CITED TODAY, GONE TOMORROW: THE PROBLEM OF DISAPPEARING INTERNET SOURCES CITED IN SUPREME COURT DECISIONS*

*Hilton A. Lazo***

ABSTRACT

Citations occupy a central role in judicial adjudication especially in a legal system that adheres to *stare decisis*, such as the Philippine legal system. Citations connect arguments to authorities that support them. They aid readers in locating primary and secondary legal sources. This significance accorded to citations in legal argumentation requires that the sources they point to remain perpetually available. When a source disappears, readers will never be able to examine its relevance, veracity, and quality. This problem of disappearing sources particularly afflicts cited online content. Unlike print sources, internet content suffers from volatility. What is worrisome is that over the years, the Supreme Court has increasingly cited internet sources in its decisions. This empirical study documents how pervasive the problem is. The results show that the majority of internet sources cited in decisions promulgated from 1997 to 2012 have all disappeared. In addition, they reveal that the older the citations are, the more probable it is that the internet sources they point to have disappeared. To address this problem, several archiving options are presented, along with their advantages and disadvantages.

---

* *Cite as* Hilton A. Lazo, *Cited Today, Gone Tomorrow: The Problem of Disappearing Internet Sources Cited in Supreme Court Decisions*, 91 PHIL. L.J. 115, (page cited) (2018).

** Supreme Court. J.D. (Evening Program), University of the Philippines (2018, *expected*). B.S. Physics, University of the Philippines (2012). Violeta Calvo Drilon-ACCRALAW Scholar for Legal Writing (2015). Chair, PHILIPPINE LAW JOURNAL (2014-2015).

I would like to thank my adviser, Professor Solomon F. Lumba, without whose invaluable guidance and openness to an unorthodox research topic this paper would not have seen the light of the day.

INTRODUCTION

Citations form the bedrock of judicial opinions.[1] They connect arguments to authorities that support them.[2] They aid courts in fulfilling their constitutional duty to support their decisions with factual and legal bases.[3]

Citations find even greater relevance in a legal system that adheres to *stare decisis*, such as the Philippine legal system.[4] They help connect a previous case to a subsequent one,[5] making it easier to trace judicial doctrines. Ultimately, citations assist courts in evolving and reexamining precedents by performing two functions.[6] First, they "provide enough information about a reference to give the reader a general idea of its significance and whether it's worth looking up."[7] Second, they "enable the reader to find the reference if he decides that he does want to look it up."[8]

This significance accorded citations in legal argumentation[9] requires that the sources they point to remain perpetually available.[10] When a source disappears, readers will never be able to examine its relevance to the citing case as well as its veracity and quality.[11] The argument it once supported will appear suspect.[12] And if this argument occupies a central place in the

---

[1] Raizel Liebler & June Liebert, *Something Rotten in the State of Legal Citation: The Life Span of a United States Supreme Court Citation Containing an Internet Link (1996-2010)*, 15 YALE. J.L. & TECH 273, 274 (2013) [hereinafter "Leibler & Liebert"].

[2] Jonathan Zittrain, Kendra Albert, & Lawrence Lessig, *Perma: Scoping and Addressing the Problem of Link and Reference Rot in Legal Citations*, 127 HARV. L. REV. FORUM 176, 176 (2014) [hereinafter "Zittrain, et al."].

[3] CONST. art. 8, § 14.

[4] *See* PACIFICO AGABIN, MESTIZO: THE STORY OF THE PHILIPPINE LEGAL SYSTEM (2011); Theodore O. Te, *Stare (In)Decisis: Some Reflections on* Stare Decisis *in the Wake of the Judicial Flip-Flopping in* League of Cities v. COMELEC *and* Navarro v. Ermita, 85 PHIL. L.J. 785 (2011); Cesar Lapuz Villanueva, *Comparative Study of the Judicial Role and its Effect on the Theory on Judicial Precedents in the Philippine Hybrid Legal System*, 65 PHIL. L.J. 42 (1990).

[5] *See, e.g.,* Frank B. Cross, James F. Spriggs II, Timothy R. Johnson & Paul J. Wahlbeck, *Citations in the US Supreme Court: An Empirical Study of their Use and Significance*, 2010 U. ILL. L. REV. 489, 490; and James H. Fowler & Sangick Jeon, *The authority of Supreme Court precedent*, 30 SOCIAL NETWORKS 16 (2008).

[6] Richard A. Posner, *The Bluebook Blues (reviewing Harvard Law Review Association, The Bluebook: A Uniform System of Citation (19th ed., 2010))*, 120 YALE L.J. 852 (2011).

[7] *Id.*

[8] *Id.*

[9] *See* Friedrich Schauer, *Authority and Authorities,* 94 VA. L. REV. 1931 (2008).

[10] *See* Leibler & Liebert, *supra* note 1, at 275-276.

[11] *See* Zittrain, et al., *supra* note 2, at 176.

[12] *Id.*

disposition of a case, the whole decision will lose its authority and timelessness.

The problem of disappearing sources particularly afflicts online content.[13] Unlike print sources, which can be archived in libraries and repositories and exist in multiple copies, internet content suffers from volatility.[14] It can be easily modified or even removed.[15]

Yet, despite these shortcomings of internet sources, the Supreme Court has increasingly cited them in its opinions. Because of this growing reliance on internet sources, the problem of their subsequent disappearance now pervades Supreme Court decisions.

This paper examines the prevalence of missing online content cited in Supreme Court decisions, a problem which has not received any attention from Filipino scholars. While studies on citation practices abound in American legal scholarship,[16] no similar studies exist in the Philippines. This is the first study that will review the availability of internet sources in the opinions of the Supreme Court.

This paper is structured as follows: Part I traces the rise in citations to internet sources in Supreme Court decisions. Part II explains the effect of disappearing internet sources in judicial opinions. Part III discusses the methodology, scope, and results of the study. Finally, Part IV presents proposals to mitigate or eliminate the problem of disappearing online sources in judicial opinions.

I. CITATIONS TO INTERNET SOURCES IN SUPREME COURT DECISIONS

The 1997 case of *Garcia-Rueda v. Pascasio*[17] marks the first time the Supreme Court cited an internet source. Only three years have passed since the Philippines became connected to the internet in 1994.[18] In *Garcia-Rueda*,

---

[13] *Id.* at 176-177.

[14] *Id.*

[15] *Id.*

[16] *See, e.g.,* Leibler & Liebert, *supra* note 1 and Zittrain, et al., *supra* note 2.

[17] G.R. No. 118141, 278 SCRA 769, Sept. 5, 1997.

[18] *See* Miguel A. L. Paraz, *Developing a Viable Framework for Commercial Internet Operations in the Asia-Pacific Region: The Philippine Experience*, PROC. OF THE SEVENTH ANNUAL CONFERENCE OF THE INTERNET SOCIETY (1997) *at* http://www.isoc.org/inet97/proceedings/E6/E6_1.HTM [https://perma.cc/C6PP-E75P].

Justice Flerida Ruth Romero quoted an online material to provide a brief background on what medical malpractice is and what is required to litigate cases on the subject matter successfully.[19] In particular, *Garcia-Rueda* established that to prove medical negligence, the plaintiff must show four things—duty, breach, injury, and proximate causation:

> In its simplest terms, the type of lawsuit which has been called medical malpractice or, more appropriately, medical negligence, is that type of claim which a victim has available to him or her to redress a wrong committed by a medical professional which has caused bodily harm.
>
> In order to successfully pursue such a claim, a patient must prove that a health care provider, in most cases a physician, either failed to do something which a reasonably prudent health care provider would have done, or that he or she did something that a reasonably prudent provider would not have done; and that failure or action caused injury to the patient.[20]

In addition, *Garcia-Rueda* explained that proximate causation requires inquiry into two things: (1) whether the doctor's actions caused harm to the patient; and (2) whether the doctor's actions were the proximate cause of the patient's injury.[21]

This discussion on medical negligence eventually made *Garcia-Rueda* an oft-cited case in torts jurisprudence. Subsequent medical negligence cases have depended on the doctrine reiterated in *Garcia-Rueda*.[22]

Following *Garcia-Rueda*, the number of citations to online sources has increased over the years. In 1998, then-Justice Reynato Puno cited four internet sources in his *ponencia* in *Ople v. Torres*.[23] *Ople* grappled with the constitutionality of establishing a national computerized identification system. Justice Puno cited three internet sources to give a brief background

---

[19] *Id.* at 778.

[20] *Id.*, *citing* http://medicalmal.com/neglig.html (last visited Aug. 22. 2017).

[21] *Id.*

[22] *See, e.g.,* Borromeo v. Family Care Hospital, Inc., G.R. No. 191018, 781 SCRA 527, Jan. 25, 2016; Casumpang v. Cortejo, G.R. No. 171127, 752 SCRA 379, Mar. 11, 2015; Aquino v. Heirs of Raymunda Calayag, G.R. No. 158461, 678 SCRA 609, Aug. 22, 2012. *See also* Darwin P. Angeles, *Dissecting Philippine Law and Jurisprudence on Medical Malpractice*, 85 PHIL. L.J. 896 (2011); Michelle M.P. Sabistana, *Exploring the Option of Professional Self-Regulation in Philippine Medical Negligence Cases*, 85 PHIL. L.J. 949 (2011); Joseph Joemer C. Perez, Ronald D. Policarpio, & Anna Nerissa B. Paz, *Medical Malpractice Law in the Philippines: Present State and Future Directions*, 78 PHIL. L.J. 687 (2004).

[23] G.R. No. 127685, 293 SCRA 141, July 23, 1998.

on biometrics and biometric devices,[24] and another one to support his claim that the internet is not limited by a particular geographical location.[25] These online sources buttressed Justice Puno's opinion that a national computerized identification system would impinge on the citizens' right to privacy. His discussion on privacy made *Ople* a landmark decision and was later cited in subsequent cases.[26]

In 2000, the Supreme Court cited only one internet source in *University of the East v. Jader*.[27] This case involves an action for damages filed by a student against his university for erroneously including him in the list of graduates despite not being able to complete one required course. As a result, he failed to take the bar exam that year. Justice Consuelo Ynares-Santiago cited the Supreme Court's own website to confirm that the student is not yet a member of the bar because he failed to take the bar exam in the first place.

From 2001 to 2002, the Supreme Court did not cite internet sources in its opinions. However, starting 2003, this trend was reversed. The Court cited eight internet sources in four cases. The most significant of which is *People v. de Jesus*,[28] which cited five internet sources.

In *People v. de Jesus*, the victim, assisted by her mother, accused her father of rape when she was still one year and nine months old. At the time she testified, the victim was already six years of age. On the strength of the victim's testimony, the trial court convicted de Jesus of statutory rape.

On appeal, however, the Supreme Court acquitted the accused on the ground that the victim had no independent recollection of the event. The Court, through Justice Ma. Alicia Austria-Martinez, relied on internet sources to establish that a person's recollection of memories under the age of three is not at all reliable:

---

[24] *Id.*, nn.46, 51.

[25] *Id.*, n.84.

[26] *See, e.g.*, Disini v. Secretary of Justice, G.R. No. 203335, 716 SCRA 237, Feb. 18, 2014; Hing v. Choachuy, Sr., G.R. No. 179736, 699 SCRA 667, June 26, 2013; Fernando v. St. Scholastica's College, G.R. No. 161107, 693 SCRA 141, Mar. 12, 2013; Gamboa v. Chan, G.R. No. 193636, 677 SCRA 385, July 24, 2012. *See also* Oscar Franklin B. Tan, *Articulating the Complete Philippine Right to Privacy in Constitutional and Civil Law: A Tribute to Chief Justice Fernando and Justice Carpio*, 82 PHIL. L.J. 78 (2008).

[27] G.R. No. 132344, 325 SCRA 804, Feb. 17, 2000.

[28] G.R. No. 127878, 407 SCRA 265, July 25, 2003.

> The presumption of innocence in favor of appellant also finds support in the theory of infantile amnesia. The theory posits that there is a general inability of people to remember specific events from the early years of their lives. Psychologists have concluded that there are very few memories under the age of 3, and the average age of the earliest memory reported is 3 1/2.[29] Sigmund Freud, who first stated the theory, claims that early childhood memories, particularly sexual ones, are repressed because they are too frightening and distasteful to the child to be preserved as such. These types of memories are replaced by "screen memories" of ordinary events that are less threatening.[30]
>
> While it is recognized that pseudomemories of abuse are possible, the processes underlying accurate and inaccurate recollections of childhood abuse are largely unknown. The most frequently reported factor related to recall was being in therapy.[31] In one case,[32] a U.S. court found the repressed memory syndrome reliable and admissible. The plaintiff therein was found to have no memory of sexual abuse by her cousin until after 45 years after the incident and during psychotherapy.
>
> This notwithstanding, critics are still reluctant to accept the idea which they consider unreliable, since recovered memories are too often obtained while the subject is under hypnosis and the therapist is in control, directing the client what to visualize and what to explore. They say that controls should be put in place to ensure the use of non-suggestive techniques by unbiased clinicians when "recovering memories."[33]

After 2003, the Supreme Court's reliance on internet sources has steadily increased. Figure 1 demonstrates this trend. It shows the number of cases that cited at least one internet source in each year from 1997 to 2012.

---

[29] *Id.*, n.39 *citing* http://pages.slc.edu/~ebj/iminds01/notes/L8-infantile-amnesia/L8-inf-amn.html.

[30] *Id.*, n.40 *citing* http://home.cc.umanitoba.ca/~mdlee/Teaching/Lecture6.htm and http://www.birthpsychology.com/birthscene/intelligent2.html.

[31] *Id.*, n.41 *citing* http://ist-socrates.berkeley.edu/~kihlstrm/argument.htm and http://www.brown.edu/Departments/Taubman_Center/Recovmem/reviewx.htm.

[32] *Id.*, n.42 *citing* Shahzade vs. Gregory, 923 F.Supp. 286.

[33] *Id.*, n.43 *citing* http://www.psychology.uwaterloo.ca/people/mross/Why%20Recovered%20Memories%20.

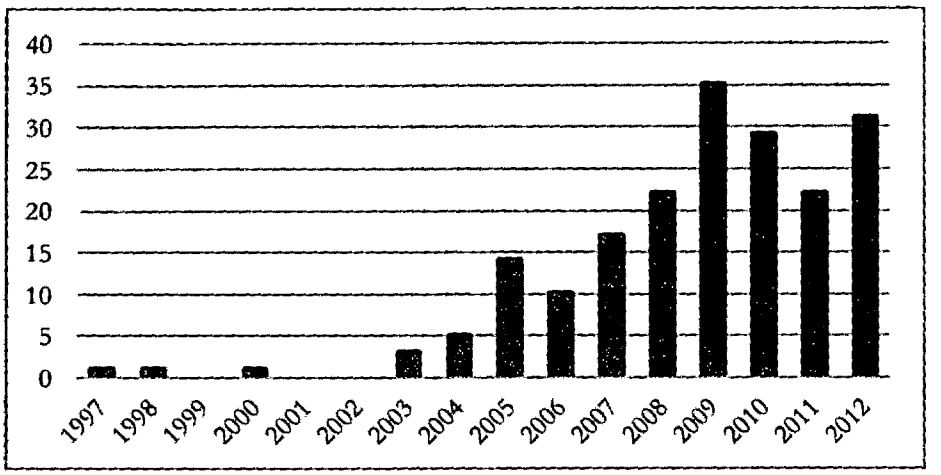

FIGURE 1. The number of cases that cited internet sources from 1997 to 2012.

As discussed earlier, from 1997 to 2000, the Court hardly cited any internet sources. In subsequent years, however, the number of online sources cited per case began to increase and starting in 2003, that number averaged at 2.2 internet sources cited for each case studied.

This trend may be attributed to the increasing accessibility of the internet even for ordinary users. The introduction of new internet technologies has also made it possible for service providers to offer faster internet connection at a lower cost than previously possible.

This development led the Court to include internet sources in its citation manual. The Manual for Judicial Writing, which was released in 2005, dedicated a separate segment on internet sources.[34] The Manual provides that the use of online sources must be made only if the printed material is not available in the Philippines.[35] It also requires all citations to internet sources to be appended with the Uniform Resource Locator (URL) as well as the date the website was last visited.[36] The URL is the address assigned to a website or online service.[37]

---

[34] SUPREME COURT OF THE PHILIPPINES, MANUAL FOR JUDICIAL WRITING 69-70 (2005).

[35] *Id.*

[36] *Id.*

[37] For a more technical description, *see* Tim Berners-Lee, Larry Masinter, & Mark McCahill, *Uniform resource locators (URL).* No. RFC 1738 (1994) *available at* https://www.rfc-editor.org/rfc/pdfrfc/rfc1738.txt.pdf [https://perma.cc/K3F7-8SQK].

The Manual deserves credit for recognizing the nascent role of internet sources in Supreme Court decisions. Indeed, in 2005 when the Manual was released, the Supreme Court had already cited 50 online sources in 26 cases. However, the Manual proved insufficient in dealing with problems related to internet sources. It failed to address the quality of internet sources cited in judicial opinions, and as the gathered data will show, it also failed to deal with disappearing online sources cited in Supreme Court opinions.

PART II. DISAPPEARING INTERNET SOURCES

The internet is a dynamic system. It constantly changes. New content is added every second; old content is removed in the process; and somewhere in between, some are modified. Indeed, the internet now changes like the proverbial Heraclitian river that precludes one from stepping into the same river twice.[38]

The following section explores why internet content is particularly volatile. In particular, previous studies on the reasons why internet content disappears are reviewed. Studies on the effect of disappearing online sources in scholarly publishing as well as judicial opinions in the United States are likewise discussed.

A. Why internet content disappears

An anthropological study conducted by researchers from the University of Oxford identified three most prevalent causes for the disappearance of online content—neglect, cost, and censorship.[39] Using high profile websites as case studies, the researchers conducted interviews with site owners to determine what exactly caused the demise of their online portal.[40]

The first cause is neglect by the site owner. [41] This can be in the form of non-renewal of domain registration. [42] When this happens, the

---

[38] CHARLES H. KAHN, THE ART AND THOUGHT OF HERACLITUS 168-169 (1979).

[39] Francine Barone, David Zeitlyn, & Viktor Mayer-Schönberger, *Learning from failure: The case of the disappearing Web site*, 20 FIRST MONDAY 5 (2015) *at* http://firstmonday.org/article/view/5852/4456 [https://perma.cc/K26T-3XQE] [hereinafter "BARONE, ET AL."].

[40] *Id.*

[41] *Id.*

[42] *Id.*

content becomes inaccessible.[43] In addition, it leaves the domain open for occupation by other users.[44] Non-renewal of domain registration is the most common reason why internet content disappears.[45]

Sometimes, however, the non-renewal of domain registration is not caused by the site owner's negligence. This leads to the second cause—the increasing financial cost of maintaining a website.[46] The Oxford study found that when a website starts gaining traction, it attracts more and more visitors.[47] With time, the volume of content hosted by the website also increases, fueled by the enthusiastic visits and support among internet users.[48] The simultaneous surge in content and traffic, however, puts a strain on the servers hosting the online content. This in turn increases the cost of maintaining the website,[49] a cost which content owners might not be able to shoulder and thus leads to non-renewal of the domain registration.[50]

In addition to neglect and financial strain, political factors may also have a hand in the disappearance of online information. In particular, the threat of prosecution, censorship, or intentional shutting down by governments of websites for hosting sensitive content has led to the loss of material online.[51]

Aside from these factors identified by the Oxford study, online content may also change or disappear because of the changes made by the site owner.[52] This includes modifications or removal of particular content. Worse, the site owner might restructure the whole website.

Restructuring websites can render the original URLs indicated in the citations defective.[53] For instance, the Supreme Court website has been completely overhauled in the past. Previously, the Supreme Court website may be accessed through the URL *supremecourt.gov.ph* but now it has been changed to *sc.judiciary.gov.ph*. Thus, all links citing the old Supreme Court website have all become defective.

---

[43] *Id.*
[44] *Id.*
[45] *Id.*
[46] *Id.*
[47] *Id.*
[48] *Id.*
[49] *Id.*
[50] *Id.*
[51] *Id.*
[52] Leibler & Liebert, *supra* note 1, at 284.
[53] *Id.*

In summary, websites disappear for a number of reasons. These include negligence by the site owner, the increasing financial cost of maintaining the website, political factors, and modifications made by the site owner. As time goes, a confluence of these factors makes the website more volatile until it finally disappears. And when it disappears, it presents a range of problems for those that depended on the information it once contained.

B. The problem when internet sources disappear

Recently, the volatility of internet sources has started to cause problems in scholarly publishing. Researchers are starting to notice the rise of disappearing online sources cited in previous studies.

For instance, in articles published in science, technology, engineering, and mathematics (STEM) journals, at least one in five articles suffers from missing sources.[54] A similar study found that of all citations to internet sources in STEM journals, at least four out of five no longer point to the same information originally referenced in the articles.[55]

The same problem afflicts articles published in communication journals. One study observed that around 39% of the internet sources cited between 2000 and 2003 are no longer accessible in 2004.[56]

Similarly in political science, more than 40% of the internet sources cited in articles published in a major journal in the field from 2000 to 2013 are no longer available.[57]

These dismal findings have alerted scholars to the problem of disappearing online sources in academic publishing. After all, sources occupy a central role in the scholarly discourse.[58] Citations provide a way for the sources to be checked by others and aid in arriving at a correct interpretation of the results.[59] A correct interpretation in turn helps in

---

[54] Martin Klein, Herbert Van de Sompel, et al., *Scholarly Context Not Found: One in Five Articles Suffers from Reference Rot*, 9 PLOS ONE 1 (2014) [hereinafter "Klein, et al."].

[55] Shawn M. Jone, Herbert Van de Sompel, et al., *Scholarly Context Adrift: Three out of Four URI References Lead to Changed Content*, 1 PLOS ONE 12 (2016).

[56] *See* Daniela V. Dimitrova & Michael Bugeja, *The half-life of internet references cited in communication journals*, 9 NEW MEDIA & SOCIETY 811 (2007).

[57] *See* Aaron L. Gertler & John G. Bullock, *Reference Rot: An Emerging Threat to Transparency in Political Science*, 2017 AMERICAN POLITICAL SCIENCE REV. 166, 166.

[58] Klein, et al., *supra* note 54, at 2.

[59] *Id.*

reproducing the conclusions of the studies, an essential step in validating hypotheses and creating knowledge.[60] In other words, sources underpin scholarly transparency and integrity in academic research.

What is true in academic publishing is equally true for judicial opinions. While academic research pursues scientific and humanistic "truth," judicial opinions announce the judicial truth in a case. Since the Philippine legal system entrenches precedents as part of the law of the land,[61] the problem of disappearing online sources becomes even more acute in judicial decisions.

In contrast to academic research, judicial decisions not only pronounce the judicial truth in a certain case, they also govern the future conduct of individuals and management of the political affairs of the country.[62] The impact of judicial opinions in the life of the nation thus demands that they stand to the highest level of scrutiny. To do this, the citations used as support must be perpetually available to facilitate better understanding of court decisions.

As in academic articles, disappearing online sources now pervade judicial citations. In the United States, one study which reviewed links in US Supreme Court opinions found that 29% of all websites cited no longer existed, generating an HTTP 404 error.[63] A year later, a follow-up study which considered not only non-existent websites but also non-existent information from internet sources found that almost 50% of the citations suffer from disappearing online content.[64]

Disappearing sources cited in judicial opinions are problematic for two reasons. First, they destroy the link between the citation and the actual content. With the loss of information, the reasoning of the Court suddenly exists in a vacuum. Second, a decision infested with missing sources can never be contextualized. The information from internet sources used to support its reasoning is forever lost. A future reader can never fully scrutinize the Court's judgment as the cited sources upon which the decision is based are no longer available.[65]

---

[60] *Id.*

[61] CIVIL CODE, art. 8.

[62] Leibler & Liebert, *supra* note 1, at 276-277.

[63] *Id.* at 298.

[64] Zittrain, et al., *supra* note 2, at 186.

[65] *See* Leibler & Liebert, *supra* note 1, at 287.

One such example is the case of *Garcia-Rueda v. Pascasio.* This case was cited several times in cases involving medical negligence. However, the internet article it cited has disappeared.[66] Thus, it would be close to impossible to examine the quality of this online article used as basis for one of the most important doctrines in medical negligence. Readers can never identify the authorities cited by this internet article. Worse, they can never know whether this source presented alternative viewpoints which might enhance their understanding of medical negligence cases.

The same is true for *People v. de Jesus.* This case is notable because it cited seemingly scientific studies to establish that children, despite the presumption of competence to be a witness accorded to them, might not be able to testify on memories at age less than three. The only way to reexamine whether this is indeed a correct conclusion is to look at the scientific articles it cited as support. Unfortunately, out of the five internet sources it cited, only one still exists. All the studies on infantile amnesia have all disappeared.

Some may argue that the cases cited are nonetheless old and outdated. Hence, even if the internet sources they cited have disappeared, there is a chance that they have been superseded by newer cases or laws.

This attitude, however, is misleading. Old cases may still be good law. Moreover, recent cases also suffer from disappearing internet sources.

One example is the latest case on martial law decided by the Supreme Court. In *Lagman v. Medialdea,*[67] the Court grappled with the factual sufficiency of the declaration of martial law and the suspension of the privilege of the writ of *habeas corpus* over the whole of Mindanao island. These were done to suppress the armed conflict brewing in Marawi City involving the Maute group and the Armed Forces of the Philippines.[68]

For a declaration of martial law or suspension of the privilege of the writ of habeas corpus to be valid, the Constitution requires two things.[69] First, there must be an invasion or rebellion.[70] Second, public safety requires the declaration of martial law or suspension of the writ of *habeas corpus.*[71]

---

[66] 278 SCRA 769 (1997) n.12, *citing* http://medicalmal.com/neglig.html (last visited Aug. 22. 2017).

[67] G.R. No. 231658, July 4, 2017.

[68] *Id.*

[69] CONST. art. VII, §18.

[70] *Id.*

[71] *Id.*

Defining the second requisite of public safety, the Supreme Court, through Justice Mariano del Castillo, quoted a definition from the website *www.definition.net/definition/PUBLIC SAFETY*.[72] This website defined public safety to "involve [] the prevention of and protection from events that could endanger the safety of the general public from significant injury/harm, or damage, such as crimes of disasters."[73]

According to the citation, the website was last visited on July 3, 2017.[74] However, the website has now disappeared, taking with it the reference to the definition of public safety. And to put things in perspective, this definition constitutes one of the essential elements for the factual sufficiency of a martial law declaration or suspension of the writ of *habeas corpus*. A future reexamination of the public safety requirement—and this requirement will surely be reexamined—will be incomplete. The very internet source it referred to is now missing. Readers will never know the quality or the weight of the authority cited.

If this can happen to a recent case, the more likely it is to happen to older cases. The following part shows how pervasive the problem is.

III. PRESENT STUDY

The present study aims to document the prevalence of disappearing online sources cited in Supreme Court decisions. By presenting data on the pervasiveness of the problem, it is hoped that the Supreme Court will institute changes in the way it handles online sources to address the problem. The following part discusses the scope, methodology, and the results of the study.

A. Scope and Methodology

To document the prevalence of disappearing sources in Supreme Court opinions, the first task is to identify all decisions that cited internet sources. This was greatly facilitated by a database of cases available in the market today. CDAsiaOnline,[75] an online proprietary service that allows searching for particular strings of text within cases, is utilized.

---

[72] Lagman v. Medialdea, n.268.

[73] *Id.*

[74] *Id.*

[75] CDASIA website *at* cdasiaonline.com.

Cases with citations to online sources are compiled by using the word extender search functionality, which is activated by putting asterisks into the search parameter. This functionality allows users to search for particular strings of characters even if they do not comprise separate words. This means that even if the search parameter is concatenated with other string of characters, such will still appear in the search results.

For example, if the search parameter *elect** is used, then the search results would include words that begin with the string *elect.* Hence, the search results will include cases that contain the words *elect, election, electrical, electorate,* among others. This is so since these results begin with the search parameter *elect.* By contrast, if the search parameter **elect* is used, then the search results would include words that end with *elect.* The search results will then include cases which contain the word *re-elect, select,* among others.

To detect the URLs cited in Supreme Court cases, generic top-level domains in the internet are used as parameters. These top-level domains appear in the URLs cited in Supreme Court opinions. These are as follows:

Domain	**Intended Use**
.com	Commercial
.gov	Government
.org	Organizations
.edu	Educational institutions
.net	Networks
.int	International organizations

For example, for websites pertaining to educational institutions, the search parameter is *.edu* which means that cases will appear in the search results if they contain the *.edu* string. This is so regardless if *.edu* is concatenated with other characters before and after the said text. For instance, if a case contains a citation to the website of the College of Law of the University of the Philippines whose web address is *http://www.law.upd.edu.ph*, it does not matter that the text *.edu* is preceded by the string of characters *http://www.law.upd* and followed immediately by *.ph.* The case will still show up in the search results since it contains *.edu.*

After identifying all the cases with citations to internet sources, all links cited were visited one by one to confirm their existence. Then, it was further examined if the links still contain the information referred to in the court opinions that cited them. For consistency, the links were all visited on February 7, 2017. Thus, the results presented are current as of the said date.

To make the study more manageable, its scope was limited to Supreme Court opinions. Although inferior courts sometimes cite online sources, it cannot be denied that decisions of the Supreme Court have special significance in the Philippine legal system. As the country's highest court, the Supreme Court's interpretation of the Constitution and laws forms part of the law of the land.[76]

Also, for reasons of practicality, this study only considered those internet sources cited in main opinions. While separate opinions are important in that they provide persuasive authority especially for future re-examination of doctrines,[77] they are not considered in this study as they lack precedential value. The scope of the gathered data is also limited to cases until 2012. This is sufficient to show the prevalence of disappearing internet sources in Supreme Court decisions.

B. Results

The data for this study are available online.[78] The results show that from 1997 to 2012, the Supreme Court cited a total of 424 internet sources. Of these citations, only 141 links or 33.3% of the internet sources are still working—that is, these links still serve up online content which contains the information cited in the decision. This means that a staggering 66.7% of all the internet sources cited have disappeared. A summary of the numerical results is presented in Table 1.

---

[76] CIVIL CODE, art. 8.

[77] For a discussion of the value of dissenting opinions, *see* DANTE GATMAYTAN, LEGAL METHOD ESSENTIALS 130-144 (2012).

[78] https://www.dropbox.com/s/622bgggx82hdeea/links.xlsx?dl=0.

Year	Number of Links Cited	Number of Working Links	Percentage of Working Links (per year)
1997	1	0	0%
1998	5	0	0%
1999	0	-	-
2000	1	0	0%
2001	0	-	-
2002	0	-	-
2003	9	1	11.1%
2004	12	1	8.3%
2005	23	8	34.8%
2006	16	4	25%
2007	38	12	31.6%
2008	43	16	37.2%
2009	87	35	40.2%
2010	73	23	31.5%
2011	55	19	34.5%
2012	61	22	36.1%
TOTAL	**424**	**141**	**33.3%**

TABLE 1. Summary of numerical results.

To illustrate the trend better, Figure 2 plots the number of citations to internet sources compared to the number of working links for all the years studied.

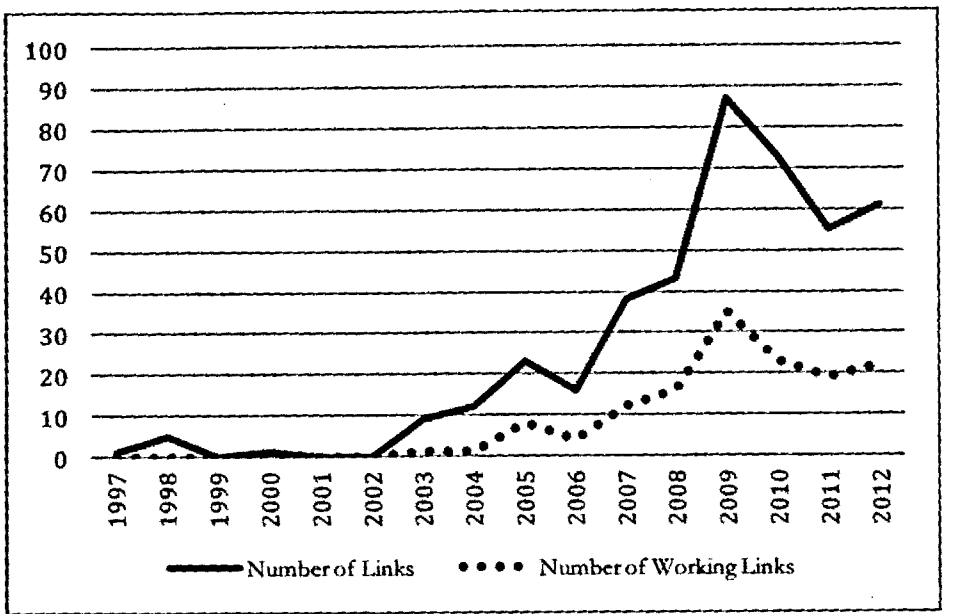

FIGURE 2. Total number of internet sources cited (solid line) and number of internet sources that are still available (broken line) for each year from 1997 to 2012.

For an alternative perspective, the proportion of working links over the years is also plotted. This way, the general trend can be observed regardless of the number of internet sources cited. The data points in the plot are obtained by dividing the number of working links by the total number of links cited for each year studied. The resulting trend is shown in Figure 3.

The results show that the older the citations are, the more probable it is that the internet content they refer to have disappeared. Most or all of the citations in the early years of using internet sources (1997 to 2004), have become defective. But even the links for 2012, the most recent year studied, are not immune to reference or link rot. Indeed, the results show that for 2012, only 21 out of 61 links are still working as intended.

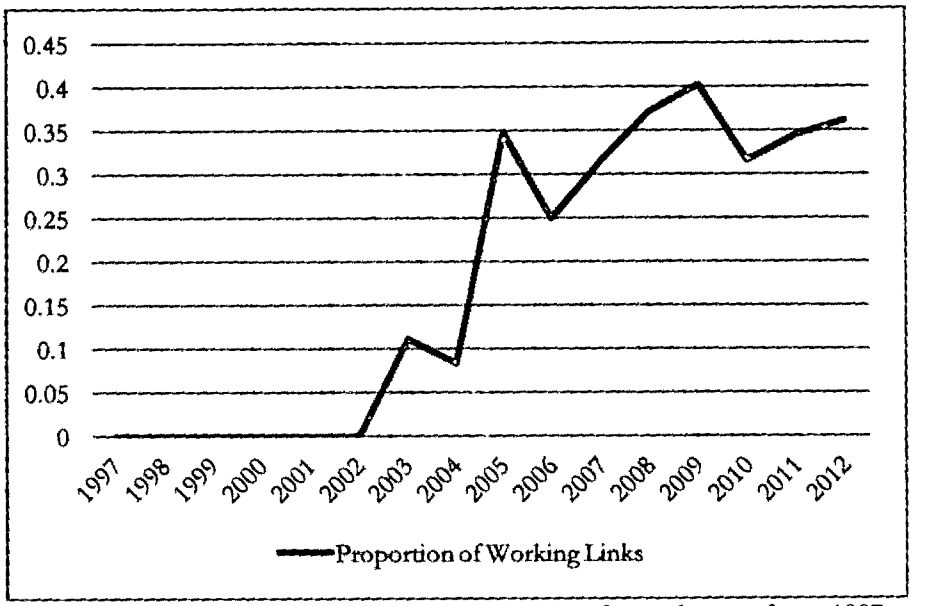

FIGURE 3. Proportion of available internet sources for each year from 1997 to 2012.

These observations point to one important fact—unless the Supreme Court addresses the problem of disappearing internet sources, more internet sources will disappear. With time, these internet sources will be exposed to various threats. And when all internet sources referenced had disappeared, readers will never know the context of the decision as well as the quality of the online information utilized by the Supreme Court, or any court for that matter, in its judicial opinions.

IV. REMEDYING DISAPPEARING INTERNET SOURCES

The citation method specified in the Supreme Court's Manual of Judicial Writing hardly suffices to solve the problem of disappearing online sources. As shown in the results, indicating the URL and the date the website was last visited is not sufficient. When the cited internet source is removed, transferred, or modified, the citation itself becomes defective. It will never refer to the originally cited content.

The most straightforward solution would be to require opinion writers to save a screenshot of the website at the time it was last visited. The screenshots can be printed and stored in a physical archive in the Supreme Court Library. This solution somehow mirrors the permanence of print sources.

However, storing only a limited number of copies of the cited website may prove insufficient. The power of print sources is that these are usually mass-produced by the publishing house. Hence, multiple copies are likely available elsewhere. Moreover, physical storage limitations will, at some point, pose a problem. As more internet sources are relied upon by the Supreme Court, the more physical space this will require. In addition, as more decisions cite internet sources, the more difficult it will be to organize the growing complexity of the archived materials.

To obviate these problems, the use of an electronic archive may prove to be a better solution. A good practice would be to require the opinion writer to save a copy of the websites and online documents cited at the time they were last accessed, as indicated in the citation. The online content may be stored into optical disc media to save on physical space. This would also align with digitization efforts underway in most libraries worldwide.

These two solutions suffer, however, from one common problem: a student of the law or a legal researcher would have to travel to the Supreme Court to access these archives. The idea of a functional citation system is that anyone should be able to access and verify the sources cited. Storing all the cited online content in the Supreme Court Library defeats this purpose. If the website disappears, one has to travel to the Supreme Court itself to access the cited online content. This is impractical not only those from the provinces but even for those who live and study in Metro Manila.

Thus, the best solution would be to establish an online platform where users can easily access electronic copies of the internet sources. This way, anyone can check the original internet content referred to in the citations anytime anywhere. A dedicated platform may be created containing all the internet sources cited for a particular year.

The U.S. Supreme Court has already created its own platform to deal with disappearing online sources. At present, all the internet sources cited in main, as well as separate opinions, are now archived in a single website.[79] Hopefully, the Supreme Court of the Philippines can implement the same solution.

---

[79] SUPREME COURT OF THE UNITED STATES, *Internet Sources Cited in Opinions*, Supreme Court Website, *at* https://www.supremecourt.gov/opinions/cited_URL_List.aspx [https://perma.cc/26AG-KGKQ].

Another initiative in archiving online content is the Perma project spearheaded by Harvard Law School. According to its creators:

> The solution we propose is a platform that will allow authors and editors to automatically generate, store, and reference — in a freely and publicly accessible manner — archived data representing the relevant information of a cited online resource. A freely accessible web database of cited materials will not only allow for the owners of websites to no longer worry about maintaining cited links, it will create better references and more easily verified scholarship.
>
> * * *
>
> Perma uses the citation process itself as a solution to link rot. As the author cites the material, the author can provide a link to Perma, and the Perma server will save a copy of the information relevant to the citation — at that address at that particular time — thereby capturing what the author determined was a source requiring the citation. Perma will then return to the author a new link, and a formal citation, which is designed to last as long as the Perma system survives. That link can then be used in the work, either in addition to the original citation, or instead of the original citation.[80]

Perma has the advantage of allowing users to store online content at the very moment they cite it. Thus, it will be a true reflection of what the internet source contains on the date of last access as indicated in the citation. Hence, aside from vouchsafing the permanence of cited online content, Perma also ensures the transparency in the use of said content. Perhaps the Supreme Court can explore the possibility of using this free resource in its opinions.

SUMMARY AND CONCLUSION

This paper was written with fervent hope that the Supreme Court will take steps in addressing the problem of disappearing internet sources. The results of the study show that of the internet sources cited from 1997 to 2012, only 33.3% still exist. This means that 66.7% of the online content cited are all gone. To remedy this problem, the creation of an online archive

---

[80] Zittrain, et al., *supra* note 2, at 191-192. The Bluebook, one of the most prominent citation systems in law, encourages the archiving internet sources using a reliable archiving tool. (*See* THE BLUEBOOK, Rule 18.2.1(d)). In its illustrations, it utilized the Perma project as an example of a reliable online archiving tool.

of all internet sources cited by the Supreme Court, similar to what the US Supreme Court has done, is proposed. This online archive should be available to researchers anytime anywhere. Moreover, the online content archived should mirror the actual state of the internet source on the day it was last visited as indicated in the citation. This way, readers can be sure that the internet sources cited are permanently available for scrutiny and verification.

- o0o -