389 U.S.* at 359 - 360.
[124] *Katz 389 U.S.* at 359 - 361.
[125] U.S. Const. amend. IV.

Amendment applicable in this situation but also that the lack of a warrant while attaching this device constituted a search and seizure.

Prior to the *Katz* decision the Court held that the Fourth Amendment was only applicable to instances in which a government agent infringed upon an individual's tangible item. [126] The holding in *Katz* changed the applicability of the Fourth Amendment when using technology. Under *Katz,* the Court held that the Fourth Amendment could be applied as long as there was an intrusion on an individual's privacy. [127] By arguing that physical intrusion was not a necessary prerequisite for a Fourth Amendment violation the Court broadened the protection of the Fourth Amendment to protect intangible items such as an individuals speech and movement. [128] This expansion of rights was based on "[t]he premise that property interests control the right of the Government to search and seize has been discredited." [129] Once this premise was accepted, the Court argued, "it becomes clear that the reach of the Amendment cannot turn upon the presence or absence of a physical intrusion into any give enclosure." [130] Based on this, the Court found that the test set forth in *Olmstead* was too narrow.[131] To remedy this, *Katz* expanded the protections afforded by the Fourth Amendment to include protecting intangible items such as an individual's speech and movements, provided the individual had a "reasonable expectation of privacy" while conducting these activities. [132]

Katz marked a shift in the interpretation of the Fourth Amendment. Whereas the test for a Fourth Amendment violation under *Olmstead* was an infringement by the government on a tangible item, the test under *Katz* was a violation of an individual's intangible "reasonable

[126] *Olmstead*, 277 U.S. at 464.
[127] *Katz 389 U.S.* at *passim.*
[128] *Katz 389 U.S.* at *passim.*
[129] *Katz 389 U.S.* at 353.
[130] *Katz 389 U.S.* at *passim.*
[131] *Olmstead*, 277 U.S. at 466.
[132] *Katz 389 U.S.* at 359 - 360.

expectation to privacy." [133] In the latter half of the 20th century, in cases such as *Smith v. Maryland,* 442 U.S. 735 (1979)*, United States v. Knotts* 460 U.S. 276 (1983),.*United States v. Karo* 468 U.S. 705 (1984), *California v. Ciraolo* 476 U.S. 207 (1986)*, Dow Chemical Co. v. United States* 476 U.S. 227 (1986)*,* and *Kyllo v. United States* 533 U.S. 27, 29 (2001) the *Katz* test served as the Court's way to determine if the government had infringed upon an individual's Fourth Amendment rights.

Shortly after the *Katz* decision, the Court decided *Smith v. Maryland,* 442 U.S. 735 (1979). *Smith* dealt with the question of "whether the installation and use of a pen register constitutes a 'search' within the meaning of the Fourth Amendment." [134] The facts of the case stand as the following. Patricia McDonough was robbed, and after the robbery she received calls from a person who identified himself as the robber. In one such call "the caller asked that [Patricia McDonough] set outside on her front porch; she did so." [135] While on her front porch, she saw a vehicle drive slowly by her house. [136] McDonough had previously seen the car while she was being robbed. [137] She recorded the license plate and turned the information over to the police. [138] Using this information, the police identified the vehicle as belonging to Michael Lee Smith. [139] Based on this information and the calls, which McDonough had been receiving, the police asked the telephone company to install a pen register on Smith's phone. [140] The pen register revealed that the Smith had indeed been in contact with McDonough. [141] Based on this evidence, the police obtained a search warrant and carried out a search of Smith's residence

[133] *Katz 389 U.S.* at 359 - 360.
Olmstead, 277 U.S. at 466.
[134] *Smith v. Maryland,* 442 U.S. 735, 737 (1979).
[135] *Smith* 442 U.S. at 737.
[136] *Smith* 442 U.S. at 737.
[137] *Smith* 442 U.S. at 737.
[138] *Smith* 442 U.S. at 737.
[139] *Smith* 442 U.S. at 737.
[140] *Smith* 442 U.S. at 737.
[141] *Smith* 442 U.S. at 737.

where the police found items which had been stolen from McDonough's house. [142] While on trial, Smith argued that the use of the pen register constituted a search and therefore was unconstitutional under the Fourth Amendment. [143]

The Court held that the use of a pen register did not constitute a search and seizure and therefore, the Fourth Amendment was not applicable. [144] The Court argued that "given a pen register's limited capabilities" that the petitioner did not have a "legitimate expectation of privacy." [145] This was based on the reasoning that the Court doubted "that people in general entertain any actual expectation of privacy in the number they dial." [146] The Court also noted that "even if [the] petitioner did harbor some subjective expectation that the phone number he dialed would remain private, this expectation is not 'one that society is prepared to recognize as reasonable.'" [147] Because the petitioner did not have a reasonable expectation of privacy, the Court held that the use of a pen register to collect information about whom he was calling did not constitute a search. [148] Therefore, since there was no government intrusion on an individual's "reasonable expectation to privacy" the Fourth Amendment was not applicable. [149] The aforementioned reasoning was based on the foundation set forth in *Katz,* rather than the foundation laid out by *Olmstead.* [150] In fact, the question of whether the police intruded on the petitioner's "persons, papers, houses, or effects" was not even discussed.[151] This case, thus, demonstrates that *Katz* and the test of whether someone had a "reasonable expectation to

[142] *Smith* 442 U.S. at 737.
[143] *Smith* 442 U.S. at 737.
[144] *Smith* 442 U.S. at 742.
[145] *Smith* 442 U.S. at 742.
[146] *Smith* 442 U.S. at 737.
[147] *Smith* 442 U.S. at 743.
[148] *Smith* 442 U.S. at 746.
[149] *Katz 389 U.S.* at 359 - 360.
[150] *Olmstead*, 277 U.S. at 466.
[151] *Smith* 442 U.S. at *passim.*
Olmstead, 277 U.S. at 466.
U.S. Const. amend. IV.

privacy" was used to determine if the use of technology infringed upon and individual's Fourth Amendment rights. [152] The application of the *Katz* test in order to determine if the Fourth Amendment is applicable can again be seen in the case *United States v. Knotts,* 460 U.S. 276 (1983).

In *Knotts* the respondent was charged with "conspiracy to manufacture controlled substances." [153] This was based off evidence that was obtained when officers, with the consent of Hawkins Chemical Corporation, installed beepers on the inside of a chemical container.[154] This container contained chloroform which is considered a precursor chemical.[155] The officers, following the respondent, maintained both visual surveillance and used the signal from the beeper in order track the vehicle. [156] However, eventually the respondent noticed the surveillance and made evasive maneuvers. [157] The officers, at this time, not only lost visual surveillance but the agents also lost the beeper signal. [158] Shortly there after, a helicopter picked up the signal of the beeper. [159] The signal led the agents to a cabin in the woods. Based on the maintenance of the precursor chemical, the agents were able to obtain a warrant for the search of the cabin. [160] The respondent held that the use of the beeper violated his "reasonable expectation of privacy."[161] The question in this case is whether the use and subsequent tracking of the beeper violated the respondent's "rights secured by the Fourth Amendment." [162]

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[152] *Katz 389 U.S.* at 359-360.
[153] *United States v. Knotts* 460 U.S. 276, 278 (1983).
[154] *Knotts* 460 U.S. at 278.
[155] A precursor chemical is one, which can be used to manufacture illicit drugs.
[156] *Knotts* 460 U.S. at 277.
[157] *Knotts* 460 U.S. at 277.
[158] *Knotts* 460 U.S. at 277.
[159] *Knotts* 460 U.S. at 278.
[160] *Knotts* 460 U.S. at 278 - 279.
[161] *Knotts* 460 U.S. at 286.
Katz 389 U.S. at 359 - 360.
[162] U.S. Const. amend. IV.

The Court found that the Fourth Amendment was not applicable because the use of the beeper did not constitute a search or a seizure. Drawing upon the "reasonable expectation of privacy" test set forth in *Katz,* the Court noted that, "a person traveling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another." [163] Moreover, the Court noted that the "respondent's complaint appears to be simply that scientific devices such as the beeper enabled the police to be more effective in detecting crime" this argument, the Court decided, had no Constitutional standing because "nothing in the Fourth Amendment prohibited the police from augmenting the sensory faculties bestowed upon them at birth with such enhancement as science and technology afforded them in this case." [164] In fact, the Court even noted that "there is no indication that the beeper was used in any way to reveal information as to the movement of the drum within the cabin, or in any way that would not have been visible to the naked eye from outside the cabin."[165] As such, the Court sustains that no intrusion on the respondent's intangible rights took place. Based on the lack of infringement on the individual's intangible "expectation of privacy," the Court held that the respondent's Fourth Amendment rights were not applicable. [166] This case is significant because it again demonstrates that after 1967 the Courts chose to follow the test set forth in *Katz* instead of *Olmstead.*[167] This trend can be seen again in the case *United States v. Karo* 468 U.S. 705 (1984).

[163] *Knotts* 460 U.S. at 282.
Katz 389 U.S. at 359-360.
[164] *Knotts* 460 U.S. at 284.
[165] *Knotts* 460 U.S. at 285.
[166] *Katz 389 U.S.* at 359 - 360.
[167] *Katz 389 U.S.* at 359 - 360.

Karo was decided in 1984.[168] In *Karo,* the petitioners ordered 50 gallons of ether from a government informant. [169] With the permission of the informant, the government placed a beeper on the inside of one of the containers of either. Although the agents saw Karo pick up the can with the beeper inside of it, Karo brought the container into his house.[170] At some point, the container was transferred to another individual's house. [171] The agents realized this only by using the beeper's signal; they did not physically see the transfer of the containers. [172] The container was then transferred, again to a commercial storage facility. [173] The beeper again, provided the agents with the general location, not the precise locker, of the container.[174] Eventually, Karo picked up the can of ether and drove it to another house. [175] The beeper demonstrated that the container was in the house. [176] The agents "noticed the windows of the house were wide open on a cold windy day." [177] This led them to believe that the ether was being used. [178] This information was used to obtain a warrant to search the aforementioned house.[179] The question before the Court was whether the instillation and use of the beeper constituted a search and seizure and therefore made the Fourth Amendment applicable.

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[168] *United States v. Karo et al*. 468 U.S. 705 (1984).
[169] *Karo* 468 U.S. at 708.
[170] *Karo* 468 U.S. at 708.
[171] *Karo* 468 U.S. at 708.
[172] *Karo* 468 U.S. at 708.
[173] *Karo* 468 U.S. at 708.
[174] *Karo* 468 U.S. at 708.
[175] *Karo* 468 U.S. at 708.
[176] *Karo* 468 U.S. at 709.
[177] *Karo* 468 U.S. at 710.
[178] *Karo* 468 U.S. at 710.
[179] *Karo* 468 U.S. at 710.
Karo sought to address two of the question, which the Court failed to answer in its decision in *Knotts* 460 U.S. at 285. These questions were "whether installation of a beer in a container of chemicals with the consent of the original owners constitutes a search and seizure" and whether monitoring of a beeper falls within the ambit of the Fourth Amendment when it reveals information that could not have been obtained through visual surveillance." This paper, however, considering its narrow scope, will only address the question of whether the instillation of the beeper constituted a search and seizure.

The Court held that the instillation of the beeper did not constitute a search and seizure and as such the Fourth Amendment was not applicable. [180] The Court noted that the "mere transfer to Karo, of a can containing an unmonitored beeper infringed no privacy interest." [181] This was based on the fact that "the can into which the beeper was placed belonged at the time to the DEA, and by no stretch of the imagination could it be said that respondents then had any legitimate expectation of privacy in it." [182] Additionally, the Court held that the transfer of the container did not constitute a seizure because a "seizure" of property occurs when "there is some meaningful interference with an individual's possessory interests in that property." [183] As the beeper was placed on the container prior to the petitioner buying the container the Court reasoned that did not infringe upon any individual's possessory interests. [184] Since there was neither a search nor a seizure, the Fourth Amendment was not applicable.

This holding followed the trend set forth in *Katz.* The Court's decision re-enforced the principle that the threshold for determining an unreasonable search and seizure was based, primarily, on an individual's intangible "expectation of privacy" rather than their an infringement on an individual's tangible "papers, houses and effects." [185] Although the Court discussed the argument by the petitioner, that his right to be "secure in this property" was violated, the Court noted that the question of "the existence of a physical trespass [was] only marginally relevant to the question of whether the Fourth Amendment has been violated." [186] Instead, the Court chose to place a greater emphasis on whether the petitioner's privacy had been

[180] *Karo* 468 U.S. at 725.
[181] *Karo* 468 U.S. at 712.
[182] *Karo* 468 U.S. at 711.
[183] *Karo* 468 U.S. at 712.
[184] *Karo* 468 U.S. at 712.
[185] U.S. Const. amend. IV.
[186] *Karo* 468 U.S. at 712.

violated. [187] As such, the Court seems to dismiss the applicability of the *Olmstead* framework and rely entirely on the *Katz* framework in order to determine if the Fourth Amendment is applicable.[188]

California v. Ciraolo 476 U.S. 207 (1986) was decided by the Court in 1985. [189] This case again uses the *Katz* test to determine if the Fourth Amendment is applicable. [190] In *Ciraolo*, the police received an anonymous tip that marijuana was growing the respondent's backyard. Surrounding the backyard was a six-foot outer fence and a ten-foot inner fence that prohibited the police from viewing what was in the back yard. [191] Later that day, an officer "secured a private plane and flew over [the] respondent's house at an altitude of 1,000 feet." [192] From the plane, the officers noted that marijuana was growing in a "15 by 25 foot plot in [the] respondent's year." [193] The police photographed this, and used this as evidence to obtain a search warrant. The question before the Court was whether the use of a plane for observation constituted a search of the property. [194]

The Court held that the use of a plane for aerial observation does not constitute search and therefore that the Fourth Amendment was not applicable. [195] The Court held this based on the idea set forth in *Katz*.[196] In particular, the Court noted that the police did not infringe upon the individual's "reasonable expectation to privacy" and therefore the Fourth Amendment was not

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[187] *Karo* 468 U.S. at
[188] *Olmstead*, 277 U.S. at 466.
Katz 389 U.S. at 359 - 360.
[189] *California v. Ciraolo* 476 U.S. 207 (1986).
[190] *Katz 389 U.S.* at 359 - 360.
[191] *Ciraolo* 476 U.S. at 209.
[192] *Ciraolo* 476 U.S. at 209.
[193] *Ciraolo* 476 U.S. at 209.
[194] *Ciraolo* 476 U.S. at 209.
[195] *Ciraolo* 476 U.S. at 209.
[196] *Ciraolo* 476 U.S. at 209.

applicable.[197] In this case, the Court noted that "any member of the public flying in this airspace who glanced down could have seen everything that these officers observed."[198] Because it could be seen from the air, the Court found that the respondent was exposing the marijuana to the public.[199] Thus, based on the holding in Katz which stipulates that "what a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection," the Court found that aerial photography did not constitute a violation of the Fourth Amendment.[200] Therefore, the Fourth Amendment was not applicable. An additional case that used aerial photography to obtain information was *Dow Chemical Co. v. United States* 476 U.S. 227 (1986).

The Court decided *Dow Chemical Co.* in 1986. Dow Chemical was a company that operated 2,000-acre chemical company.[201] Environmental Protection Agency (EPA) officials, with the consent of Dow Chemical, initially conducted an on-site inspect of two of the many power plants that were located on the complex.[202] The EPA requested a second inspection, however, Dow Chemical denied the request. Although the EPA could have obtained an administrative search warrant, they decided to use a commercial aerial photographer to take photographs of the facility from a variety of altitudes.[203] The photographs were "essentially like those commonly used in mapmaking" and therefore provided limited details.[204] Despite this, however, the petitioner, Dow Chemical, claimed that the use of an airplane to take photographs of the facility constituted a search and was unreasonable.

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[197] *Katz 389 U.S.*at 359-360.
[198] *Ciraolo* 476 U.S. at 214 – 215.
[199] *Ciraolo* 476 U.S. at 210.
[200] *Ciraolo* 476 U.S. at 213.
[201] *Dow Chemical Co. v. United States* 476 U.S. 227, 235 (1986).
[202] *Dow Chemical Co.* 476 U.S. at 242.
[203] *Dow Chemical Co.* 476 U.S. at 242.
[204] *Dow Chemical Co.* 476 U.S. at 231.

The Court disagreed. They held that the taking of aerial photographs by the EPA was not a search that was prohibited by the Fourth Amendment.[205] At the core of the Court's holding was the idea that the Government has a

> greater latitude to conduct warrantless inspections of commercial property" because "the expectation of privacy that the owner of commercial property enjoys in such property differs significantly from the sanctity accorded an individual's home.[206]

Based on this logic, the Court held that the 2,000 acres and the facilities, which were scattered through it, were not considered to be curtilage.[207] As such, the Court held that the use of aerial photographs, although " they undoubtedly give EPA more detailed information than naked-eye views […did] not give rise to constitutional problems."[208] Thus, the use of the aerial photography for the purpose of inspecting a commercial business was not considered to be a search.[209] This holding reinforces that precedent set forth by *Katz* by using the "a reasonable expectation of privacy" as a benchmark in determining if the search was prohibited by the Fourth Amendment.[210]

In *Kyllo v. United States,* 533 U.S. 27 (2001), the Court answered the question of whether the use of a thermal imagine device, which was aimed at a house, consisted a search.[211] In *Kyllo,* the Department of the Interior agents suspected the petitioner, Danny Kyllo, of growing marijuana in his house. Noting that in order to grow marijuana indoors requires the use of heat

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[205] *Dow Chemical Co.* 476 U.S. at 231.
[206] *Dow Chemical Co.* 476 U.S. at 237.
[207] *Dow Chemical Co.* 476 U.S. at 239; Curtilage is defined as "the area, usually enclosed, encompassing the grounds and buildings immediately surrounding a home that is used in the daily activities of domestic life." *Curtilage.*US Legal.com (March 20, 2013, 12:00 pm), http://legal-dictionary.thefreedictionary.com/curtilage.
[208] *Dow Chemical Co.* 476 U.S. at 239.
[209] *Dow Chemical Co.* 476 U.S. at 239.
[210] *Katz 389 U.S.* at 359 - 360.
[211] *Kyllo v. United States* 533 U.S. 27, 29 (2001).

lamps the agents obtained a thermal imaging device.[212] Sitting across the street, the agents scanned the house using the device. Although the device took only a few minutes, the results indicated that "roof over the garage and a side wall of the petitioner's home were relatively hot compared to the rest of the home and substantially warmer than neighboring homes."[213] Based on this information, the agents obtained a warrant to search the home.[214] This search revealed that the petitioner was in fact, growing marijuana.[215] The petitioner challenge the use of thermal imaging device to scan his house, claiming that it violated his Fourth Amendment right of protection against unwarranted searches.

The Court found that the use of the thermal imaging device constituted a search and therefore the Fourth Amendment was applicable. The Court, recalling *Katz,* noted "a Fourth Amendment search occurs when the government violates a subjective expectation of privacy that society recognizes as reasonable."[216] In this case, the Court held that society would not accept the use of a thermal imaging device on an individual's house as "reasonable."[217] They hold this based on the fact that the thermal imaging device "is not in the general public use" and is available predominately to law enforcement.[218] The use of this device allows for the an exploration of "details of the home that would previously have been unknowable without physical intrusion."[219] As such, this fails the two-part test set forth in *Katz* and therefore cannot be considered to be "reasonable" in society. Thus, the Court reasoned that the use of thermal imaging devices for "surveillance purposes is a 'search' and is presumptively unreasonable

[212] *Kyllo* 533 U.S. at 29.
[213] *Kyllo* 533 U.S. at 30.
[214] *Kyllo* 533 U.S. at 30.
[215] *Kyllo* 533 U.S. at 30.
[216] *Kyllo* 533 U.S. at 33.
[217] *Katz 389 U.S.* at 359 - 360.
[218] *Kyllo* 533 U.S. at 34.
[219] *Kyllo* 533 U.S. at 40.

without a warrant."[220] The holding in *Kyllo* followed the long standing trend of relying on the precedent set forth in *Katz* in order to determine if the Fourth Amendment was applicable.[221] This can be seen in the fact that the Court used the intangible idea of an "expectation of privacy," as a benchmark to determine whether a violation of the Fourth Amendment had occurred. [222]

An analysis of the *Olmstead* and *Katz*, and cases following their holdings demonstrate that the 20th and early 21st century was largely characterized by two ways of interpreting the Fourth Amendment. [223] Cases, which were adjudicated prior to 1967 followed the precedent set forth in *Olmstead.*[224] This precedent set the standard, with regards to the use of technology, that in order for the Fourth Amendment to be applicable there must be a tangible infringement upon an individual's "papers, houses, or effects."[225] Post 1967, the Courts tended to follow a looser interpretation of the Fourth Amendment based on the precedent set forth in *Katz.*[226] This stipulated that the Fourth Amendment could be considered applicable when the use of technology intruded upon an individual's "reasonable expectation to privacy."[227] The reason for the use of *Katz* instead of *Olmstead* during the later 20th century was the fact that initially the Court believed that the ideas set forth in *Olmstead* and *Katz* directly opposed each other.[228] In fact, in *Kaiser v. United States,* which was decided in 1969, after the *Katz* decision, the Court noted that, "*Olmstead* […] was overruled by *Katz*."[229] Even in the *Kyllo* decision the Court

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[220] *Kyllo* 533 U.S. at 40.
[221] *Kyllo* 533 U.S. at 40.
[222] *Katz 389 U.S.* 359 - 360.
[223] *Olmstead*, 277 U.S. at 466
Katz 389 U.S. at 359-361.
[224] *Olmstead*, 277 U.S. at 466. In particular, this can be seen in the cases: *Goldman v. United States,* 316 U.S. 129 (1942)*, On Lee v. United States,* 343 U.S. 747 (1952)*, Silverman v. United States,* 365 U.S. 505 (1961).
[225] U.S. Const. amend. IV.
[226] *Katz 389 U.S.* at 359 - 360.
[227] *Katz 389 U.S.* at 359 - 360.
[228] *Olmstead*, 277 U.S. at 466.
[229] *Kaiser* 394 U.S. at 282.

reinforced that "*Olmstead* […] was overruled by *Katz.*"[230] In the decision the Court noted that "a Fourth Amendment search does not occur—even when the explicitly protected location of a house is concerned—unless "the individual manifested a subjective expectation of privacy in the object of the challenged search," and "society [is] willing to recognize that expectation as reasonable."[231] The decision in *Kaiser* and *Kyllo* are significant because they underscore the fact that for the majority of the 20th century the Court believed that the ideas in *Olmstead* and *Katz* were contradictory in nature.[232] However, *United States v. Jones* 132 S.Ct. 945 (2012), which was decided in 2012, demonstrates that as technology become more advanced the tests set forth in *Katz* and *Olmstead* are no longer necessarily contradictory in nature.[233] In fact, it can be beneficial to look at and apply both tests in order to determine if the Fourth Amendment is applicable.

In *Jones*, the government obtained a search warrant, which permitted them to install a Global-Positioning- System (GPS) on the car of the respondent.[234] The agents, however, failed to attach the GPS to the car within the allotted time period, but decided to attach the device despite the lack of an existing warrant.[235] The agents attached the GPS to the underside of the car.[236] The GPS was used for twenty-eight days.[237] The government notes that they only used the evidence that was obtained by the GPS while the respondent was driving on public roads.[238] Based on the information, which the GPS provided the agents were able to arrest Jones on

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[230] *Kaiser* 394 U.S. at 282.
[231] *Katz* 389 U.S. at 359 - 360.
Kyllo 533 U.S. at 33.
[232] *Kaiser* 394 U.S. at 282.
[233] *United States v. Jones* 132 S.Ct. 945, 948 (2012).
[234] *Jones* 123 S. Ct. at 948.
[235] *Jones* 123 S. Ct. at 949.
[236] *Jones* 123 S. Ct. at 948.
[237] *Jones* 123 S. Ct. at 948.
[238] S *Jones* 123 S. Ct. at 950.

charges of drug trafficking conspiracy.[239] The question before the Court was whether by attaching the device to the undercarriage of the car was the Fourth Amendment applicable.[240]

The Court held that the Fourth Amendment was applicable because the attachment of the GPS constituted a search.[241] The Court reasoned "the Government physically occupied private property for the purposes of obtaining information" and therefore can be considered a search.[242] This holding was based on the precedent established in *Entick* and reaffirmed by the trend established in *Olmstead.*[243] This decision marked a point of departure from the traditional *Katz* framework that was used to establish Fourth Amendment applicability.[244]

In the *Jones* majority opinion the Court relies on the framework set forth by both *Olmstead* and *Katz* in order to determine if the Fourth Amendment was applicable.[245] This was based on the fact that the Court saw *Katz* as limiting in nature when it came to determining the applicability of the Fourth Amendment when technology was involved.[246] In *Jones,* the Court held that Jones had no "reasonable expectation of privacy" because his Fourth Amendment rights [did] not fall into the *Katz* formulation because "the area of the Jeep accessed by Government agents [its underbody) and […] the locations of the Jeep on public roads, […] was visible to all."[247] Using solely the *Katz* framework fails to address whether on not the Fourth Amendment was actually applicable.[248] In fact, if *Katz* had been the sole test used to determine if the Fourth Amendment was applicable, the Court would have determined that because the respondent had

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[239] *Jones* 123 S. Ct. at 954.
[240] *Jones* 123 S. Ct. at 954.
[241] *Jones* 123 S. Ct. at 955.
[242] *Jones* 123 S. Ct. at 949.
[243] *Olmstead*, 277 U.S. at 466.
See *The Constitution of the United States of America: Analysis and Interpretation Id* at 1199.
[244] *Jones* 123 S. Ct. at 950.
[245] *Olmstead*, 277 U.S. at 466.
[246] *Katz 389 U.S. at* 359 - 360.
[247] *Jones* 123 S. Ct. at 950.
Katz 389 U.S. at 359 - 360.
[248] *Jones* 123 S. Ct. at 952.

no "reasonable expectation of privacy," there was no search and seizure and so consequently the Fourth Amendment was not applicable.[249] However, by also asking the question of whether or not the Government also infringed the individual's tangible property, through the application of the *Olmstead* test, the Court was better able to determine if the Fourth Amendment was applicable.[250] In particular, because in this age of modern and emerging technologies it is often difficult to determine the exact scope of an individual's Fourth Amendment rights.

An examination of the aforementioned cases demonstrates that over the years, as technology has evolved the way in which to test if the Fourth Amendment is applicable has evolved as well. This evolution, however, is not a bad thing. In fact, numerous decisions have highlighted the need for the Court's decision to evolve as technology does. The first mention of the need for the Court to take into account technology can be read in Justice Brennan's dissent in *Lopez v. United States,* 373 U.S. 427 (1963).[251] In his dissent, Brennan notes, "the Constitution would be an utterly impractical instrument of contemporary government if it were deemed to reach only problems familiar to the technology of the eighteenth century," as such, Justice Brennan argues, the Court must advance the applicability of the Fourth Amendment as technology evolves.[252] The Court in *Kyllo v. United States* 533 U.S. 27 (2001) also acknowledged that "it would be foolish to contend that the degree of privacy secured to citizens by the Fourth Amendment has been entirely unaffected by the advance of technology."[253] Although these two instances represent only a small number of times in which the Court has directly mentioned the impact that technology is having on the applicability of the Fourth

[249] *Katz 389 U.S. at* 359 - 360.
Jones 132 S. Ct. at 948.
[250] *Olmstead*, 277 U.S. at 466.
[251] *Lopez* 373 U.S. at 459.
[252] *Lopez* 373 U.S. at 459.
[253] *Kyllo* 533 U.S. at 33 - 34.

Amendment, it becomes clear that this is a challenge which has not only faced the Court from the early 20th century but will continue to face the Court in the foreseeable future.[254] The question, however, is how best to ensure that in an age of technology the Fourth Amendment remains applicable. The answer is simple: the Court must evolve.

This evolution, however, does not mean overturning the decisions made in *Katz* or in *Olmstead.* Rather, as seen in concurring opinion in *Jones*, the test to determine the applicability of the Fourth Amendment should evolve to encompass the precedent set forth in *Katz* and *Olmstead.*[255] Although, they have been previously seen as contradictory in nature, the fact is that they provide protections, which are incredibly important in ensuring that the rights enshrined in the Fourth Amendment are upheld. By using both tests the Court ensures that both an individual's tangible and intangible Fourth Amendment rights are protected. While the *Jones* test, is sufficient for now, the question, is how the test must evolve in the future. For, as technologies evolve, the requirement of either an infringement on an individual's tangible "persons, papers, houses, or effects" or an invasion of an individual's "reasonable expectation of privacy" will become obsolete.[256]

In fact, both Justice Sotomayor and Justice Alito, in their concurrences, point out, technology is rapidly moving towards the point where the *Olmstead* physical intrusion test will no longer be sufficient.[257] In fact, in his concurring opinion Alito notes:

> physical intrusion is now unnecessary to many forms of surveillance. […] With increasing regularity, the Government will be capable of duplicating the monitoring understand in this case by enlisting factory – or owner

[254] Orin S. Kerr. *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution.* 102 Mich. L. Rev. 801- 888 (2004).
[255] *Jones* 132 S. Ct. at 954 - 965.
[256] U.S. Const. amend. IV.
Katz 389 U.S. at 359-360.
[257] *Jones* 132 S. Ct. at 954 - 965.

> installed vehicle tracking devices or GPS-enabled smartphones. [258]

From this quotation it becomes apparent that the *Olmstead* test of requiring physical intrusion for the Fourth Amendment to be applicable, will soon become obsolete with regards to decision of whether the Fourth Amendment is applicable. [259] This is particularly problematic because as was seen in the case of *Jones,* the *Katz* test is often insufficient or too subjective to determine whether an individual's "reasonable expectation to privacy" have been infringed upon.[260]

The reason why the *Katz* test, in the future, will also fail to be an efficient way to establish if the Fourth Amendment is applicable is that over the past five years, technology has evolved at an accelerated rate. [261] People have GPS devices on their cellphones and cars. People choose to use technologies, which can actively record their conversation or leave a digital footprint. [262] Considering the newness of these technologies and the ambiguity of the extent to which these new technologies invade an individual's privacy, it becomes difficult to apply the *Katz* test because society's "reasonable expectation of privacy" has not clearly been defined. [263]

In the concurring opinion, written by Justice Alito, it becomes apparent that another issue that has emerged with regards to determining whether the use of an emerging technology is reasonable is how long that device collects information. [264] Alito posits that the longer the device is used to collect information, the more likely people are going to see that as unreasonable. [265] The problem, however, with this test, is that what is too long? How long does a GPS device have to be attached to a car before it is considered to violate an individuals' "reasonable expectation of

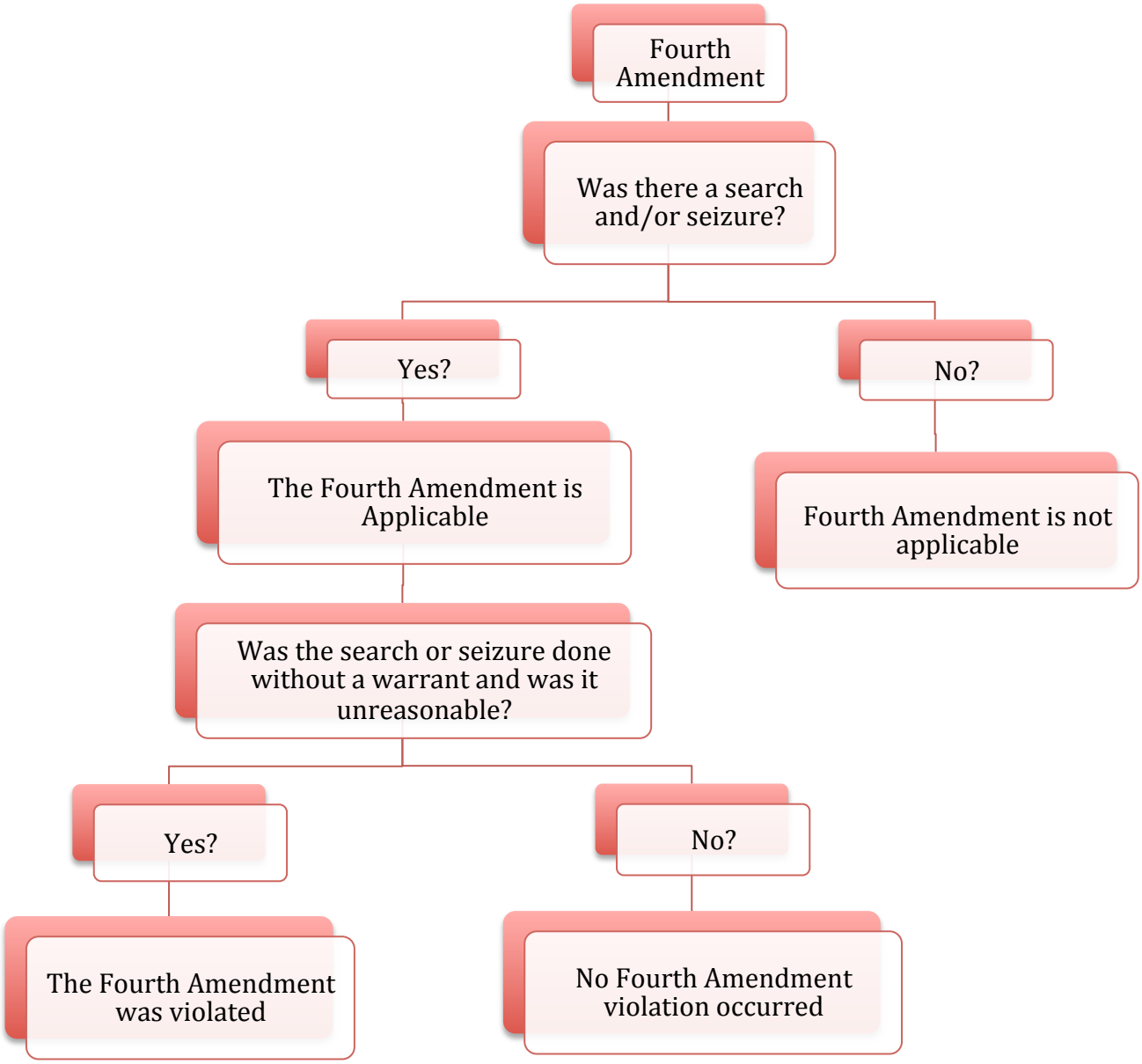
[258] *Jones* 132 S. Ct. at 955.
[259] *Olmstead*, 277 U.S. at 466.
[260] *Katz 389 U.S. at* 359-360.
[261] Orin S. Kerr. *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution.* 102 Mich. L. Rev. 801-888 (2004).
[262] *Jones* 132 S. Ct. at 955.
[263] *Katz 389 U.S.* at 359-361.
[264] *Jones* 132 S. Ct. at 963-964.
[265] *Jones* 132 S. Ct. at 963-964.

privacy."[266] The Court has set no threshold number of days, and it is unlikely that the Court will do so. The reason for this is two fold; first, is that the public's expectation of privacy is constantly evolving. A bright line rule would fail to take this evolution into consideration. Second, determining a Fourth Amendment's applicability is often extremely fact intensive. Setting a bright line rule would limit the ability of the Court to take these facts into consideration, and thus would pose the potential to unduly hinder the work of law enforcement. Thus, it appears that the *Katz* "reasonable expectation of privacy" test might have become too subjective in this age of technology. [267]

Although the current test for determining Fourth Amendment applicability is sufficient, as highlighted by the opinions of Alito and Sotomayor, this test will not be applicable indefinitely. As such, the Court must come up with a new test. This new test must not only take into account the new definition of privacy that is beginning to emerge, but also be able to address whether or not there has been a physical intrusion by the government. Only through the creation of a new test, will the Court be able to sufficiently strike a favorable balance between the rights of an individual to be "secure in their persons, papers, houses and effects" and for government and law enforcement officials to effectively carry out their jobs. [268]

[266] *Katz 389 U.S.* at 359-360.
[267] *Katz 389 U.S.* at 359-360.
[268] U.S. Const. amend. IV.

Figure 1: Determining Fourth Amendment Applicability



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