A WORD IS WORTH A THOUSAND WORDS: LEGAL IMPLICATIONS OF RELYING ON MACHINE TRANSLATION TECHNOLOGY

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I. INTRODUCTION

We may hope that machines will eventually compete with men in all purely intellectual fields. But which are the best ones to start with? Even this is a difficult decision. Many people think that a very abstract activity, like the playing of chess, would be best. It can also be maintained that it is best to provide the machine with the best sense organs that money can buy, and then teach it to understand and speak English. This process could follow the normal teaching of a child. Things would be pointed out and named, etc. Again I do not know what the right answer is, but I think both approaches should be tried. We can only see a short distance ahead, but we can see plenty there that needs to be done.¹

According to the most recent language survey published by the U.S. Census Bureau, over twenty-five million people in the United States who are age five or older speak English less than "very well," and over sixty million people speak a language other than English at home.² This is a significant increase from the approximately forty-seven million people in the United States over age five who spoke a language other than English at home in 2000.³ Between 1980 and 2000, the U.S. population grew by approximately twenty-five percent, yet the number of Americans

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^{1.} A.M. Turing, Computing Machinery and Intelligence, 59 MIND 433, 460 (1950).

^{2.} Detailed Languages Spoken at Home and Ability to Speak English for the Population 5 Years and Over for United States: 2009–2013, U.S. CENSUS BUREAU tbl.1 (Oct. 2015), https://www.census.gov/data/tables/2013/demo/2009-2013-lang-tables.html.

^{3.} United States – Ability to Speak English by Language Spoken at Home for the Population 5 Years and Over: 2000, U.S. CENSUS BUREAU tbl.1a (Oct. 29, 2004), https://www.census.gov/topics/population/language-use/data.html.

speaking a language other than English at home nearly doubled.⁴ Within the state of Florida, over a quarter of the population currently speaks a language other than English.⁵ These numbers reflect a growing foreign-language population⁶ and suggest that a substantial portion of people involved in the American legal system have limited English proficiency (LEP).⁷ As more and more non-English speakers are brought before or otherwise require access to the courts, American lawyers will be faced with an increased number of documents in languages other than English. An interesting dilemma arises with respect to how English-speaking lawyers will deal with foreign language documents without placing themselves or their firms at risk of committing malpractice.

Despite a long history of legislation relating to court *interpreters*,⁸ there is no federal law establishing the qualifications

7. "An LEP person is one who speaks a language other than English as his or her primary language and has a limited ability to read, write, speak, or understand English." AM. BAR ASS'N, STANDARDS FOR LANGUAGE ACCESS IN COURTS 1 (2012).

^{4.} Hyon B. Shin & Rosalind Bruno, *Language Use and English-Speaking Ability: 2000*, U.S. CENSUS BUREAU 1, 2 (Oct. 2003), https://www.census.gov/prod/2003pubs/c2kbr-29.pdf.

^{5.} QuickFacts Florida: Language Other Than English Spoken at Home, Percent of Persons Age 5 Years+, 2012–2016, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/fact/table/FL/POP815216#viewtop (last visited Aug. 10, 2018).

^{6.} See Jennifer M. Ortman & Hyon B. Shin, Language Projections: 2010 to 2020, U.S. CENSUS BUREAU 1, 3 (Aug. 2011), https://www.census.gov/hhes/socdemo/language/ data/acs/Ortman_Shin_ASA2011_paper.pdf (showing an increase in the amount of foreignlanguage speakers in America as a result of immigration from multiple countries). "The use of a language other than English at home increased by 148 percent between 1980 and 2009." Id. at 2. Interestingly, the growth of languages other than English is not limited to states with high immigration trends such as California, Florida, and Texas, but has been noted "in states not traditionally thought of as immigrant magnets, such as Alabama, Georgia, Kentucky, and Tennessee." Jeff Hogue & Anna Hineline, Can Translation Software Help Legal Services Agencies Deliver Legal Information More Effectively in Foreign Languages and Plain English?, LEGAL ASSISTANCE OF W. N.Y., Apr. 2013, at 1, 3, available at https://www.lsc.gov/sites/default/files/attach/resources/LanguageAccess-LegalAssistanceof WesternNewYork-TranslationSoftwareReport.pdf; see also Gillian Dutton et al., Promoting Language Access in the Legal Academy, 13 U. MD. L.J. RACE, RELIGION, GENDER & CLASS 6, 9 (2013) (noting that "migration is increasing to the *interior* of the United States") (emphasis in original).

^{8.} An "interpreter" is "a person who is sworn at a trial to accurately translate the testimony of a witness who is deaf or mute, or who speaks a foreign language." *Interpreter*, BLACK'S LAW DICTIONARY (10th ed. 2014). "Interpreting involves an immediate transfer of meaning from the source language to the target language. Speed and accuracy are crucial in performing this job effectively.... [T]he interpreter does not have time to reflect on his work and very rarely is able to go back to correct himself." Stella Szantova Giordano, *It's All Greek to Me: Are Attorneys Who Engage In or Procure Legal Translation for Their Clients at Risk of Committing an Ethical Violation*?, 31 QUINNIPIAC L. REV. 447, 455 (2013).

of *translators*⁹ of written documents.¹⁰ There are presently no federal or Florida state guidelines setting forth what a party offering translated documents into evidence must show to establish that the person who prepared the translation was qualified.¹¹ The practical consequence of this lack of legislation is that anyone—regardless of his or her linguistic credentials—can lawfully serve as a translator. This Comment specifically addresses the scenario in which a lawyer stumbles upon non-English documents during discovery and subsequently relies on a machine translation system to translate those documents into English.

Traditionally, lawyers dealing with foreign-language documents had no option but to locate and pay human translators;¹² in recent years, lawyers and law firms have had the cheaper, simpler option of purchasing machine translation software to perform their translation work.¹³ As neural machine translation software continues to approach human-like accuracy, its use will likely become widespread in the legal profession. Since lawyers are both unlikely to understand the intricacies of legal translation and unable to personally verify the accuracy of translations, there is potential for blind reliance on neural

Giordano, supra note 8, at 455–56 (emphasis added).

10. The U.S. Supreme Court acknowledged the difference between oral interpreters and written translators at length in *Taniguchi v. Kan Pacific Saipan, Ltd.*, 566 U.S. 560, 566–72 (2012).

^{9.} A "translator" is "someone who changes speech or esp. writing from one language to another." *Translator*, BLACK'S LAW DICTIONARY (10th ed. 2014).

Legal translation . . . allows the translator to spend time choosing the best equivalent in the target language and to go back to correct mistakes. It occurs exclusively in either a law firm, an in-house legal department, or at an outside translating agency, away from the prying eyes of the courts and clients. . . . [S]ince legal translation is a private affair, chances are that any irregularities which occur during the selection of the translator or during the translation process itself will go unnoticed unless an actual problem with the translation is discovered later.

^{11.} Neither translation nor interpretation appear in the Local Rules of the Middle District of Florida, the Southern District of Florida, or the Federal Rules of Civil Procedure. The Northern District of Florida's Local Rules contain only one mention of interpretation. N.D. FLA. R. 72.2(F)(13) (instructing practitioners to "[a]ppoint *interpreters* in cases pending before a magistrate judge initiated by the United States pursuant to 28 U.S.C. §§ 1827 and 1828") (emphasis added).

^{12.} See Hogue & Hineline, *supra* note 6, at 3 (describing how document translation "requires a person skilled at general plain language translation, fluent in both languages, and familiar with legal conventions").

^{13.} Id. at 6.

translation systems, and malpractice suits may be filed if a substantial enough translation error surfaces.

There are many instances where lawyers who rely on machine translation software to translate foreign-language documents into English may be found to have breached the standard of care owed to their clients.¹⁴ A hypothetical situation illustrates the emerging need to set minimum qualifications for translators as well as guidelines for lawyers who rely on translation technology. Suppose A, a Spanish-speaking individual, hires B, an attorney who speaks only English, to represent her in a civil suit. A has managed to pull together enough money to hire B but is straining her budget to do so. Suppose further that A has sufficient English skills to adequately communicate with B.¹⁵ During the discovery phase of litigation, B obtains a variety of documents in Spanish. Needing to know what these documents say so that he may determine their relevance to A's case, B must decide how to translate these documents into English. B knows that paying a professional translator will dramatically increase A's bill, and B further doubts that A has enough proficiency in English to translate the documents herself. Therefore, B chooses to translate the Spanish documents using a translation software program that his firm already owns and has paid for. B translates each of the documents using his firm's neural translation system and uses the resulting English translations to prepare A's case. Litigation proceeds, and A loses her case. It takes A quite some time to gather the money to continue her legal fight. A eventually hires a new, Spanishspeaking lawyer (let's call him C) to handle her appeal. C reviews A's case file and discovers that, not only has the statute of limitation on A's appeal expired, but there was a material flaw in some of the English translations that B relied on, which may have affected the outcome of her case. A decides to file a malpractice suit against B.

Given the current lack of regulation of written translations, the results of such a malpractice suit are uncertain. What is

^{14.} See generally Douglas R. Richmond, *Why Legal Ethics Rules Are Relevant to Lawyer Liability*, 38 ST. MARY'S L.J. 929, 933–35 (2007) (discussing lawyers' standard of care and how their conduct may breach this standard).

^{15. &}quot;One's ability to converse in English does not necessarily mean[] that one can sufficiently understand judicial proceedings consisting of sophisticated legal terminology." Beth Gottesman Lindie, *Inadequate Interpreting Services in Courts and the Rules of Admissibility of Testimony on Extrajudicial Interpretations*, 48 U. MIAMI L. REV. 399, 407 (1993).

certain, however, is that having statutory parameters in place to govern the qualifications of translators as well as minimum system requirements for legal translation software would make it easier for attorneys to ensure that they are not breaching the duty of reasonable care they owe to their clients when they do decide to use cost-efficient neural translation programs.

Statistically, each lawyer will be the subject of three legal malpractice claims over the course of his or her career.¹⁶ Since the 1970s, the number of legal malpractice decisions has steadily increased,¹⁷ and one of the primary activities in which alleged legal errors occur is in the preparation of documents.¹⁸ This Article advocates for a hybrid method of translating documents that involves an initial machine translation and subsequent review by a human translator, with the ultimate goal of saving practitioners time and money all whilst steering clear of any legal malpractice suit which may arise from excessive trust in machine translation technology. Part II examines the current federal and state legislation pertaining to both interpreters and translators. Part III shifts the focus to the historical development of translation software and surveys the different types of translation technologies available on the market. Part III also explains how the accuracy of machine translation has dramatically increased in recent years-and continues to steadily increase. Part IV discusses potential liability issues which may arise when a lawyer uses machine translation software to translate a client's documents into English. This Comment next addresses both tort- and contractbased legal malpractice and surveys the Model Rules of Professional Conduct for issues which may bring a lawyer before

Id.

^{16.} Ronald E. Mallen, *Cutting Through the Malpractice Maze*, THE BRIEF, Summer 1986, at 10.

^{17.} RONALD E. MALLEN & JEFFREY M. SMITH, LEGAL MALPRACTICE § 1:6 (2009).

During the 1970s alone, there were almost as many reported legal malpractice decisions as there were in the previous history of American jurisprudence. In the 1980s, the number of reported decisions tripled over the prior decade. The trend of decisions in the 1990s continued, showing approximately a 155% increase over the prior decade. . . . [T]he rate of increase is declining, though the number of absolute claims is not.

^{18.} STANDING COMM. ON LAWYERS' PROF'L LIAB. OF THE AM. BAR ASS'N, PROFILE OF LEGAL MALPRACTICE: A STATISTICAL STUDY OF DETERMINATIVE CHARACTERISTICS OF CLAIMS ASSERTED AGAINST ATTORNEYS 9 (1986) [hereinafter ABA Study] (noting that twenty-one percent of alleged legal errors were linked to the preparation of documents).

the local bar grievance committee. Part V discusses solutions for how the current laws could be improved to fill the gap that exists with respect to translator qualifications. Ultimately, this Comment suggests that neural machine translation will become a common tool in the legal profession and argues in favor of increased regulation of written translations that mimics the current regulation of oral interpretation. Absent such laws, it is the Author's opinion that more lawyers will negligently open themselves up to liability for the damages resulting from inaccurate machine translations.

II. CURRENT LEGISLATION

A. Interpreters

The Civil Rights Act of 1964 made it illegal to exclude any person in the United States from participating in or benefiting from any program or activity receiving federal financial assistance "on the ground of race, color, or national origin."¹⁹ In 2000, President Clinton signed Executive Order 13166, entitled "Improving Access to Services for Persons with Limited English Proficiency," which prescribed affirmative measures to provide meaningful legal access to individuals with LEP in order to prevent discrimination under Title VI disparate impact regulations.²⁰ The Executive Order requires all federal agencies to examine the services they provide, identify any need for services to LEP individuals, and develop and implement a system to provide those services to LEP individuals.²¹ State courts that receive federal funding are therefore required to provide interpreters to LEP individuals.²² In 1978, President Carter signed the Court Interpreters Act and established the right of any individual with language barriers or other communicative impairments who is involved in a court proceeding to have a qualified court interpreter.²³ Federal law also requires courts to ensure that interpreters are "qualified" and are "give[n] an oath or affirmation

^{19.} Civil Rights Act of 1964, Pub. L. No. 88-352, § 601, 78 Stat. 241, 252.

^{20.} Improving Access to Services for Persons with Limited English Proficiency, Exec. Order No. 13,166, 65 Fed. Reg. 50,121, 50,121 (Aug. 11, 2000).

^{21.} Id.

^{22.} See *id.* (stating that federal agencies must ensure "LEP persons can meaningfully access the agency's programs and activities").

^{23.} Court Interpreters Act, Pub. L. No. 95-539, § 1827, 92 Stat. 2040, 2040-42 (1978).

to make a true translation."²⁴ State laws mimic these requirements that court interpreters be qualified and take an oath to make a true translation.²⁵ Failure to swear an interpreter, however, has not been found to constitute a fundamental error.²⁶ In fact, trial courts have broad discretion over matters regarding the selection of an interpreter, and reversible error generally will not result from "the presiding judge's appointment of an uncertified interpreter if (1) a timely objection is not raised; (2) there is no substantiated objection to the selection or performance of same; or (3) it was shown (upon request) that a certified interpreter was not reasonably available."²⁷

The Supreme Court of Florida appointed the Interpreter's Committee in 2003 to evaluate how well the court system delivered interpreting services to Florida's citizens.²⁸ The Committee recommended that the Florida Supreme Court seek statutory authorization to implement a certification program for court interpreters, which it did.²⁹ The current Florida Rules of Judicial Administration establish the qualifications of interpreters³⁰ and require that an oral interpreter be appointed in criminal and juvenile delinquency proceedings, as well as in all other proceedings in which "the litigant's inability to comprehend English deprives the litigant of an understanding of the court proceedings, [so] that a fundamental interest is at stake... and that no alternative to the appointment of an interpreter exists."³¹

^{24.} FED. R. EVID. 604; see also Language Access in State Courts, U.S. DEP'T OF JUSTICE 8 (Sept. 15, 2016), https://www.justice.gov/crt/file/892036/download (stating that "[f]or LEP individuals, accurate interpretation is the only way that they will be able to communicate their side of the story, preserve their evidence for the record, and challenge the testimony of adverse witnesses").

^{25.} E.g., FLA. STAT. § 90.606 (2017).

^{26.} Obando v. Florida, 988 So. 2d 87, 88 (Fla. 4th Dist. Ct. App. 2008); *but see* Balderrama v. Florida, 433 So. 2d 1311, 1311 (Fla. 2d Dist. Ct. App. 1983) (finding reversible error after the defendant's brother, who had the same charges brought against himself, served as the court interpreter and did not take an oath to make a true translation).

^{27.} Virginia Benmaman, *Interpreter Issues on Appeal*, PROTEUS (Newsl. of the Nat'l Ass'n of Judiciary Interpreters & Translators, Atlanta, Ga.), Fall 2000, *available at* https://public.courts.alaska.gov/web/language/docs/interpreter-issues.pdf.

^{28.} In re Court Interpreter Rules, Admin. Order No. AOSC03-8 (Fla. Feb. 12, 2003), http://www.floridasupremecourt.org/clerk/adminorders/2003/sc03-8.pdf.

^{29.} H.R. 849, 2006 Reg. Sess. § 1128 (Fla. 2006).

 $^{30. \ \ \,} Fla.\ R.\ \, Jud.\ \, Admin.\ 2.560(e).$

^{31.} Id. 2.560(b).

B. Translators

Concerned that LEP individuals face considerable disadvantages in litigation, the ABA's Standing Committee on Legal Aid and Indigent Defendants (SCLAID) drafted standards for language access and encouraged their adoption by courts and tribunals. Standard 7 deals specifically with written translation and provides that:

To ensure quality in translated documents, courts should establish a translation protocol that includes: review of the document prior to translation for uniformity and plain English usage; *selection of translation technology*, document formats, and glossaries; and utilization of both a primary translator and a reviewing translator.³²

Courts and tribunals have yet to adopt the ABA's suggested translation protocols—or any translation protocols, for that matter.

Interestingly, the lack of regulation of written translators extends beyond the American legal system. The European Court of Justice, for instance, has a separate division of lawyer-linguists whose job is to translate court documents between each of the twenty official languages of the European Union.³³ Although all Court of Justice lawyer-linguists are required to be trained attorneys, there is no requirement that they be experienced translators.³⁴ Research into the Court of Justice's lawyer-linguist division has revealed that, even in such a linguistically diverse environment, many misunderstandings about the qualifications of competent legal translators remain.³⁵

^{32.} STANDARDS FOR LANGUAGE ACCESS IN COURTS, supra note 7, at 17 (emphasis added).

^{33.} Law: Lawyer-Linguist, EUR. PERSONNEL SELECTION OFFICE, https://epso.europa.eu/career-profiles/law_en (last visited Aug. 10, 2018).

^{34.} Id.

^{35.} See generally Karen McAuliffe, Translation at the Court of Justice of the European Communities, in TRANSLATION ISSUES IN LANGUAGE AND LAW 99, 102–04 (Frances Olsen, Alexander Lorz & Dieter Stein eds., 2009) (discussing some negative attitudes within society and the legal community toward translation, a complex job that is often incorrectly viewed as merely an administrative task).

III. THE EVOLUTION OF TRANSLATION TECHNOLOGIES

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A. The Need for Translation Within the Legal Profession

The monolingual lawyer who encounters a document in a language in which he or she is not proficient must find a way to translate the document, if only to make the ultimate determination that the document is unimportant to the case at hand. As eDiscovery expert Conrad Jacoby³⁶ explained, "[o]ne of the biggest challenges for a litigation team is simply knowing what they have."37 Unfortunately, managing foreign-language documents can be a challenging task; each document's language must be properly identified, and sufficient time must be set aside for both locating a qualified translator and performing the translation itself.³⁸ When faced with foreign-language documents, many attorneys may be tempted to save time and money by turning to a bilingual colleague; knowing a language, however, is not synonymous with knowing how to accurately translate all types of documents in that language.³⁹ Machine translation software claims to offer attorneys a solution to the translation dilemma: fast-yet accuratetranslations at a much lower cost than human translators.

B. The Development of Rule-Based Machine Translation Systems

In 1949, Warren Weaver, the Director of the Natural Sciences Division at the Rockefeller Center, published his memorandum "Translation."⁴⁰ This memorandum, which maps out a number of

^{36.} Conrad Jacoby has been an active figure in the eDiscovery community since its inception. His experience includes founding an eDiscovery consulting company, efficientEDD, and managing the eDiscovery Review Center at Winston & Strawn. For a more detailed overview of his career, see *Conrad Jacoby*, THE MASTER'S CONF., https://themastersconference.com/speakers/conrad-jacoby (last visited Aug. 10, 2018).

^{37.} Lillian Clementi, *Cost in Translation*, OR. STATE BAR BULLETIN, Dec. 2009, at 36–37.

^{38.} Id.

^{39.} Thomas L. West III, the owner of Intermark Language Services and former president of the American Translators Association (ATA) recounts a story wherein a fellow lawyer received a fax from his Latin American subsidiary and then gave it to his Spanish-speaking secretary to translate. Upon spotting three key words ("celebración," "asamblea," and "social"), the secretary reassured the lawyer that "they're just having a party." As it turns out, the fax was an invitation to a shareholders' meeting. *Id.* at 36.

^{40.} MINA REES, Warren Weaver: 1894–1978, inNAT'L ACAD. OF SCIENCES, BIOGRAPHICAL MEMOIRS 493, 513 (1987).

scenarios for the then-brand-new field of machine translation,⁴¹ is credited by many in the field as "providing the original stimulus to the field of machine translation."⁴² Inspired by cryptographic methods, one of Weaver's scenarios examined "frequencies of letters, letter combinations, intervals between letters and letter combinations, letter patterns, etc. which are to some significant degree independent of the language used."⁴³ The following year, Alan Turing published "Computing Machinery and Intelligence," an article in which he sought to answer the question: "Can machines think?"⁴⁴ This work contains the famous "Turing Test," which suggests that using language as humans do is a sufficient operational test for intelligence.⁴⁵

In 1951, Yehoshua Bar-Hillel became the first full-time machine translation (MT) researcher at Massachusetts Institute of Technology (MIT).⁴⁶ Toward the end of his two-year appointment, Bar-Hillel was already of the opinion that "fully automatic MT, i.e. one without human intervention . . . [was] achievable only at the price of inaccuracy."⁴⁷ Bar-Hillel believed that "general MT" (i.e., translation from any language into another) would only be possible if a universal language with a limited vocabulary, such as Esperanto,⁴⁸ was used.⁴⁹ Bar-Hillel was of the opinion that quick, accurate machine translations would only be possible if a language's vocabulary and grammar was stripped of its

46. John Hutchins, Yehoshua Bar-Hillel: A Philosopher's Contribution to Machine Translation, in EARLY YEARS IN MACHINE TRANSLATION: MEMOIRS AND BIOGRAPHIES OF PIONEERS 300–01 (John Hutchins ed., 2000).

^{41.} Translation Automation Timeline, TRANSLATION AUTOMATION USER SOCIETY, https://taus.net/academy/timelines/translation-automation-timeline (last visited Aug. 10, 2018).

^{42.} Rees, *supra* note 40, at 513.

^{43.} Translation Automation Timeline, supra note 41.

^{44.} Turing, supra note 1, at 433.

^{45.} In Turing's opinion, a computer possessed artificial general intelligence if it was capable of translating between two languages so fluently as to deceive a human interlocutor. Once the computer could accomplish this task, the foundation would be laid for a machine that may eventually "understand" human language well enough to converse. Gideon Lewis-Kraus, *The Great A.I. Awakening*, N.Y. TIMES (Dec. 14, 2016), https://www.nytimes.com/2016/12/14/magazine/the-great-ai-awakening.html.

^{47.} Id. at 302 (alterations in original).

^{48.} For an overview of the international language Esperanto, see *Information about the International Language*, ESPERANTO.ORG, http://esperanto.org/us/USEJ/world/index.html (last visited Aug. 10, 2018); see also Joan Acocella, A Language to Unite Humankind, THE NEW YORKER (Oct. 31, 2016), https://www.newyorker.com/magazine/2016/10/31/a-language-to-unite-humankind (explaining Esperanto's origins from the perspective of its creator, Ludovik Zamenhof).

^{49.} Hutchins, *supra* note 46, at 303.

complexity.⁵⁰ Idiomatic expressions, he believed, posed one of the largest problems for an automated translation program to overcome: "It is not implausible to assume that one or more... rough translations will not only be grammatical and make sense, even good sense, and therefore be accepted by some or all potential users as the correct translation, but still be dead wrong."⁵¹

While Bar-Hillel was exploring machine translation, Nathanial Rochester was busy helping IBM design its first production computer for scientific work:⁵² the IBM 701.⁵³ Two years later, Anthony Oettinger of Harvard became the first person to earn a PhD thesis on machine translation after describing a computer operating system that operated as "an automatic Russian dictionary and produced rough translations of technical texts which could be used effectively by specialists in the subject matter."⁵⁴ Oettinger's publication corresponded with the launch of the MIT Journal of Mechanical Translation.⁵⁵

Léon Dostert, the French-American linguist who engineered the simultaneous translation system used at the Nuremberg Trials and the United Nations, founded the Machine Translation Research Project at Georgetown in 1955.⁵⁶ Funded by the National Science Foundation and the Central Intelligence Agency (CIA), this project aimed to prove that large-scale continuous machine translation was possible.⁵⁷ A 1958 demonstration featuring one hundred thousand words of Russian organic chemistry text translated into English suggested that machine translation was possible, but not without its fair share of challenges.⁵⁸

57. Id.

^{50.} Id.

^{51.} Id. at 304.

^{52.} Nathaniel Rochester, *The 701 Project as Seen by its Chief Architect*, ANNALS OF THE HIST. OF COMPUTING, Apr. 1983, at 115, 116–17.

^{53.} Chronological History of IBM: 1950s, IBM, https://www-03.ibm.com/ibm/history/ history/ decade_1950.html (last visited Mar. 12, 2018).

^{54.} M.A. KHAN, CATALOGUING IN LIBRARY SCIENCE 195 (1997).

^{55.} Id.

^{56.} Paul Robert Walker, *The Trials and Triumphs of Leon Dostert '28*, OCCIDENTAL COLL., https://www.oxy.edu/magazine/fall-2015/trials-triumphs-leon-dostert-28 (last visited Aug. 10, 2018).

^{58.} The project's researchers were given an alphabetical list of all the words to be translated, then based solely off of that list they began a laborious process involving morphological programs, dictionary lookup, and constantly testing modules for the demonstration. Although the translation "came out pretty well," it was still a time-consuming, imperfect process. Peter Toma, *From Serna to Systran, in* EARLY YEARS IN MACHINE TRANSLATION: MEMOIRS AND BIOGRAPHIES OF PIONEERS 135, 138 (John Hutchins ed., 2000).

In 1962, the Association for Machine Translation and Computational Linguistics (AMTCL) was created,⁵⁹ and Peter Toma built the AUTOTRAN software, which six years later would become the Systran system that is still used (and marketed to legal professionals) today.⁶⁰ The term "artificial intelligence" was subsequently coined by John McCarthy, who co-wrote a proposal hypothesizing the following: "An attempt will be made to find how to make machines use language, form abstractions and concepts, solve kinds of problems now reserved for humans, and improve themselves."⁶¹ McCarthy, along with Rochester and other computational linguists, sought to explore "automatic computers, how a computer can be programmed to use a language, neural nets, computational complexity, self-improvement, and randomness and creativity."⁶²

C. Statistical Machine Translation

In recent decades, statistical machine translation (also known as "data-driven machine translation") has become the dominant translation paradigm.⁶³ "Statistical machine translation (SMT) is a machine translation system that uses algorithms to establish probabilities between segments in a source and target language document to propose translation candidates."⁶⁴ The main drawback of SMT is that it fails when presented with texts that are unlike the material in the training corpora, such as texts written in a more casual style that contain slang and idioms.⁶⁵ This type of machine translation can provide acceptable translations if

^{59.} What Is the ACL and What Is Computational Linguistics?, ASS'N FOR COMPUTATIONAL LINGUISTICS, https://www.aclweb.org/portal/what-is-cl (last visited Aug. 10, 2018).

^{60.} John Hutchins, *ALPAC: The (In)Famous Report, in* READINGS IN MACHINE TRANSLATION 132, 133 (Sergei Nirenburg, Harold Somers & Yorick Wilks eds., 2003).

^{61.} V Rajaraman, John McCarthy – Father of Artificial Intelligence, ASIA PACIFIC MATHEMATICS NEWSLETTER (World Sci. Publ'g Co., Sing.), July 2014, at 15–16, http://www.asiapacific-mathnews.com/04/0403/0015_0020.pdf.

^{62.} Id. at 17.

^{63.} Yonghui Wu et al., Google's Neural Machine Translation System: Bridging the Gap Between Human and Machine Translation 2 (2016), https://arxiv.org/pdf/1609.08144.pdf.

^{64.} Statistical Machine Translation, TRANSLATION AUTOMATION USER SOCIETY, https://www.taus.net/knowledgebase/index.php/Statistical_machine_translation (last visited Aug. 10, 2018) [hereinafter Statistical Machine Translation].

^{65.} Id.; William Lange, The Pros and Cons of Statistical Machine Translation, UNITED LANGUAGE GROUP, http://daily.unitedlanguagegroup.com/stories/pros-cons-statistical-machine-translation (last visited Aug. 10, 2018) (exploring other drawbacks of SMT, including its need for bilingual content and high cost).

the system has been trained with texts similar to those that will be translated, however SMT systems frequently translate words out of context or in the incorrect order.⁶⁶ Because SMT systems function poorly when presented with texts written in different styles than the training corpora,⁶⁷ SMT systems are likely to have very restricted use with regard to the translation of discovery documents, which frequently consist of documents such as text messages, emails, and personal letters.⁶⁸

D. Neural Machine Translation

In late 2016, Google released updated translation software called the Google Neural Machine Translation (GNMT) system.⁶⁹ The GNMT system uses deep machine learning⁷⁰ to mimic the function of a human brain, and Google claims the tool is sixty percent more accurate for English, Spanish, and Chinese than Google Translate, which is phrase-based.⁷¹ The improvement between old translation software and the newer neural machine translation systems is best illustrated by an example.⁷²

Translation by a Previous Version of Google Translate:

Kilimanjaro is 19,710 feet of the mountain covered with snow, and it is said that the highest mountain in Africa. Top of the west, "Ngaje Ngai" in the Maasai language, has been referred to as the house of God. The top close to the west, there is a dry,

^{66.} Statistical Machine Translation, supra note 64.

^{67.} Id.

^{68.} See Michael B. Bittner, *Electronic Discovery: Understanding the Framework of Florida E-Discovery Law*, 35 TRIAL ADVOC. Q. 22, 22 (2016) (listing documents commonly requested and secured during discovery).

^{69.} Karen Turner, *Google Translate Is Getting Really, Really Accurate*, THE WASH. POST (Oct. 3, 2016), https://www.washingtonpost.com/news/innovations/wp/2016/10/03/google-translate-is-getting-really-really-accurate/?utm_term=.15956ebe6c8f.

^{70.} For a brief explanation of deep learning technology, see Robert D. Hof, *Deep Learning*, MIT TECH. REV., https://www.technologyreview.com/s/513696/deep-learning (last visited Aug. 10, 2018) (providing a historical overview of the precursors to deep learning technology, explaining the current state of the technology, and speculating on its potential future applications).

^{71.} Turner, supra note 69.

^{72.} These texts are taken directly from Jun Rekimoto, a renowned professor of humancomputer interaction at the University of Tokyo, who translated the opening of Hemingway's "The Snows of Kilimanjaro" to gauge the accuracy of various translation paradigms. Lewis-Kraus, *supra* note 45.

frozen carcass of a leopard. Whether the leopard had what the demand at that altitude, there is no that nobody explained.

Translation by the GNMT System:

Kilimanjaro is a mountain of 19,710 feet covered with snow and is said to be the highest mountain in Africa. The summit of the west is called "Ngaje Ngai" in Masai, the house of God. Near the top of the west there is a dry and frozen dead body of leopard. No one has ever explained what leopard wanted at that altitude.

Translation by a Human Translator:

Kilimanjaro is a snow-covered mountain 19,710 feet high, and is said to be the highest mountain in Africa. Its western summit is called the Masai "Ngaje Ngai," the House of God. Close to the western summit there is the dried and frozen carcass of a leopard. No one has explained what the leopard was seeking at that altitude.

The vast improvements stem from the fact that the GNMT system no longer translates word-by-word but instead translates entire phrases as units, a feature known as "soft alignment."⁷³

People who rated the accuracy of the new system on a scale of 0 to 6 scored English-to-Spanish (non-legal) translations at an average of 5.43 compared to 5.5 for human translators, and an average of 4.3 for Chinese-to-English (non-legal) translations compared to 4.6 for human translators.⁷⁴ Although the neural system has made great strides, "the GNMT model still mistranslates rare terms and occasionally drops words."⁷⁵ Currently, the tool is only publicly offered for Chinese-to-English translations.⁷⁶ However, Google plans to eventually offer the GNMT system for more of the ten thousand language pairs

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^{73.} Dzmitry Bahdanau et al., Neural Machine Translation by Jointly Learning to Align and Translate, INT'L CONF. MACHINE TRANSLATION 7 (May 19, 2016), https://arxiv.org/pdf/1409.0473.pdf.

^{74.} Turner, supra note 69; but see Matthew Blake, Man vs. Machine: Google Translate Jeopardizes Client Confidentiality, eDiscovery, ABOVE THE LAW (Jan. 5, 2015, 11:12 AM), https://abovethelaw.com/2015/01/man-vs-machine-google-translate-jeopardizes-client-confidentiality-ediscovery/ (noting that many common web-based translation services "do

not have a proven record of the high accuracy rates required for many legal situations"). 75. Turner, *supra* note 69.

^{76.} Id.

supported by Google Translate.⁷⁷ Systran's version of neural machine technology, known as Pure Neural Machine Translation (PNMT), is currently capable of translating over a hundred languages.⁷⁸ The GNMT and PNMT are but two examples of rapidly-advancing neural machine translation systems, which are likely to become part of modern law offices' standard technological outfits.

IV. LAWYER LIABILITY

A. Legal Malpractice

A quarter of a century ago, an article appearing in the ABA Journal predicted that "[a] malpractice suit will eventually be brought against a law firm on the basis that a case was either inadequately or improperly automated."⁷⁹ Although the article's authors were referring to the use of computer programs to speed up document searches, many of the same arguments can be advanced with respect to an attorney who ineffectually uses only machine translation to translate his or her client's documents.

Courts have long held that it can be negligent to not use common, accepted technology.⁸⁰ For instance, in the 1932 *T.J. Hooper* case, the defendant operated tugboats that did not have reliable radios on board.⁸¹ The plaintiff sued under a towing contract when two barges were lost in a storm.⁸² Basing his case on a theory of negligence, the plaintiff claimed that the defendant breached the standard of care owed to him when the defendant failed to equip its tugboats with reliable radios.⁸³ If the tugboats had radios, the plaintiff argued, the defendant would have received storm warnings and the plaintiff's two barges would have been

^{77.} Id.

^{78.} Jeff Charles, What Small Businesses Should Know About Neural Machine Translation, SMALL BUS. TRENDS (May 26, 2017), https://smallbiztrends.com/2017/05/ neural-machine-translation-small-business.html.

^{79.} Stuart W. Hubbard & Gregory S. Johnson, Avoid Malpractice – Automate, ABA J., Sept. 1993, at 88, 89.

^{80.} See generally Mark F. Grady, Why Are People Negligent? Technology, Nondurable Precautions, and the Medical Malpractice Explosion, 82 NW. U. L. REV. 293 (1988) (explaining how technological advances "can easily cause corresponding increases in the number of negligence claims").

^{81.} The T.J. Hooper v. N. Barge Co., 60 F.2d 737, 737 (2d Cir. 1932).

^{82.} Id.

^{83.} Id. at 739.

rescued⁸⁴—after all, four other tugs on the same route as the defendant avoided the storm because of reliable radios.⁸⁵ Judge Learned Hand, writing for the majority, held that:

[I]ndeed in most cases reasonable prudence is in fact common prudence; but strictly it is never its measure; a whole calling may have unduly lagged in the adoption of new and available devices. It never may set its own tests, however persuasive be its usages. Courts must in the end say what is required; there are precautions so imperative that even their universal disregard will not excuse their omission.⁸⁶

Judge Learned Hand advances, albeit in a different context, the idea that the failure to take precautions may be so egregious that it does not matter whether such precautions have been overlooked in the past. Thus, it should not matter for liability purposes that the legal community as a whole discounts the importance and difficulty of acquiring quality legal translation.⁸⁷ If neural machine translation systems become commonly accepted technology, it may be negligent for lawyers in the future to not use them. The fact that standards for legal translation are not mentioned in state laws, federal laws, or the Model Rules of Professional Conduct⁸⁸ should not be taken to mean that lawyers need not still pay special attention to the mode of translation they select for their clients' documents:

[T]he courts have always imposed the obligation of good faith and reasonableness on parties, and that is what continues to be the standard today.... So, while technology definitely has its place, the art of good judgment still comes down to people.⁸⁹

1. Legal Malpractice Arising from a Breach of Contract

Clients may sue their lawyer for malpractice on a strict liability basis for nonperformance of express or implied promises.⁹⁰

 $^{84. \} Id.$

^{85.} Id.

^{86.} Id. at 740 (emphasis added).

^{87.} Giordano, supra note 8, at 450.

^{88.} Supra pt. II.

^{89.} Richard Russeth & Susan Burns, Why My Human Document Reviewer Is Better Than Your Algorithm, ACC DOCKET, May 2010, at 19, 24.

^{90.} MALLEN & SMITH, supra note 17, §§ 8:27–28.

For instance, a lawyer who overbills a client or charges the client for tasks that were never performed is liable for breach of contract.⁹¹ Unlike legal malpractice premised on negligence, contractually based legal malpractice does not require that the plaintiff prove the defendant-lawyer acted culpably.⁹² As explained by Judge Posner:

[C]ontract liability is strict. A breach of contract does not connote wrongdoing; it may have been caused by circumstances beyond the promisor's control... And while such contract doctrines as impossibility, impracticability, and frustration relieve promisors from liability for some failures to perform that are beyond their control, many other such failures are actionable although they could not have been prevented by the exercise of due care.⁹³

This is not to imply that a lawyer's culpability in the breach of contract context is meaningless. To the contrary, lawyers who intentionally, recklessly, or negligently breach a contract likely will face increased disapproval from the judge or jury deciding their cases, and they may even forfeit their ability to discharge their malpractice judgment in bankruptcy.⁹⁴

2. The Elements of Tort-Based Legal Malpractice

While in many jurisdictions actions against attorneys may be founded in contract, in the state of Florida, legal malpractice actions are based on negligence.⁹⁵ To succeed on a legal malpractice claim, a plaintiff must plead and prove: (1) the attorney's employment;⁹⁶ (2) the attorney's neglect of a reasonable duty; and (3) that the attorney's negligence was the proximate cause of loss to the plaintiff.⁹⁷ The suit must also be brought within the applicable statute of limitations. In Florida, all legal malpractice

^{91.} Charnay v. Cobert, 145 Cal. App. 4th 170, 186 (Cal. Ct. App. 2006).

^{92.} MALLEN & SMITH, supra note 17, § 8:26.

^{93.} Evra Corp. v. Swiss Bank Corp., 673 F.2d 951, 956-57 (7th Cir. 1982).

^{94. 11} U.S.C. \$523(a)(6) (2016) (stating that debts may not be discharged "for willful and malicious injury by the debtor to another entity or the property of another entity").

^{95.} David B. Esau, *State of Florida*, *in* THE LAW OF LAWYER'S LIABILITY 100, 100 (Merri A. Baldwin et al. eds., 2012).

^{96.} Ginsberg v. Chastain, 501 So. 2d 27, 29 (Fla. 3d Dist. Ct. App. 1986).

^{97.} Steele v. Kehoe, 747 So. 2d 931, 933 (Fla. 1999); Rose Kennedy, Much Ado About Nothing: Problems in the Legal Translation Industry, 14 TEMP. INT'L & COMP. L.J. 423, 427 (2000).

actions must commence within two years from the time the cause of action was or should have been discovered.⁹⁸ For statute of limitations purposes, a cause of action for legal malpractice does not accrue until the underlying adverse judgment becomes final (i.e. all appeals have been exhausted). Before all appellate remedies have been exhausted, damages are considered to be merely speculative and legal malpractice only hypothetical.⁹⁹

a. The Attorney's Employment

Bringing a legal malpractice cause of action requires establishing, to the court's satisfaction, that the plaintiff-client employed the defendant-attorney and that the alleged act or acts of malpractice were within the scope of the attorney's employment.¹⁰⁰ An attorney-client relationship may generally be created in one of three ways: judicial appointment, express agreement, and mistake.¹⁰¹ If the record does not contain evidence that indicates an attorney-client relationship existed with respect to the services at issue, the first element of legal malpractice will not be met, and the case may be dismissed for failure to state a claim.¹⁰² Additionally, the client must prove that the negligent act

A relationship of client and lawyer arises when:

 $\left(2\right)$ a tribunal with power to do so appoints the lawyer to provide the services.

^{98.} FLA. STAT. § 95.11(4)(a) (2017).

^{99.} Law Office of David J. Stern, P.A. v. Security Nat. Servicing Corp., 969 So. 2d 962, 966 (Fla. 2007).

^{100.} See Maillard v. Dowdell, 528 So. 2d 512, 514 (Fla. 3d Dist. Ct. App. 1988); Ginsberg v. Chastain, 501 So. 2d 27, 29 (Fla. 3d Dist. Ct. App. 1986); Davis v. Hathaway, 408 So. 2d 688, 689 (Fla. 2d Dist. Ct. App. 1982) (explaining that the court examines whether the facts support that an attorney-client relationship existed and that the attorney neglected this relationship).

^{101.} According to RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 14 AM. LAW INST. (2000):

⁽¹⁾ a person manifests to a lawyer the person's intent that the lawyer provide legal services for the person; and either

⁽a) the lawyer manifests to the person consent to do so; or

⁽b) the lawyer fails to manifest lack of consent to do so, and the lawyer knows or reasonably should know that the person reasonably relies on the lawyer to provide the services; or

But see RICHARD E. FLAMM, CONFLICTS OF INTEREST IN THE PRACTICE OF LAW § 14.1 (2015) ("In most jurisdictions... the applicable rules of professional conduct neither prescribe when an attorney-client relationship comes into being, nor provide guidelines for determining such.").

^{102.} Gutter v. Wunker, 631 So. 2d 1117, 1118 (Fla. 4th Dist. Ct. App. 1994) (affirming dismissal of a legal malpractice claim for failure to allege an attorney-client relationship).

complained of was within the scope of the attorney's initial employment.¹⁰³

Unless excepted, legal malpractice causes of actions require privity of contract between the client and his or her attorney: "Florida courts have uniformly limited attorneys' liability for negligence in the performance of their professional duties to clients with whom they share privity of contract."¹⁰⁴ The privity requirement has been relaxed in Florida only where the client obviously intended to benefit a third-party beneficiary.¹⁰⁵ Willdrafting is the most common example of this exception; although the third-party beneficiary exception occasionally has been applied to other scenarios,¹⁰⁶ courts often refer to this as the "will-drafting exception."¹⁰⁷

b. Neglect of a Reasonable Duty

Plaintiffs asserting a legal malpractice cause of action must plead and prove that their attorney neglected a reasonable duty.¹⁰⁸ The duty of reasonable care has been interpreted to require the attorney to exercise good faith and to perform tasks with competence and diligence,¹⁰⁹ but the duty does not extend so far as to require that the attorney correctly predict the future of unsettled law.¹¹⁰ Examples of the duty of reasonable care being breached include the attorney failing to inform a client of possible changes in the law which the attorney knows could adversely affect a client,¹¹¹ or negligently informing or failing to inform a client of the risks of not accepting settlement.¹¹² The Florida Supreme Court has held that the evaluation of an attorney's judgment may

^{103.} Davis v. Hathaway, 408 So. 2d 688, 689 (Fla. 2d Dist. Ct. App. 1982).

^{104.} Angel, Cohen and Rogovin v. Oberon Investment, 512 So. 2d 192, 194 (Fla. 1987). 105. *Id.*

^{106.} See, e.g., Rushing v. Bosse, 652 So. 2d 869, 872–73 (Fla. 4th Dist. Ct. App. 1995) (applying the third-party beneficiary exception to adoptees).

^{107.} Espinosa v. Sparber, et al., 586 So. 2d 1221, 1223 (Fla. 3d Dist. Ct. App. 1991).

^{108.} Atkin v. Tittle & Tittle, 730 So. 2d 376, 377-78 (Fla. 3d Dist. Ct. App. 1999).

^{109.} Crosby v. Jones, 705 So. 2d 1356, 1358 (Fla. 1998).

^{110.} Stake v. Harlan, 529 So. 2d 1183, 1185 (Fla. 2d. Dist. Ct. App. 1988) (stating "there was no duty of defendant attorney to advise his clients of a possible change in the law"). 111. Id.

^{111.} *Ia*

^{112.} Sauer v. Flanagan and Maniotis, P.A., 748 So. 2d 1079, 1082 (Fla. 4th Dist. Ct. App. 2000).

be determined as a matter of law,¹¹³ whereas the question of the attorney's good faith and diligence are questions of fact.¹¹⁴

c. Legal Cause of Damage to the Client

The final element of legal malpractice claims is that the attorney's negligence was the "legal" or "proximate" cause of the client's damages.¹¹⁵ Causation of damages is never presumed but must be proven by the client, most often using the "but for" test.¹¹⁶ The client is required to show that, but for the negligence of his or her attorney, the harm would not have occurred.¹¹⁷ Liability will not attach where "some separate force or action is 'the active and efficient intervening cause,' the 'sole proximate cause,' or an 'independent' cause,"¹¹⁸ and in a "significant minority" of jurisdictions the burden of proof with respect to causation is on the malpractice defendant.¹¹⁹

Despite the apparent simplicity of the "but for" test, courts have found such causation difficult to establish.¹²⁰ The client must often establish that not only was the attorney the proximate cause of his or her damages, but that an alternative sequence of events would have occurred if not for the attorney's negligence.¹²¹

Proving damages in legal malpractice cases is much more difficult than in, say, medical malpractice cases with personal

119. MALLEN & SMITH, *supra* note 17, § 33:32.

^{113.} Crosby, 705 So. 2d at 1358-59.

^{114.} DeBiasi v. Snaith, 732 So. 2d 14, 16 (Fla. 4th Dist. Ct. App. 1999).

^{115.} RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 53 cmt. a AM. LAW INST. (2000) (stating that "legal cause" is equivalent to "proximate cause").

^{116.} *Id.* § 53 cmt. b (stating that the client must prove, by a preponderance of the evidence, that but for the attorney's misconduct, the client would not have been harmed). 117. *Id.*

^{118.} Gibson v. Avis Rent-A-Car System, Inc., 386 So. 2d 520, 522 (Fla. 1980) (citations omitted).

^{120.} See, e.g., Faber v. Herman, 731 N.W.2d 1, 10–11 (Iowa 2007) (holding that a divorce lawyer's malpractice did not cause damages because, although the lawyer did not comply with all applicable laws, the result sought by the husband was ultimately achieved); AmBase Corp. v. Davis Polk Wardwell 866 N.E.2d 1033, 1037–38 (N.Y. 2007) (finding that plaintiff failed to establish the requisite factual causation in a case involving a law firm's alleged failure to provide proper tax advice).

^{121.} See, e.g., Bristol Co., LP v. Osman, 190 P.3d 752, 756–57 (Colo. Ct. App. 2007) (finding the portion of plaintiff's complaint addressing causation to be insufficient because the allegations of harm were hypothetical and speculative); Christensen & Jensen, P.C. v. Barrett & Daines, 194 P.3d 931, 942 (Utah 2008) (holding that joint plaintiffs in a legal malpractice suit could not recover damages because they failed to show that, but for the attorneys' breaches, they would have benefitted).

injury because the damages in legal malpractice suits are typically limited to economic loss.¹²²

3. Avoiding Legal Malpractice

Although incorrect translations frequently bring about devastating consequences,¹²³ no translator has ever been successfully sued for producing an incorrect translation.¹²⁴ One potential explanation for the lack of translator liability is that few translators are perceived as having the ability to pay the amount of a judgment.¹²⁵ Lawyers and law firms, on the other hand, are thought of as having enough liability insurance to cover large awards.¹²⁶ This assumption arises despite the fact that the vast majority of states do not require all private practitioners to carry professional liability insurance.¹²⁷ The state of Florida, for example, does not require lawyers to report legal malpractice insurance status with annual registration.¹²⁸ Florida also does not

^{122.} Herbert M. Kritzer & Neil Vidmar, When the Lawyer Screws Up: A Portrait of Legal Malpractice Claims and Their Resolution, 1, 3–5 (2015) http://ssrn.com/abstract=2627735.

^{123.} For example, in the mid-20th century, the mistranslation of a few German phrases in a European Court of Justice judgment led to the filing of over 200,000 suits in the German courts. Terrill J. North, *New Approach to Legal Translation*, 4. COLUM. J. EUR. L. 211, 211 (1998) (book review) (referencing Alfons Lutticke GmbH v. Hauptzollamt Saarlous, Case 57/65, 1966 E.C.R. 205).

^{124.} Matt Hammond, A New Wind of Equality from Europe: Implications of the Court Case Cited by Holz-Mänttäri for the U.S. Translation Industry, in VIII TRANSLATION AND THE LAW 233, 234 (Marshall Morris ed. 1995) (book review) (stating that "translationmarket observers surveyed by this author could not think of a single case of a translator being sued for anything other than failure to deliver on time"); Benmaman, *supra* note 27, at 10 (citing only one case to ever be overturned because of an interpretation error). Medical malpractice lawsuits are one example of the type of suit that frequently arises as a result of incorrect translations. See, e.g., GAIL PRICE-WISE, AN INTOXICATING ERROR: MISTRANSLATION, MEDICAL MALPRACTICE, AND PREJUDICE iv (2015) (discussing the case of Willie Ramirez, who received a seventy-one-million-dollar settlement after the misinterpretation of the Spanish word "intoxicado" at a hospital resulted in a misdiagnosis that left him quadriplegic).

^{125.} A number of insurance companies offer Errors & Omissions (E&O) insurance to translators, however, very few translators opt to purchase liability insurance, reasoning that they are likely to be seen as "judgment proof" and will avoid litigation based solely on their apparent lack of assets. *E.g., Insurance for Translators*, INSUREON, http://www.insureon.com/who-we-insure/specialty/translators (last visited July 29, 2018).

^{126.} This assumption is not always correct, as many legal practitioners serving private clients are uninsured. Solo practitioners and those working in very small firms are the most likely to be without malpractice insurance. Kritzer & Vidmar, *supra* note 122, at 3. There is limited data regarding the correlation between firm size and malpractice claims, however one study reported that 98% of alleged legal errors were made by solo practitioners and attorneys at firms with fewer than thirty attorneys. ABA Study, *supra* note 18, at 20–21.

^{127.} ABA Study, *supra* note 18, at 20–21

^{128.} Kritzer & Vidmar, supra note 122, at 72.

require lawyers to inform clients in retainer agreements if they have malpractice insurance or require lawyer limited liability partnerships, limited liability companies, or service corporations to have liability insurance for the entity.¹²⁹

Despite misconceptions regarding legal malpractice insurance, generally speaking, between lawyers and translators, lawyers face a greater risk of being successfully sued.¹³⁰ Thus, lawyers who wish to offer machine translation technology to their clients should take precautions to minimize their chances of being sued for malpractice in the event that a machine translation error harms their clients. Such caution is all the more significant in light of the increasing costs of both legal malpractice insurance¹³¹ and legal malpractice defense.¹³²

a. Client Intake

An attorney may attempt to lessen his or her exposure to machine translation-based malpractice suits by taking only English-speaking clients to avoid the issue of translation altogether. This method is not foolproof, however, for there are many instances where foreign-language documents are relevant in cases involving anglophone clients.¹³³ In an increasingly globalized and multilingual world, it is nearly impossible for a lawyer to fully screen each prospective client and successfully predict whether he or she will encounter a foreign language document during discovery.

^{129.} Id.

^{130.} Nearly all translators are self-employed and work as independent contractors. Despite the fact that independent contractors have many of the same legal obligations as big businesses, independent contractors rarely have sufficient insurance coverage. See generally New National Survey Finds Nearly 60 Percent of Home Based Business Owners Without Insurance, INDEP. INS. AGENTS & BROKERS OF AM. (Feb. 25, 2004), https://www.independentagent.com/News/PressReleases/Pages/2004/NA20040225120203 .aspx (revealing that the majority of U.S. home-based businesses lack adequate insurance coverage).

^{131.} Lorelei Laird, ABA Study Suggests Legal Malpractice Insurers Are Settling Sooner, AM. BAR ASS'N (Oct. 17, 2016, 11:30 AM), http://www.abajournal.com/news/article/ aba_study_suggests_legal_malpractice_insurers_are_settling_sooner.

^{132.} Insurers Say Legal Malpractice Claims Hold Steady but Defense Costs Rise, INS. J. (July 11, 2017), https://www.insurancejournal.com/news/national/2017/07/11/456320.htm.

^{133.} For example, when English-speaking parties engage in business with foreign parties. Michelle J. Rozovics, *Drafting Multiple Language Contracts*, 48 GP SOLO 1, 14 (2011).

b. Use of a Hybrid MT-Human Translator Process

To both benefit from the cost and increased speed of modern translation technology and lessen the likelihood of a malpractice suit, lawyers and law firms should seek to implement a hybrid translation process which involves an initial document translation by an NMT tool followed by a review by a human translator. Regardless of the improvements in NMT technology,¹³⁴ human translators will remain necessary:

[M]any lawyers view interpreters with suspicion, and may wish to confine the interpreter's role to that of a machine . . . merely transmitting "exact" translations, free of subjectivity, from one side to the other. And yet, when properly understood, the linguistic complexity and cultural embeddedness of interpretation reveal the lie of verbatim translation and underscore the inescapable subjectivity of all interpretation.¹³⁵

Lawyers will have a much better chance of proving that they met the necessary standard of care owed to their clients if they can show that, in an effort to ensure the highest degree of accuracy, they used two separate translation mechanisms—machine and human.

As has been suggested in various articles dealing with emerging eDiscovery technologies, technology should not be viewed "as a superhero, rescuing corporations from the high costs of e[D]iscovery,"¹³⁶ but rather as an imperfect assistant whose work will always require subsequent review. Attorneys who seek to save money and time whilst avoiding claims of negligence should employ a hybrid machine-human translation process, or else send all of their clients' documents to reputable human translators.

B. The Model Rules of Professional Conduct

The attorney who agrees to perform services for a client is bound by a variety of ethical rules, which include taking

^{134.} Finding a Voice, THE ECONOMIST (May 1, 2017), https://www.economist.com/technology-quarterly/2017-05-01/language (stating that "[m]achine translation . . . has gone from terrible to usable for getting the gist of a text, and may soon be good enough to require only modest editing by humans").

^{135.} Muneer I. Ahmad, Interpreting Communities: Lawyering Across Language Difference, 54 UCLA L. REV. 999, 1003 (2007).

^{136.} Russeth & Burns, supra note 89, at 20.

precautions to competently perform the services requested by the client,¹³⁷ maintaining client confidences,¹³⁸ making reasonable efforts to expedite litigation,¹³⁹ and neither charging nor collecting unreasonable fees.¹⁴⁰ Although the preamble to the Rules of Professional Conduct for Florida Lawyers explicitly provides that "they are not designed to be a basis for civil liability,"¹⁴¹ failure to abide by the Model Rules of Professional Conduct can still be grounds for discipline by a state bar's grievance committee.¹⁴² Potential sanctions range from admonitions,¹⁴³ or "informal reprimands" to reprimands¹⁴⁴ (sometimes called "censures");¹⁴⁵ suspension;¹⁴⁶ and—in extreme cases—disbarment.¹⁴⁷

Although there are no Model Rules that address translation directly and no case law on the subject of "ethical violations by attorneys who act as translators of legal documents,"¹⁴⁸ the Rules are nonetheless worthy of consideration because courts often refer to ethics rules to determine what standard of care clients were owed.¹⁴⁹ Rule violations may also be used by courts as evidence of

143. AM. BAR ASS'N, STANDARDS FOR IMPOSING LAWYER SANCTIONS, Standards 2.6, 4.34 (1992); Fla. Bar v. Ticktin, 14 So. 3d 928, 939 (Fla. 2009) ("Rule Regulating the Florida Bar 3-5.1(b) states that minor misconduct is the only type of misconduct for which an admonition is appropriate.").

144. STANDARDS FOR IMPOSING LAWYER SANCTIONS, supra note 143, at Standard 4.33.

145. E.g., Matter of Begos, 117 A.D. 3d 241, 245 (N.Y. App. Div. 2014) ("[A] public reprimand in Connecticut is the equivalent of a public censure in New York.") (citations omitted).

146. See STANDARDS FOR IMPOSING LAWYER SANCTIONS, supra note 143, at Standard 4.32 (discussing when suspension may be appropriate in the context of conflicts of interest).

147. See id. at Standard 4.31 (discussing when disbarment may be appropriate in the context of conflicts of interest); but see RICHARD E. FLAMM, LAWYER DISQUALIFICATION: CONFLICTS OF INTEREST AND OTHER BASES §§ 23.1, 23.3 (2003) ("Courts have begun to register growing dissatisfaction with the use of disqualification as a remedy for ethical misconduct... [M]any have opined that disqualification may be a harsh, drastic, extreme, extraordinary, and even draconian sanction for what may, in some instances, be an inadvertent rule violation.") (citations omitted).

148. Giordano, supra note 8, at 451.

149. See generally Richmond, supra note 14, at 939; MALLEN & SMITH, supra note 17, § 1:8 ("Ethics rules are a basis for discipline, have been argued to provide an alleged independent basis of tort liability, may prescribe a standard of conduct, or may codify accepted principles of civil liability.") (citation omitted).

^{137.} MODEL R. PROF'L CONDUCT 1.1 (AM. BAR ASS'N 2016).

^{138.} MODEL R. PROF'L CONDUCT 1.6.

^{139.} MODEL R. PROF'L CONDUCT 3.2.

^{140.} MODEL R. PROF'L CONDUCT 1.5.

^{141.} FLA. R. PROF'L CONDUCT pmbl.

^{142.} Model Rules of Professional Conduct: Preamble & Scope, AM. BAR. ASS'N, https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct_preamble_scope.html (last visited Aug. 7, 2018).

negligence.¹⁵⁰ This Section explores how an attorney who obtains an incorrect translation for his or her client may run afoul of the current legal ethic rules and expose the attorney to discipline.

1. Rule 1.1

The ABA's Model Rule of Professional Conduct 1.1 reads: "A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation."¹⁵¹ As early as the 1990s, state and local bar associations began to consider implementing "minimum computer literacy requirements for their members . . . [that] would make it unethical to practice law without a rudimentary understanding of computers."¹⁵² The comments to Model Rule 1.1 now specifically direct lawyers to "keep abreast of changes in the law . . . including the benefits and risks associated with relevant technology."¹⁵³ Twenty-seven states have adopted an ethical duty of technology competence,154 and Florida recently became the first state to require technology training as part of its continuing legal education (CLE) requirement.¹⁵⁵ In light of these developments, lawyers appear to have a duty to educate themselves about the benefits and risks of machine translation software before deciding whether to rely on such technology to translate their documents.

Comment 5 to Model Rule 1.1 further states that "[c]ompetent handling of a particular matter includes inquiry into and analysis of the factual and legal elements of the problem, and *use of methods and procedures meeting the standards of competent practitioners*."¹⁵⁶ This language could be logically interpreted as requiring attorneys to spend some time educating themselves about the various translation methods available before selecting

^{150.} See Pressley v. Farley, 579 So. 2d 160, 161 (Fla. 1st Dist. Ct. App. 1991) (citing Oberon Investments, N.V. v. Angel, Cohen & Rogovin, 492 So. 2d 1113, 1114 n.2 (Fla. Dist. Ct. App. 1986), quashed on other grounds, 512 So. 2d 192 (Fla. 1987)).

^{151.} MODEL R. PROF'L CONDUCT 1.1 (AM. BAR ASS'N 2016).

^{152.} Hubbard & Johnson, *supra* note 79, at 90.

^{153.} MODEL R. PROF'L CONDUCT 1.1 cmt. 8.

^{154.} Erika Kubik, *Tennessee Becomes 27th State to Adopt Ethical Duty of Technology Competence*, 2 CIVILITY: ILLINOIS SUPREME COURT COMMISSION ON PROFESSIONALISM (Mar. 22, 2017), https://www.2civility.org/tennessee-27th-state-adopt-technology-competence.

^{155.} In re Amend. to Rules Reg. Fl. Bar 4-1.1 & 6-10.3, 200 So. 3d 1225, 1227-28 (Fla. 2016).

^{156.} MODEL R. PROF'L CONDUCT 1.1 cmt. 5 (emphasis added).

one; otherwise, they risk incompetently handling their clients' foreign-language documents.

It has even been suggested that the "requisite skill and preparation" mandated by Rule 1.1 may not be met when a bilingual attorney (who is not a professional translator) translates his or her own documents and relies on the translations when formulating a case strategy.¹⁵⁷ This further highlights the need for an additional translation mechanism.

2. Rule 1.5

Eighty-four percent of Americans who reported having civil legal issues in 2014 did not have the financial means to obtain legal help in addressing them.¹⁵⁸ Unfortunately, at least eighty percent of indigent civil litigants do not receive assistance from Florida legal services attorneys, meaning many people who cannot afford to obtain counsel are effectively excluded from access to justice.¹⁵⁹ Automated technologies like machine translation can lower the cost of certain aspects of legal practice to help to eliminate price barriers for those individuals seeking legal aid; however, commentators remain aware that the success of such technologies "partially relies upon their ability to circumvent or avoid expensive ethical duties."¹⁶⁰ In other words, legal professionals may still hesitate to take non-English-speaking clients on a pro bono basis in part due to the unclear laws regarding the translation of discovery documents.

Paying a human translator to translate hundreds of pages of documents in their entirety to then subsequently rule out the documents as unimportant for a case is not only illogical, but likely to upset budget-conscious clients. There would be a dramatic billing difference between paying a professional human translator to translate every foreign language document in its entirety and using machine translation software to produce an initial translation sufficient to signal to the lawyer whether it is necessary to pay a human translator for a more precise translation

^{157.} Giordano, supra note 8, at 479 (quoting MODEL R. PROF'L CONDUCT 1.1).

^{158.} Interim Report, FL. COMM'N ON ACCESS TO CIV. JUST. 5 (Oct. 1, 2015), https://www.americanbar.org/content/dam/aba/administrative/legal_aid_indigent_defenda nts/ATJReports/FL_2015_InterimReport.authcheckdam.pdf.

^{159.} Id. at 5-6.

^{160.} See Brian Sheppard, Incomplete Innovation and the Premature Disruption of Legal Services, 2015 MICH. ST. L. REV. 1797, 1899 (2016).

of certain documents. The lawyer who does not initially use an available machine translation system to determine the nature and importance of a document may end up over-charging the client for document translations.¹⁶¹ Model Rule 1.5 states that "[a] lawyer shall not make an agreement for, charge, or collect an unreasonable fee or an unreasonable amount for expenses."¹⁶² In other words, any fees charged—including fees for in-house services like translation—must be reasonable under the circumstances.¹⁶³ As machine translation continues to become more accurate and more readily available, charging clients top-dollar for human translations of documents that end up being unimportant to a case may eventually be viewed as unreasonable and results in clients filing complaints against their attorneys.

3. Rule 1.6

Model Rule 1.6 states, in relevant part, that "[a] lawyer shall not reveal information relating to the representation of a client unless the client gives informed consent,¹⁶⁴ the disclosure is impliedly authorized in order to carry out the representation or the disclosure is permitted by [another provision of the Model Rules]."¹⁶⁵ Web-based translation systems like Google Translate pose confidentiality issues because they do not contain safeguards to protect against the exposure of client data.¹⁶⁶ Unless an attorney has obtained prior consent from his or her client to use web-based services like Google Translate to determine a document's meaning, it is risky to translate confidential documents using these services—especially considering that the attorney has no way of knowing what a foreign language document says until after it has been translated. If an attorney inadvertently plugs sensitive

^{161.} See Andrew Arruda, An Ethical Obligation to Use Artificial Intelligence? An Examination of the Use of Artificial Intelligence in Law and the Model Rules of Professional Responsibility, 40 AM. J. TRIAL ADVOC. 433, 456 (2017) (making a similar argument that lawyers who do not use email or phones to communicate with their clients may be violating Model Rule 1.5 by billing for slower and more expensive methods of communication).

^{162.} MODEL R. PROF'L CONDUCT 1.5(a) (AM. BAR ASS'N 2016).

^{163.} See MODEL R. PROF'L CONDUCT 1.5(a) cmt. 1 (explaining that all fees must be "reasonable under the circumstances" but not discussing translation specifically).

^{164. &}quot;Informed consent' denotes the agreement by a person to a proposed course of conduct after the lawyer has communicated adequate information and explanation about the material risks of and reasonably available alternatives to the proposed course of conduct." MODEL R. PROF'L CONDUCT 1.0(e).

^{165.} MODEL R. PROF'L CONDUCT 1.6(a).

^{166.} Blake, *supra* note 74.

information into a public web-based service like Google Translate, opposing counsel may be able to argue that any protective orders for information confidentiality have been voided.¹⁶⁷

Neural machine translation software offers more security than web-based tools and is more likely to abide by the client confidentiality guidelines set forth in Rule 1.6: "implementing machine translation services within a secure firewall that operates under a terms of service agreement tailored to the legal industry appears to be the most secure way to leverage machine translation capabilities without jeopardizing client confidentiality."¹⁶⁸

4. Rule 3.2

Model Rule 3.2 states that "[a] lawyer shall make reasonable efforts to expedite litigation consistent with the interests of the client."¹⁶⁹ If faced with a substantial number of foreign language documents, discovery could be delayed as the attorney—who already spent time locating a suitable human translator—then waits for the final translated documents. Neural machine translation software allows firms to translate thousands of documents nearly instantaneously—a task that would take "a team of highly skilled linguists" weeks.¹⁷⁰ Thus, an attorney with access to a reliable neural machine translation system may run afoul of Model Rule 3.2 by not running the client's non-English documents through a NMT system before seeking the help of a professional translator, because failing to take this extra step could significantly delay a case.

5. Rule 5.3

Lawyers are not only responsible for ensuring that their own behavior comports with the ethical standards laid out in the Model Rules but are also required to supervise the translators they hire so as to ensure the translators' compliance with the Rules.¹⁷¹ The

^{167.} Id.

^{168.} Id.

^{169.} Model R. Prof'l Conduct 3.2 (Am. Bar Ass'n 2016).

^{170.} Sheila Eugenio, *This New Translation Tech Will Smash the Language Barrier to Doing Business Globally*, ENTREPRENEUR (July 25, 2017), https://www.entrepreneur.com/article/292972.

^{171.} MODEL R. PROF'L CONDUCT 5.3 (AM. BAR ASS'N 2016); see also Peter Geraghty, Don't Get Lost in the Translation, AM. BAR ASS'N (Nov. 2016), https://www.americanbar.org/

ABA Ethics 20/20 Commission's recent amendments to Rule 5.3 clarify that the duty to supervise non-lawyers applies not only to non-lawyers employed by the lawyer or law firm but also to non-lawyers outside of the firm who are retained on a case-by-case basis, such as translators.¹⁷² One example of non-lawyer assistance given in the comments to Rule 5.3 is "using an Internet-based service to store client information,"¹⁷³ which suggests that the mandate of Rule 5.3 can extend to non-human technologies. Therefore, lawyers employing machine translation software likely have a duty under Rule 5.3 to inspect the translation technology prior to using it to ensure it is capable of, for instance, satisfactorily protecting client confidences.

V. LEGISLATIVE PROPOSALS

A. Agency Regulation

Legislatures are a good starting point for regulatory schemes because they have democratic legitimacy and are able to delegate.¹⁷⁴ However, one challenge to regulating machine translation is that legislatures lack expertise on the subject (it is decidedly harder to regulate a technology that one doesn't fully understand). Scholars have suggested that creating an agency may be the best way to regulate artificial intelligence like NMT technology because the agency can employ individuals with preexisting knowledge of the industry, allowing the agency to focus its work solely on industry-relevant matters.¹⁷⁵ Despite these advantages, artificial intelligence research spans a variety of seemingly disparate fields, making it quite difficult for an agency to ensure that its staff includes the appropriate mix of professionals.¹⁷⁶

publications/youraba/2016/november-2016/don_t-get-lost-in-the-translation.html (discussing applicability of Rule 5.3 to interpreters).

^{172.} AM. BAR ASS'N, *Ethics Resolution and Report* 105(c) 2–3 (2012), https://www.americanbar.org/content/dam/aba/administrative/ethics_2020/20120808_revis ed_resolution_105a_as_amended.authcheckdam.pdf.

^{173.} Id. at 3.

^{174.} Matthew U. Scherer, Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies, 29 HARV. J.L. & TECH. 353, 378 (2016).

^{175.} *Id.* at 383.

^{176.} Id. at 385.

B. Mimicking the Current Laws Pertaining to Interpreters

Perhaps the simplest way to ensure that translation is adequately regulated is to pass laws that mimic the existing laws pertaining to oral interpretation. As discussed in Part II, the current laws require interpreters to go through a certification process to become "qualified."¹⁷⁷ The National Center for State Courts (NCSC) established uniform requirements for court interpreting services at the state level and provide court training.¹⁷⁸ interpreter orientation and Similarly. Administrative Office of the United States Courts has developed certification examinations for certain languages that consist of both written and oral tests.¹⁷⁹ Although automated translation software cannot sit down and take a test like human interpreters can, minimum software requirements can be set with respect to things like how accurate a translation system must be before it can be employed for legal services and whether consent must be obtained from a client prior to selecting a translation medium.

Requiring clients to sign a consent form before documents relevant to their case are translated would be one simple step in the right direction. Such consent forms should specify the mode of translation to be employed (i.e., input into translation software or translation by a third-party professional) so that clients may express their approval or disapproval of these methods on the front end. Even with this additional consent form, common sense dictates that most clients would welcome an initial in-house machine translation if it meant they would save a few bucks.

A second potential solution is for courts to require proof of document review by a human translator of any document substantially relied upon by an attorney. Requiring attorneys who used translation software during the discovery phase of a case to attach affidavits to their written documents affirming that a

^{177.} See FED. R. EVID. 604 (discussing the qualification requirement); supra pt. II (discussing the certification process).

^{178.} See generally State Interpreter Certification, NAT'L CENTER ST. CTS., http://www.ncsc.org/education-and-careers/state-interpreter-certification.aspx (last visited July 28, 2018) (explaining the necessary skills and training required to become a certified court interpreter).

^{179.} See Interpreter Categories, USCOURTS.GOV, http://www.uscourts.gov/services-forms/federal-court-interpreters/interpreter-categories#a1 (last visited July 28, 2018) (explaining the process required to become a certified interpreter and the languages that certification programs have been developed for).

qualified and sworn *human* translator reviewed the documents in question would better safeguard the clients' interests and minimize the risk of overlooked translation errors (and, ultimately, the risk of malpractice suits).

VI. CONCLUSION

As neural machine translation software continues to approach human-like accuracy, its use will become increasingly widespread in law firms. Traditionally, lawyers faced with foreign-language documents had no option but to locate and pay human translators; however, in recent years, lawyers have had the cheaper, simpler option of purchasing machine translation software to perform their translation work. Since lawyers are both unlikely to understand the intricacies of legal translation and unable to personally verify the accuracy of the translations they rely upon, potential exists for blind reliance on neural translation systems-and surprise litigation when a translation error does finally surface. Until written translation is regulated by law in a similar manner as oral interpretation, the best solution for an attorney keen on using machine translation is to employ a hybrid method of initial machine translation and a subsequent review by a human translator.