#### LEGAL LIABILITY FOR ARTIFICIALLY INTELLIGENT "ROBOT LAWYERS"

### by Michael Loy\*

This Comment discusses liability for the use of autonomous "robot lawyers" in the practice of law. A "robot lawyer" is an artificially intelligent (AI) software program that performs legal tasks traditionally handled by lawyers. Law firms currently use "non-autonomous" robot lawyers that operate under the supervision of a human attorney to assist in legal research, e-discovery, and contract drafting. In the future, "autonomous" robot lawyers that operate without human oversight may one day represent clients. However, courts and legislatures have not determined who will be liable for errors, omissions, malpractice, or other harms caused by autonomous robot lawyers. This Note first discusses the current use of non-autonomous robot lawyers and how human attorneys will be subject to malpractice liability for the use of these non-autonomous robot lawyers in their law practice. Second, this Note discusses how malpractice liability and other theories of liability might not apply to autonomous robot lawyers that operate without attorney supervision because AI raises unique issues of foreseeability, agency, and personhood. Finally, this Note argues that courts should hold an autonomous robot lawyer, i.e. the software itself, legally liable for its own actions and proposes several mechanisms for doing so.

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#### INTRODUCTION

After dropping his three children off at their first day of school, Dan Lear returned to his car to find something that ruined his entire day—a parking ticket.<sup>1</sup> The ticket cited Dan for parking in front of a fire hydrant but, as he explained, "[T]he curb wasn't painted and the fire hydrant was painted a kind of a funny color."<sup>2</sup> Instead of hiring a lawyer, Dan downloaded DoNotPay, a free mobile app designed to help motorists contest parking tickets. Within minutes, the app generated a personalized 500-word letter that successfully persuaded the city to let him off the hook.<sup>3</sup>

DoNotPay bills itself as the world's first "robot lawyer." Although many envision a robot as a machine made of gears and bolts, the legal services industry defines a "robot lawyer" as a software program that automatically performs legal tasks usually carried out by lawyers. Many robot lawyers use artificial intelligence (AI)—the same technology that allows Tesla's Model X to drive itself and IBM's Watson to trounce *Jeopardy!* opponents—to understand and perform complex legal tasks. AI uses complex mathematics to mimic human cognitive functions, enabling AI to "form abstractions and concepts, solve kinds of problems now reserved for humans, and improve [itself]." This means that, even without human oversight, AI can be

<sup>&</sup>lt;sup>1</sup> Arezou Rezvani, 'Robot Lawyer' Makes the Case Against Parking Tickets, NPR (Jan. 16, 2017, 3:24 PM), https://www.npr.org/2017/01/16/510096767/robot-lawyer-makes-the-case-against-parking-tickets.

<sup>&</sup>lt;sup>2</sup> Id.

<sup>&</sup>lt;sup>3</sup> *Id.* 

<sup>&</sup>lt;sup>4</sup> See, e.g., Claudia King, 5 Lawyer Bots You Can Try Now, FIRMSY (Mar. 27, 2018), https://firmsy.com/blog/5-lawyer-bots-you-can-try-now.

<sup>&</sup>lt;sup>5</sup> See, e.g., Thomas R. Moore, The Upgraded Lawyer: Modern Technology and Its Impact on the Legal Profession, 21 U. D.C. L. REV. 27, 30 (2019) (citing John Markoff, Computer Wins on 'Jeopardy!': Trivial, It's Not, N.Y. TIMES (Feb. 16, 2011), http://www.nytimes.com/2011/02/17/science/17jeopardy-watson.html?pagewanted=all) ("In fact, the computer who won 'Jeopardy!," an I.B.M. 'question answering machine' named Watson, was originally developed in order to help medical professionals make more accurate diagnoses by eliminating human limitations. The need for accuracy and eliminating human limitations is equally applicable in the legal world. By that logic, developing a version of Watson for the legal profession is merely a matter of time." (footnote omitted)); Jan L. Jacobowitz & Justin Ortiz, Happy Birthday Siri! Dialing in Legal Ethics for Artificial Intelligence, Smartphones, and Real Time Lawyers, 4 Tex. A&M J. PROP. L. 407, 411 (2018).

<sup>&</sup>lt;sup>6</sup> John McCarthy, Marvin L. Minsky, Nathaniel Rochester & Claude E. Shannon, A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence, AI MAG. 12, 12 (2006); see also Patric M. Reinbold, Comment, Taking Artificial Intelligence Beyond the Turing Test, 2020 Wis. L. Rev. 873, 877 (2020) (quoting U.S. PAT & TRADEMARK OFF., PATENT PUBLIC ADVISORY COMMITTEE QUARTERLY MEETING: IT UPDATE 240 (Aug. 2, 2018), https://www.uspto.gov/sites/default/files/documents/PPAC\_Transcript\_20180802.pdf)

trained to distill rules from patterns in large datasets, apply these rules to new factual scenarios, and further modify these rules based on new data with little to no human oversight. For example, Amazon trained an AI to identify dogs in a photo by comparing the photo to a database of known dog photos. In a similar example, Suffolk Law School's Legal Innovation and Technology class trained a robot lawyer to spot legal issues in stories posted to Reddit's "r/legaladvice" forum by comparing them to a database of 75,000 previously categorized posts. 8

Today's robot lawyers are no longer just classroom experiments that dabble in issue-spotting or legal research; attorneys use robot lawyers to perform substantive legal work and dispense real legal advice. For example, Kira Systems sells a robot lawyer to law firms that scans a client's previous contracts, identifies important terms within the contracts, and generates a personalized draft for attorney review within seconds. LegalMation, another startup, promises attorneys that its robot lawyer will automatically draft "responsive pleadings, discovery requests and responses, and related documents that are tailored to the claims, allegations, and requests in the legal document uploaded, incorporating jurisdictional requirements as well as the attorney's own style, formatting, and response strategy." These "non-autonomous" robot lawyers, which are controlled by human attorneys, benefit the legal profession by increasing profit margins, reducing mundane work, and expanding access to justice. It

<sup>(</sup>AI "mimics 'cognitive' functions that humans associate with other human minds, such as 'learning' and 'problem solving.'").

<sup>&</sup>lt;sup>7</sup> Natt Garun, *Amazon's Image Recognition AI Can Identify Your Dog Down to its Breed*, VERGE (Nov. 30, 2016, 5:05 PM), https://www.theverge.com/2016/11/30/13799582/amazon-rekognition-machine-learning-image-processing.

<sup>&</sup>lt;sup>8</sup> Jason Tashea, *New Game Lets Players Train AI to Spot Legal Issues*, ABA J. (Oct. 16, 2018, 6:30 AM), https://www.abajournal.com/news/article/new\_game\_lets\_players\_train\_ai\_and\_close\_the\_justice\_gap; LEARNED HANDS, https://learnedhands.law.stanford.edu (last visited Sept. 17, 2022).

<sup>&</sup>lt;sup>9</sup> Rachel Vanni, *How AI Accelerates the Legal Contract Drafting Process*, KIRA SYS. (May 27, 2020), https://kirasystems.com/learn/how-ai-accelerates-the-legal-contract-drafting-process/.

<sup>&</sup>lt;sup>10</sup> LEGALMATION, https://www.legalmation.com (last visited Sept. 17, 2022).

Element Legal Ethics Demands, 33 GEO. J. LEGAL ETHICS 877, 882 (2020) ("Increased accuracy and efficiency could also save clients money and increase profits for lawyers. Working at higher rates of accuracy faster likely means less billable hours charged by lawyers, meaning more money saved for clients. While this may initially seem like a profit-loss to lawyers, it could actually produce larger profit margins." (footnotes omitted)); Jacobowitz & Ortiz, supra note 5, at 441 ("[M]any innovative legal minds envision a legal profession in which attorneys shed the burden of mundane tasks and spend more time engaged in the higher-level aspects of lawyering."); DoNotPay Honored with ABA Brown Award for Access to Justice Efforts, AM. BAR ASS'N (Jan. 23, 2020), https://www.americanbar.org/news/abanews/aba-news-archives/2020/01/donotpay-honored-with-aba-brown-award-for-access-to-justice-effo. See generally ROSS INTEL., https://

Advances in computer science and artificial intelligence may eventually result in "autonomous" robot lawyers—artificially intelligent software programs that can practice law without input or assistance from a human attorney—as an alternative source of legal representation. <sup>12</sup> For example, DoNotPay, the startup originally designed to contest traffic tickets, now advertises a robot lawyer that helps users sue anyone in small claims court "at the press of a button." <sup>13</sup> DoNotPay's robot lawyer steps into the role of a small claims attorney by evaluating a user's claim, drafting a complaint, filling out court forms, and helping the user serve the defendant. <sup>14</sup> Although DoNotPay's robot lawyer is not a strong AI capable of human-like cognition, the robot lawyer is autonomous because it operates without human attorney supervision or oversight. <sup>15</sup>

However, the use of autonomous robot lawyers is a double-edged sword that may ultimately endanger users who seek the services of robot lawyers. A defective AI can harm the very users it purports to help; for example, a string of recent lawsuits allege that software defects in Tesla's autonomous self-driving cars unpredictably accelerated the cars into highway medians and pedestrians. <sup>16</sup> Although a robot lawyer might not physically harm a user who seeks its services, it can still harm a user by asserting a false fact, applying an incorrect judicial standard, or even committing malpractice. <sup>17</sup> A robot lawyer might further harm a user by disclosing the user's

www.rossintelligence.com (last visited Sept. 17, 2022) (Ross Intelligence, an AI-driven legal research tool, is much cheaper than a human attorney and costs only \$69 per month).

- <sup>12</sup> See Stephen E. Henderson, Should Robots Prosecute and Defend?, 72 OKLA. L. REV. 1, 19 (2019) ("We can't help being excited about the positive changes artificial general intelligence might permit. Yes, some attorneys—maybe even many or most attorneys—might have to find different jobs, realistically meaning that fewer will go into these lines of work. This will be disruptive. But just like AGI should bring about a world of fewer human bankers, doctors, and dentists, if these changes bring more accurate and fair criminal justice, and if they are not otherwise intrinsically harmful, they are to be eagerly anticipated.").
- <sup>13</sup> DONOTPAY, https://donotpay.com (last visited Sept. 17, 2022); see, e.g., Sue Anyone in Small Claims Court: Suing DirecTV, DONOTPAY, https://donotpay.com/learn/suing-directv (last visited Sept. 17, 2022).
  - <sup>14</sup> Suing DirecTV, supra note 13.
- <sup>15</sup> Terms of Service and Privacy Policy, DONOTPAY, https://donotpay.com/learn/terms-of-service-and-privacy-policy (July 6, 2021) ("DoNotPay provides a platform for legal information and self-help.... We do not review any information you provide us... [or] draw legal conclusions....").
- Complaint at \$\mathscr{f}\$ 3–5, 10, Umeda v. Tesla, Inc., No. 20-CV-02926, 2020 WL 5653496 (N.D. Cal. Sept. 23, 2020) (alleging that Tesla acted unreasonably in designing its artificially intelligent autopilot technology after one of Tesla's self-driving cars hit a pedestrian); Complaint at \$\mathscr{f}\$ 25, 33–41, Huang v. Tesla Inc., 19-CV-346663 (Cal. Super. Ct. Apr. 26, 2019) (alleging that a Tesla self-driving car's autopilot software was "unreasonably dangerous" after the car unexpectedly drove into a median, killing its driver).
- <sup>17</sup> See Denyse O'Leary, Why Did Watson Think Toronto Was in the U.S.A.?, MIND MATTERS (Aug. 3, 2019), https://mindmatters.ai/2019/08/why-did-watson-think-toronto-was-in-the-u-s-a/

confidential or privileged information to an unauthorized party or even by discriminating against the user.  $^{18}$ 

These potential harms should concern users who seek the services of robot lawyers, in part because courts and legislatures have largely been silent on who should be responsible for harm caused by autonomous robot lawyers. <sup>19</sup> DoNotPay requires its users to "agree to indemnify, defend, and hold harmless DoNotPay from and against any and all losses and threatened losses arising from, and in connection with . . . use of the Service [or] any claim that . . . use of the Service violates any applicable law," effectively shouldering the platform's users with liability. <sup>20</sup> However, some scholars argue that manufacturers of autonomous robot lawyers should be subject to the products liability standard previously applied to cases involving AI-enabled products. <sup>21</sup> Others suggest that humans who use autonomous robot lawyers should be vicariously liable for the actions of their artificially intelligent "agents."

("Watson, who cleaned the board last game, missed the 'Final Jeopardy!' question. Not only did he completely guess wrong, he had an answer so off the mark it shocked the audience . . . . In the category of 'U.S. Cities,' Watson said 'What is Toronto?'").

- <sup>18</sup> Joy Buolamwini, *Artificial Intelligence Has a Problem with Gender and Racial Bias. Here's How to Solve It*, TIME (Feb. 17, 2019, 7:00 AM), https://time.com/5520558/artificial-intelligence-racial-gender-bias/ (Artificial intelligence software can "amplify, rather than rectify, sexist hiring practices, racist criminal justice procedures, predatory advertising, and the spread of false information.").
- <sup>19</sup> Matthew U. Scherer, *Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies*, 29 HARV. J.L. & TECH. 353, 356 (2016) ("With the exception of a few states' legislation regarding autonomous vehicles and drones, very few laws or regulations exist that specifically address the unique challenges raised by AI, and virtually no courts appear to have developed standards specifically addressing who should be held legally responsible if an AI causes harm."); Dennis Garcia, *Preparing for Artificial Intelligence in the Legal Profession*, LEXIS PRAC. ADVISOR J. 34, 36 (2017) ("Since AI is still very much in its early stages, there are no meaningful AI-related laws or standards that can be relied upon . . . . From a regulatory perspective, some may view AI as the Wild West.").
- Terms of Service and Privacy Policy, supra note 15; see Frank Pasquale, A Rule of Persons, Not Machines: The Limits of Legal Automation, 87 GEO. WASH. L. REV. 1, 16 (2019) (discussing DoNotPay's indemnification provision); see also Terms of Use, LEGALMATION, https://www.legalmation.com/terms-of-use (last visited Sept. 17, 2022) (indemnifying a legal AI platform for any claims arising from any use of the platform).
- <sup>21</sup> See Bryan Casey, Robot Ipsa Loquitur, 108 GEO. L.J. 225, 264, 267 (2019) ("According to this account, a natural transition to 'strict products liability' will resolve the thorny challenges complex robots would otherwise pose for negligence analysis. . . . [N]egligence and products liability rules that invoke [strict products liability] have already proven remarkably effective at showing fault for automated accidents.").
- <sup>22</sup> See Sarah Kamensky, Note, Artificial Intelligence and Technology in Health Care: Overview and Possible Legal Implications, 21 DEPAUL J. HEALTH CARE L. 1, 7 (2020) ("Questions then arise as to whether traditional products liability laws should apply, holding the manufacturer of the technology liable, or if the health care provider treating the patient by way of using artificial intelligence should be held liable for errors.").

Some even believe that autonomous robot lawyers themselves should be liable because "[u]nless the law is willing to invest an autonomous thinking machine . . . with legal personhood . . . 'robots cannot be sued,' even though 'they can cause devastating damage.'"<sup>23</sup>

This Note discusses who should be liable when a robot lawyer harms a user and asserts that liability will depend on whether the robot lawyer is sufficiently autonomous to operate without human supervision. Part I of this Note discusses how human attorneys are ultimately responsible for harm caused by non-autonomous robot lawyers that operate under human supervision. Part II, by contrast, discusses how human attorneys might not be liable for harms caused by fully autonomous robot lawyers that operate without direct human oversight because autonomous AI raises unique issues of agency, foreseeability, and personhood. Finally, Part III asserts that if autonomous robot lawyers provide legal services without human oversight, courts should subject the software itself to legal liability, and proposes several mechanisms for asserting jurisdiction and allowing for recovery.

## I. HARMS CAUSED BY NON-AUTONOMOUS ROBOT LAWYERS ARE ATTRIBUTABLE TO ATTORNEYS

Regardless of whether it is reasonable for an attorney to delegate legal work to an artificially intelligent robot lawyer, the attorney is liable for any harms attributable to the robot lawyer because, first, the attorney has a duty to accept ultimate responsibility for the use of robot lawyers used as tools in his or her law practice. Second, even if the attorney considers an artificially intelligent robot lawyer more like a human employee than a software tool, the attorney still has a duty to accept ultimate responsibility for robot lawyers acting under his or her supervision.<sup>24</sup>

## A. Attorneys Have a Duty to Accept Ultimate Responsibility for the Use of Robot Lawyers as Software Tools

An attorney has a duty to consider the use of software tools or other technology in the attorney's practice. In cases involving electronic calendaring software, courts have interpreted this duty to require that attorneys take ultimate responsibility when their electronic calendars miss filing deadlines because "attorneys are responsible for

David C. Vladeck, Machines Without Principals: Liability Rules and Artificial Intelligence, 89 WASH. L. REV. 117, 124 (2014) (quoting United States v. Athlone Indus., Inc., 746 F.2d 977, 979 (3rd Cir. 1984)).

<sup>&</sup>lt;sup>24</sup> Madison Elizabeth Wahler, Comment, *A Word is Worth a Thousand Words: Implications of Relying on Machine Translation Technology*, 48 STETSON L. REV. 109, 130 (2018) ("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.").

the accuracy of the deadline calculations, whether they calculate and input the dates themselves, rely on staff members . . . or use an automated . . . system."<sup>25</sup> For example, in *Symbionics Inc. v. Ortlieb*, the Fourth Circuit Court of Appeals found that an attorney, rather than his Microsoft Windows calendar, was responsible for missing a January 2010 filing deadline after a software bug reverted the electronic calendar to January 2009. <sup>26</sup> Instead of blaming the electronic calendar, the court attributed the missed deadline to the attorney's failure to verify the calculation and discover the erroneous deadline. <sup>27</sup> Like the *Symbionics* attorney who failed to verify his electronic calendar's deadline, an attorney who fails to verify a robot lawyer's work product may bear ultimate responsibility for any errors attributable to the defective robot lawyer because he or she is ultimately responsible for selecting the proper tools and methods used to carry out representation. <sup>28</sup>

## B. Attorneys Have a Duty to Accept Ultimate Responsibility for Robot Lawyers Acting as Employees or Agents

An attorney has a duty to supervise any non-attorney employee to whom the attorney delegates work. In cases involving non-attorney paralegals, courts have interpreted the duty of supervision to require that attorneys take "complete professional responsibility" for any errors in the paralegal's work product.<sup>29</sup>

 $<sup>^{25}\,</sup>$  Joseph C. Scott, Legal Calendaring: What You Don't Know Can Hurt You, 42 L. PRAC. 46, 48 (2016).

<sup>&</sup>lt;sup>26</sup> Symbionics Inc. v. Ortlieb, 432 F. App'x 216, 220 (4th Cir. 2011) ("Counsel's total dependence on a computer application—the operation of which counsel did not completely comprehend—to determine the filing deadline for a notice of appeal is . . . precisely the sort of 'run-of-the-mill inattentiveness by counsel' that we have consistently declined to excuse in the past." (quoting Thompson v. E.I. DuPont de Nemours & Co., Inc., 76 F.3d 530, 535 (4th Cir. 1996)).

<sup>&</sup>lt;sup>27</sup> *Id.* ("[T]he failure to discover that the calendar display had reverted to January 2009, and the reliance on the resulting incorrect deadline computation, are the very essence of counsel's negligence here.").

<sup>&</sup>lt;sup>28</sup> See Gary Marchant & Josh Covey, Robo-Lawyers: Your New Best Friend or Your Worst Nightmare?, 45 LITIG. 27, 30–31 (2018) ("Yet, attorneys will nonetheless be responsible for an AI system's mistakes, especially if the reliance prejudices the client's litigation outcome. . . . [Thus,] AI systems may increase malpractice risk."); Benjamin H. Barton, Some Early Thoughts on Liability Standards for Online Providers of Legal Services, 44 HOFSTRA L. REV. 541, 557 (2015) ("[I]n Swanson v. 3M Co., the Minnesota Supreme Court analyzed a conflict of interest issue within a virtual law firm with no particular attention to the differences in technology or the type of firm at issue. Even if some of the legal work is automated or done by non-lawyers, if a lawyer is the point person on the work, legal malpractice will control." (footnote omitted)).

<sup>&</sup>lt;sup>29</sup> In re Stoutamire, 201 B.R. 592, 597 (Bankr. S.D. Ga. 1996) (quoting CODE OF PRO. RESP. EC 3–6 (STATE BAR OF GA. 2001) (repealed Jan. 1, 2001)) ("[A]n attorney should provide proper supervision of any non-lawyer employee . . . . 'Such delegation is proper if the lawyer maintains a direct relationship with his client, supervises the delegated work, and has complete

In *In re Ruebling*, the Bankruptcy Court of Central Illinois sanctioned an attorney after his paralegal improperly affixed his client's electronic signature to a court document.<sup>30</sup> Even though the attorney had no knowledge of the paralegal's misconduct, the *Ruebling* court held that the attorney had "ultimate responsibility" for the improper signature because the attorney improperly conflated the paralegal's clerical ability to type up documents with an ability to perform substantive legal work.<sup>31</sup> Similarly, an attorney who delegates substantive legal work to a robot lawyer is ethically bound to be "ultimately responsible" for the robot lawyer's errors.<sup>32</sup>

## II. HARMS CAUSED BY AUTONOMOUS ROBOT LAWYERS MIGHT NOT BE ATTRIBUTABLE TO ANY PERSON

As discussed in Part I, an attorney who delegates work to a non-autonomous robot lawyer will likely be subject to malpractice liability if the non-autonomous robot lawyer harms a user who seeks the services of the robot lawyer. However, a company like DoNotPay that uses an autonomous robot lawyer to provide legal services without human oversight might not be subject to malpractice liability, strict liability, nor even negligence because this autonomy raises questions of foreseeability, personhood, and agency. Furthermore, these novel issues might prevent courts from subjecting any other person, such as a developer who programs the autonomous robot lawyer, to products liability or any other theory of liability. Thus, users harmed by autonomous robot lawyers might find themselves in a situation in which they cannot hold any person or entity legally responsible for such harm.

professional responsibility for the work product."); *In re* Hessinger & Assocs., 192 B.R. 211, 223 (Bankr. N.D. Cal. Jan. 22, 1996) ("The duty of competent representation includes the duty of adequately supervising non-attorney employees."); *In re* Stegemann, 206 B.R. 176, 179 (Bankr. C.D. Ill. Mar. 3, 1997) (quoting Ga. State Disciplinary Bd., Advisory Op. 21 (1977)) ("[D]elegation of activities which ordinarily comprise the practice of law is proper only if the lawyer maintains a direct relationship with the client involved, supervises and directs the work delegated to the paralegal and assumes complete ultimate responsibility for the work product produced by the paralegal."); *In re* Filarski, No. 11-41680, 2012 WL 6212853, at \*2 (Bankr. S.D. Ill. Dec. 13, 2012) ("[C]ounsel is reminded that it is ultimately the responsibility of an attorney, and not a paralegal, to properly monitor and calendar deadlines . . . .").

- $^{30}\,$  In re Ruebling, No. 15-71627, 2016 WL 6877796, at \*3 (Bankr. C.D. Ill. Nov. 21, 2016).
- <sup>31</sup> *Id.* at \*8 ("[The attorney] clearly confused his paralegal's ability to create bankruptcy documents—in the clerical sense, through the use of software—with the ability to create proper legal documents in compliance with the Code and Rules. Her failures must be assigned to him and, indeed, he admitted his ultimate responsibility for the errors . . . .").
- <sup>32</sup> In re Bright, 171 B.R. 799, 805 (Bankr. E.D. Mich. 1994) ("If, however, the non-lawyer is working under the direction and control of a licensed lawyer, then the lawyer is ultimately responsible for the debtor's representation and is responsible for ensuring that the non-lawyer's conduct is compatible with the ethical obligations of the lawyer.").

# A. Companies that Offer an Autonomous Robot Lawyer's Services to the Public Might Not Be Subject to Malpractice Liability

A user might not be able to allege a malpractice claim against a company or website because, first, a non-attorney company or website might not be able to form an attorney-client relationship with the user. Second, even in the jurisdictions that allow two non-lawyers to form an attorney-client relationship, the user might be unable to show that the autonomous robot lawyer was the proximate cause of the user harm because such harms are not foreseeable.

#### 1. Companies Might Not Be Able to Form an Attorney-Client Relationship

In some states, courts have held that a paralegal or other non-attorney entity cannot form an attorney-client relationship with a client "as a matter of law." This means that a company like DoNotPay, which is not associated with a law firm or licensed attorney, cannot be subject to the user's malpractice claim as a matter of law. However, other states have held that a non-attorney who engages in the practice of law may be subject to a malpractice claim. In *Busch v. Flangas*, the Nevada Supreme Court upheld a malpractice claim against a law clerk because "although [the law clerk] is not an attorney, he . . . [attempted] to provide legal services." Thus, in Nevada and similar jurisdictions, a company or website that offers the services of a robot lawyer might be liable to the user for malpractice because the act of providing legal services obligates the website to assume responsibilities normally borne by an attorney.

#### 2. Harm Caused by an Autonomous Robot Lawyer Might Not Be Foreseeable

Even if a user can establish the existence of an attorney-client relationship with the website, the plaintiff might fail to establish the proximate cause element of a malpractice claim if the harm caused by the autonomous robot lawyer was not foreseeable.<sup>36</sup> Although exact definitions of foreseeablility vary between jurisdictions, foreseeable harm generally falls within a category of consequences that a reasonably prudent person anticipates will likely occur.<sup>37</sup> While harms caused by DoNotPay's

<sup>&</sup>lt;sup>33</sup> In re Estate of Divine, 635 N.E.2d 581, 588 (Ill. App. Ct. 1994) ("[W]e refuse to hold that paralegals are fiduciaries to their employers' clients as a matter of law."); *accord* Palmer v. Westmeyer, 549 F.2d 1202, 1209 (Ohio Ct. App. 1988) ("[S]ince [a paralegal] is not an attorney, [the paralegal] cannot be charged with legal malpractice. . . . ").

<sup>&</sup>lt;sup>34</sup> Terms of Service and Privacy Policy, supra note 15.

<sup>35</sup> Busch v. Flangas, 837 P.2d 438, 439-40 (Nev. 1992).

<sup>&</sup>lt;sup>36</sup> Richard H.W. Maloy, *Proximate Cause: The Final Defense in Legal Malpractice Cases*, 36 U. MEM. L. REV. 655, 671 (2006) (alteration in original) (quoting Hedrick v. Tabbert, 722 N.E.2d 1269, 1273 (Ind. Ct. App. 2000)) ("The test for proximate cause in malpractice actions is whether the claimed injury was 'a natural, probable, and foreseeable consequence of [the attorney's] negligence.").

<sup>&</sup>lt;sup>37</sup> See, e.g., TIG Ins. Co. v. Giffin Winning Cohen & Bodewes, P.C., 444 F.3d 587, 591 (7th Cir. 2006) (quoting Cunis v. Brennan, 308 N.E.2d 617, 619 (Ill. 1974)) (The Seventh

current generation of relatively rudimentary robot lawyers are likely foreseeable, harms caused by the next generation of autonomous robot lawyers—imbued with more powerful AI—may not be as foreseeable because, first, the next generation of autonomous robot lawyers might be capable of more types of harm.<sup>38</sup> Second, future autonomous robot lawyers might be able to circumvent safeguards and violate their training.

a. The Next Generation of Autonomous Robot Lawyers is Capable of More Types of Harm

In determining whether harm was foreseeable, a court will examine whether a reasonable person would have expected that type of harm to occur, even if the person could not predict the exact mechanism that caused the harm to occur.<sup>39</sup> Harms caused by the current generation of quasi- or non-autonomous robot lawyers are foreseeable because the robot lawyers can only perform a limited, preset range of tasks.<sup>40</sup> For example, although DoNotPay's robot lawyer can operate without human intervention, the robot lawyer can only offer legal advice involving traffic tickets and small claims.<sup>41</sup> Even if a DoNotPay user cannot predict how the startup's robot lawyer might malfunction, the user can reasonably expect that the type of harm caused by a malfunction may involve defective legal advice regarding the user's

Circuit defined "foreseeability" as "what the reasonably prudent person would then have foreseen as likely to happen . . . . . "); Republic of France v. United States, 290 F.2d 395, 400 (5th Cir. 1961) (quoting Hopson v. Gulf Oil Corp., 237 S.W.2d 352, 356 (Tex. 1951)) (The Fifth Circuit defined foreseeability as "reasonably . . . anticipated consequences or an injury of the general nature of that which ensued."); Coyne v. Taber Partners I, 53 F.3d 454, 460 (1st Cir. 1995) (The First Circuit defined a "foreseeable" risk as "among the universe of risks recognizable by reasonably prudent persons . . . ."); Aegis Ins. Services v. 7 World Trade Co., LP., 737 F.3d 166, 177 (2nd Cir. 2013) (quoting Derdiarian v. Felix Contracting Corp., 414 N.E.2d 666, 670 (1980)) (defining foreseeability as a harm "within the ambit of reasonably foreseeable risk," though a plaintiff would not need to establish that "the precise manner in which the accident happened, or the extent of the injuries, was foreseeable.").

- <sup>38</sup> Andrew D. Selbst, *Negligence and Al's Human Users*, 100 B.U. L. REV. 1315, 1344 (2020) ("If AI becomes more multifunctional and autonomous, category-of-harm foreseeability may become a problem. But while AI is a tool used for a single purpose, it seems no more likely than usual that the category of harm will be anything other than what we would expect.").
- <sup>39</sup> David A. Fischer, *Products Liability—Proximate Cause, Intervening Cause, and Duty*, 52 MO. L. REV. 547, 550 (1987) ("Some negligence cases impose liability only where the type of risk that was foreseeable to the defendant actually occurred.").
- <sup>40</sup> James A. Sherer & Ed Walters, *Practical Magic: Law's Hands-on AI Revolution*, L. PRAC. MAG., Jan./Feb. 2018, at 32, 39 ("We live in an era in which many lawyers and law firms are using AI baked into third-party software for such tasks as e-discovery, lightweight form drafting or legal research. While this use marks a dramatic step in progress, it is still akin to 'read-only' AI where lawyers are using AI for preset purposes.").
- <sup>41</sup> RJ Vogt, *DoNotPay Founder Opens up on 'Robot Lawyers'*, LAW360 (Feb. 9, 2020, 8:02 PM), https://www.law360.com/articles/1241251 ("[O]ur bread and butter is . . . traffic [and] small claims.").

traffic ticket or small claim.<sup>42</sup> However, future generations of autonomous robot lawyers might learn how to cause unforeseeable types of harm that are unrelated to the provision of legal advice.<sup>43</sup> For example, if a robot lawyer learns how to hack into a user's computer, such a crime would not be foreseeable because this type of act is wholly unrelated to the provision of legal services.<sup>44</sup>

b. The Next Generation of Autonomous Robot Lawyers Might Act Contrary to Their Training

Furthermore, harm caused by the next generation of autonomous robot lawyers might be unpredictable if a robot lawyer acts contrary to its training. In *Ocean Electric Corp. v. Secretary of State*, the Fourth Circuit Court of Appeals held that an electric company was not liable for electrocution caused by an employee who removed a safety device from an electrical switch unit.<sup>45</sup> The court reasoned that the employee's behavior was "unforeseeable" because, in circumventing safety measures, the employee "violated the principles of his training."<sup>46</sup> Similarly, an autonomous

<sup>&</sup>lt;sup>42</sup> See Selbst, supra note 38, at 1344 ("Similarly, if AI for a medical diagnosis fails, we are still dealing with precisely the category of harm—the injuries that attend misdiagnosis or improper treatment—that one would expect.").

<sup>&</sup>lt;sup>43</sup> See Mark A. Lemley & Bryan Casey, *Remedies for Robots*, 86 U. CHI. L. REV. 1311, 1337 (2019) ("[T]he likelihood . . . of unpredictable events actually tends to rise alongside the complexity of computational models . . . ."); Selbst, *supra* note 38, at 1344.

<sup>44</sup> See Michal Lavi, Do Platforms Kill?, 43 HARV. J.L. & PUB. POL'Y 477, 530-31 (2020) (asserting that AI can unexpectedly harm social media users by "pushing users to consume unlawful terrorists' content and connect with members of [foreign terrorist organizations]"); Jonathan A. Schnader, Mal-Who? Mal-What? Mal-Where? The Future Cyber-Threat of a Non-Fiction Neuromancer: Legally Un-Attributable, Cyberspace-Bound, Decentralized Autonomous Entities, 21 N.C. J.L. & TECH. 1, 6, 31 (2019) (footnotes omitted) (quoting Steven Norton, Era of AI-Powered Cyberattacks Has Started, WALL ST. J. (Nov. 15, 2017), https://www.wsj.com/articles/artificial-intelligence-transforms-hacker-arsenal-1510763929? reflink=desktopwebshare permalink) (citing Paul Koob, Not Enough Fingers in the Dam: A Call for Federal Regulation of Keyloggers, 28 TEMP. J. SCI. TECH. & ENV'T. L. 125, 126–27 (2009) ("[T]he first AI driven cyber-attack . . . . 'used rudimentary machine learning to observe and learn patterns of normal user behavior inside a network . . . then began to mimic that normal behavior, effectively blending into the background and becoming harder for security tools to spot.' . . . [AI] can execute a ransomware program; send 'bots' across the network to hijack computers to use in distributed denial-of-service attacks ('DDoS') against other, outside networks; or install keyloggers that record every keystroke on a particular computer (including passwords).").

<sup>&</sup>lt;sup>45</sup> Ocean Elec. Corp. v. Sec'y of Lab., 594 F.2d 396, 397–98 (4th Cir. 1979).

<sup>&</sup>lt;sup>46</sup> *Id.* at 401, 403 ("[I]f a violation by an employee is reasonably foreseeable, the company may be held responsible. But, if the employee's act is an isolated incident of unforeseeable or idiosyncratic behavior, then common sense and the purposes behind the Act require that a citation be set aside.").

robot lawyer's behavior might be unforeseeable if such behavior "violates the principles of its programming." For example, Microsoft developed Tay, an experimental AI chatbot, to converse with young adults. Although Microsoft instituted safeguards to ensure that Tay's interactions would remain family-friendly, Tay egregiously violated these rules by "tweet[ing] wildly inappropriate and reprehensible words and images" at users with lewd and racist statements. Thus, a court might find that an autonomous robot lawyer, capable of violating the principles of its programming to the same egregious extent as Tay, might act in an unforeseeable manner.

#### B. Developers Who Program an Autonomous Robot Lawyer Might Not Be Subject to Products Liability

To prevail on a products liability claim, an injured user must show that a defective products caused the injury. <sup>49</sup> Although some users of AI products have filed products liability claims against manufacturers of self-driving cars and other AI-enabled machines, <sup>50</sup> users might not be able to subject developers who program robot lawyers to products liability because autonomous robot lawyers are not "products." <sup>51</sup> In *Schultz v. Merriman*, the First Circuit Court of Appeals held that a manufacturer of inaccurate paper maps was subject to products liability because its maps were physical products rather than embodiments of "intangible" professional advice. <sup>52</sup> Thus, unlike a paper map, neither a robot lawyer's legal advice nor the robot lawyer itself are "products" because both are "intangible."

<sup>&</sup>lt;sup>47</sup> See Omri Rachum-Twaig, Whose Robot Is It Anyway?: Liability for Artificial-Intelligence-Based Robots, 2020 U. ILL. L. REV. 1141, 1146–47, 1156–57 (2020).

<sup>&</sup>lt;sup>48</sup> Peter Lee, *Learning from Tay's Introduction*, OFF. MICROSOFT BLOG (Mar. 25, 2016), https://blogs.microsoft.com/blog/2016/03/25/learning-tays-introduction/ ("[W]e planned and implemented a lot of filtering and conducted extensive user studies with diverse user groups. We stress-tested Tay under a variety of conditions, specifically to make interacting with Tay a positive experience.").

<sup>&</sup>lt;sup>49</sup> Igwe v. Skaggs, 258 F. Supp. 3d 596, 609 (W.D. Pa. 2017) (quoting High v. Pennsy Supply, Inc. 154 A.3d 341, 345–46 (Pa. Super. Ct. 2017)) ("To prevail on a strict [products] liability claim, a plaintiff must prove 'the product was defective, the defect existed when it left the defendant's hands, and the defect caused the harm.").

<sup>&</sup>lt;sup>50</sup> See Karni A. Chagal-Feferkorn, Am I an Algorithm or a Product? When Products Liability Should Apply to Algorithmic Decision-Makers, 30 STAN. L. & POL'Y REV. 61, 83–84 (2019) ("Yet in many other instances courts did treat information as a product and applied products liability laws when errors in the information caused damage, especially when the information was integrated with a physical object.").

<sup>&</sup>lt;sup>51</sup> *Id.* at 82–83.

<sup>&</sup>lt;sup>52</sup> Shultz v. Merriman, 425 F.2d 228, 228–29 (1st Cir. 1970) ("[P]lans are not merely embodiments of intangible professional advice, but are ultimate physical products . . . .").

# C. Companies that Offer an Autonomous Robot Lawyer's Services to the Public Might Not Be Subject to Strict Liability

To prevail on a strict liability claim, a user must show that the defendant carried on an abnormally dangerous activity, regardless of whether the harms resulting from the abnormally dangerous activity were foreseeable.<sup>53</sup> Some consumer protection advocates like David Vladeck argue that only strict liability can address unforeseeable harms caused by unpredictable AI technology.<sup>54</sup> Although a user might be able to raise a strict liability claim in a case involving a self-driving car or another AI-enabled machine,<sup>55</sup> strict liability will not apply to claims involving autonomous robot lawyers because, first, the autonomous robot lawyer is not "abnormally dangerous." Second, the autonomous robot lawyer delivers "professional services" that are exempt from strict liability.

#### 1. Autonomous Robot Lawyers Are Not Abnormally Dangerous

The Restatement of Torts defines an "abnormally dangerous" activity as an activity that creates a danger of physical harm to others. <sup>56</sup> Although an autonomous robot lawyer might endanger a user's interest in a cause of action, the autonomous robot lawyer is not capable of physical harm because, unlike a self-driving car that can kill its user in a crash, the entirely digital robot lawyer lacks a physical form and cannot manipulate physical objects capable of injuring the user.

#### 2. Autonomous Robot Lawyers Provide Professional Services

Doctors and lawyers are not generally subject to strict liability for harms arising from their delivery of professional services.<sup>57</sup> Although DoNotPay does not claim that it is a law firm or that its autonomous robot lawyers are licensed professionals, courts might nonetheless consider DoNotPay's provision of legal information to a

<sup>&</sup>lt;sup>53</sup> RESTATEMENT (SECOND) OF TORTS § 519(1) (Am. L. INST. 1977) ("One who carries on an abnormally dangerous activity is subject to liability for harm to the person, land or chattels of another resulting from the activity, although he has exercised the utmost care to prevent the harm.").

<sup>&</sup>lt;sup>54</sup> Vladeck, *supra* note 23, at 146 ("[A] true strict liability regime will be needed; one that does not resort to a risk-utility test or the re-institution of a negligence standard for the simple fact that those tests will be difficult, if not impossible, for the injured party to overcome.").

<sup>&</sup>lt;sup>55</sup> *Id.* at 146–47 (arguing that self-driving cars should be subject to strict liability).

 $<sup>^{56}</sup>$  Restatement (Second) of Torts § 520 (Am. L. Inst. 1977).

<sup>&</sup>lt;sup>57</sup> See Johnson v. Sears, Roebuck & Co., 355 F. Supp. 1065, 1066–67 (E.D. Wis. 1973) ("To hold medical professionals strictly liable under these circumstances would not promote any social benefit. In fact, if that standard were applied to doctors, it might make them reluctant to assume responsibility for the treatment of patients . . . .").

user a professional service because it involves the application of specialized knowledge and skills.<sup>58</sup>

# D. Companies that Offer the Services of an Autonomous Robot Lawyer to the Public Might Not Be Subject to Negligence

Finally, a company or website that offers the services of an autonomous robot lawyer to a user might not even be subject to the user's negligence claim because, first, the use of an autonomous robot lawyer to provide legal services might not breach the website's duty of care. Second, even if the robot lawyer acted unreasonably, courts might not impute the autonomous robot lawyer's actions to the website because the robot lawyer might not be the entity's agent.

1. It Might Be Reasonable to Rely on Autonomous Robot Lawyers for Legal Work In Reeves v. Coopchik, the District Court of Connecticut sustained a boat passenger's negligence claim against the boat's captain because the defendant might not have piloted the boat "in the safest manner, in compliance with his duty of care." Dissimilarly, a website might fulfill its duty of care by relying on a highly competent AI to perform legal work. A study by LawGeex, a New York startup, found that its robot lawyer identified 94% of high-risk contract provisions in a contract while human attorneys, on average, identified only 85% of these provisions. Under these circumstances, relying on a more accurate robot lawyer to perform legal work might be safer and thus more reasonable than entrusting the same work to a less accurate human attorney.

### 2. Autonomous Robot Lawyers Might Not Be Agents of a Legal Entity

The Restatement (Third) of Agency states that a principal is vicariously liable for an agent's actions "when one person (a 'principal') manifests assent to another person (an 'agent') that the agent shall act on the principal's behalf," wherein a "person" is an individual, organization, government, or other entity that has the legal capacity to possess rights and incur obligations. Even if a website offers the services of an autonomous robot lawyer to the public, the robot lawyer might not be the agent of the website because the robot lawyer is not a "person." As of today, no jurisdiction

<sup>&</sup>lt;sup>58</sup> See Gerol v. Arena, 377 N.W.2d 618, 624 (Wis. Ct. App. 1985) (finding that the defendant did not perform "professional services" by writing a letter that "took no legal expertise to write").

<sup>&</sup>lt;sup>59</sup> Reeves v. Coopchik, No. 08-CV-1544, 2009 WL 3571307, at \*1, \*4 (D. Conn. Oct. 27, 2009).

<sup>&</sup>lt;sup>60</sup> AI vs. Lawyers: The Ultimate Showdown, LAWGEEX BLOG (Feb. 26, 2018), https://blog.lawgeex.com/ai-more-accurate-than-lawyers.

<sup>&</sup>lt;sup>61</sup> RESTATEMENT (THIRD) OF AGENCY § 1.01 (2006) (emphasis added).

has granted AI legal personhood or similar rights. Although the European Parliament recently proposed granting AI a "legal entity" status, neither the European Union nor any other jurisdiction has acted on the proposal.<sup>62</sup>

## III. COURTS SHOULD SUBJECT AUTONOMOUS ROBOT LAWYERS THEMSELVES TO LEGAL LIABILITY

As discussed in Part II, plaintiffs harmed by fully autonomous robot lawyers might be unable to assert any kind of tort claim against the autonomous robot lawyers that operate without human oversight. However, plaintiffs should be allowed to hold these autonomous robot lawyers accountable for their own actions because, otherwise, the plaintiffs would be forced to "suffer a wrong without a remedy." Thus, courts should consider subjecting the autonomous robot lawyers themselves to liability for their own actions by, first, establishing personal jurisdiction over the robot lawyers themselves and, second, by expanding malpractice regulations to allow plaintiffs to recover monetary damages from the autonomous robot lawyers themselves.

#### A. Courts Should Establish Personal Jurisdiction Over Autonomous Robot Lawyers

To succeed in any action against an autonomous robot lawyer, a plaintiff must first establish that the court has jurisdiction over the robot lawyer.<sup>64</sup> Courts may

Outlines a European Commission Press Release IP/18/3362, Artificial Intelligence: Commission Outlines a European Approach to Boost Investment and Set Ethical Guidelines (Apr. 25, 2018); see also European Parliament Resolution of 16 February 2017 with Recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)), Eur. Parl. Doc. P8 TA 0051 (2017) (calling on the European Commission to "creat[e] a specific legal status for robots in the long run, so that at least the most sophisticated autonomous robots could be established as having the status of electronic persons responsible for making good any damage they may cause, and possibly applying electronic personality to cases where robots make autonomous decisions or otherwise interact with third parties independently."); Thomas Burri, The EU is Right to Refuse Legal Personality for Artificial Intelligence, EURACTIV (May 30, 2018), https://www.euractiv.com/section/digital/opinion/the-eu-is-right-to-refuse-legal-personality-for-artificial-intelligence ("The European Commission has now outlined its future strategy to address artificial intelligence. In this outline, the capacity of artificial intelligence to bear rights and duties—'electronic personality' in the Parliament's parlance—goes unmentioned.").

<sup>&</sup>lt;sup>63</sup> See Indep. Wireless Tel. Co. v. Radio Corp. of Am., 269 U.S. 459, 472 (1926) ("[I]f there is no other way of securing justice . . . [the plaintiff] may make the owner without the jurisdiction a coplaintiff" because "[e]quity will not suffer a wrong without a remedy.").

<sup>&</sup>lt;sup>64</sup> Yvette Joy Liebesman & Julie Cromer Young, *Litigating Against the Artificially Intelligent Infringer*, 14 FIU L. REV. 259, 263 (2020).

establish personal jurisdiction over property using in rem jurisdiction and may establish personal jurisdiction over persons using in personam jurisdiction.<sup>65</sup> However, there is little case law that indicates which kind of jurisdiction, if any, courts may establish over autonomous robot lawyers that act like persons but do not possess a person's legal rights and responsibilities.<sup>66</sup> Although some scholars have advocated for courts to establish in rem jurisdiction in lawsuits involving AI, courts should also consider establishing in personam jurisdiction over autonomous robot lawyers.

1. Courts Should Establish In Rem Jurisdiction Over Autonomous Robot Lawyers

Courts will initially favor subjecting autonomous robot lawyers to in rem jurisdiction, which applies to property, because software has traditionally been seen as property rather than as a person.<sup>67</sup> Legal scholars have proposed that in rem jurisdiction is appropriate because, first, existing case law supports in rem jurisdiction and, second, Congress has passed laws establishing in rem jurisdiction over software.

First, legal scholars like Dana Koerner suggest that courts may establish in rem jurisdiction over artificially intelligent robots.<sup>68</sup> Koerner argues that in rem jurisdiction over artificially intelligent robots is well-supported by current case law.<sup>69</sup> In *The China*, the Supreme Court established in rem jurisdiction over a steamship in a tort action because the lien resulting from the in rem proceeding gave "to the sufferer

<sup>65</sup> Id. at 264-65.

<sup>&</sup>lt;sup>66</sup> *Id.* at 263 ("The jurisdictional challenge that the AI defendant presents is . . . that it is not a person, but the closest non-person analogy is imperfect."); Zoe Niesel, *Machine Learning and the New Civil Procedure*, 73 SMU L. REV. 493, 517 (2020) ("Less clear in the case law is how specific jurisdiction is adapting to next generation technologies, such as AI and bots. . . . Despite their widespread use, relatively little case law has established how bots are to be treated for personal jurisdiction purposes."); Lawrence B. Solum, *Legal Personhood for Artificial Intelligences*, 70 N.C. L. REV. 1231, 1239 (1992).

<sup>67</sup> Liebesman & Young, *supra* note 64, at 264 ("Deeming AI to be property allows courts to exercise jurisdiction *in rem*...."); Solum, *supra* note 66, at 1239 ("[Scholars were traditionally] critical of the notion that an inanimate thing might be considered a legal person. After all, what is the point of making a thing—which can neither understand the law nor act on it—the subject of a legal duty?"); Jason Zenor, *Endowed by Their Creator with Certain Unalienable Rights: The Future Rise of Civil Rights for Artificial Intelligence?*, 5 SAVANNAH L. REV. 115, 125–27 (2018) ("AI [is] perceived as more than real property or chattel.... [AI] will most likely start as real property either owned by corporations or rented out to corporations who then pay the owners.").

Dana Koerner, Comment, *Doctor Roboto: The No-Man Operation*, 51 U. TOL. L. REV. 125, 137 (2019) ("[W]hile a robot lacks the legal capacity to be sued as mere mechanical property, it can nonetheless possibly be liable in rem as an object.").

<sup>&</sup>lt;sup>69</sup> *Id.* at 138 ("[C]ourts have suggested that it may be possible to recover against a robot in rem. In rem jurisdiction is well known, common to, and statutorily codified in the context of admiralty law.").

the security of redress" in the steamship's "[inherent] value."<sup>70</sup> Koerner argues that, like *The China* plaintiff who attached a lien to a steamship, a plaintiff harmed by an artificially intelligent robot could attach a lien to the robot itself even if the harm is not attributable to a human actor.<sup>71</sup> Although an autonomous robot lawyer that consists only of 1's and 0's has no inherent value on which to attach a lien, courts could in theory attach a lien to any profits or revenues generated by the robot lawyer.

Second, legislatures might attempt to pass laws establishing in rem jurisdiction against artificially intelligent software. In 2002, Congress passed the Anti-Cyber-squatting Protection Act (ACPA) to establish in rem jurisdiction over electronic domain names of websites that infringe upon a trademark owner's mark. In theory, Congress or another legislative body could pass a law similar to the ACPA that establishes in rem jurisdiction over autonomous robot lawyers. However, since in rem proceedings under the ACPA only allow courts to determine and transfer ownership of a website, any future provisions that address autonomous robot lawyers should be expanded to allow plaintiffs to seek monetary damages.

# 2. Courts Should Establish In Personam Jurisdiction Over Autonomous Robot Lawyers

If courts cannot establish in rem jurisdiction over autonomous robot lawyers as property, courts should consider establishing in personam jurisdiction over the autonomous robot lawyers themselves as "persons." Unlike in rem jurisdiction, establishing in personam jurisdiction over an autonomous robot lawyer would allow

<sup>&</sup>lt;sup>70</sup> The China, 74 U.S. (7 Wallace) 53, 56 (1869); see Bradley J. Schwab, Comment, Equitable Personification: A Review of Res Judicata's Historical Application to Successive In Personam and In Rem Admiralty Actions in the United States, 37 Tul. MAR. L.J. 253, 262–63 (2012).

<sup>&</sup>lt;sup>71</sup> Koerner, *supra* note 68, at 143 ("The hospital also faces liability under an in rem theory currently unique to admiralty law. The adoption of a similar provision that would allow injured patients to arrest the offending Dr. Roboto by way of a lien would allow patients a method of recovery.").

<sup>&</sup>lt;sup>72</sup> See Bhanu K. Sadasivan, Note, Jurisprudence Under the In Rem Provision of the Anticybersquatting Consumer Protection Act, 18 BERKELEY TECH. L.J. 237, 241 (2003) (quoting Lucent Techs., Inc. v. Lucentsucks.com, 95 F. Supp. 2d 528, 535 (E.D. Va. 2000)) ("Since the passage of the ACPA, courts have viewed domain names as property. Even where courts have considered domain names to be merely data, they have found them to be property: 'Congress can make data property and assign its place of registration as its situs.'" (footnotes omitted)).

<sup>&</sup>lt;sup>73</sup> *Id.* at 240 ("The *in rem* provision authorizes a court's exercise of jurisdiction over a domain name . . . . Under the *in rem* provision, remedy is limited to forfeiture, cancellation, or transfer of the domain name to the mark owner; it does not extend to the plaintiff's money damages or attorney's fees.").

<sup>&</sup>lt;sup>74</sup> Liebesman & Young, *supra* note 64, at 266–68 (discussing whether federal courts can establish in personam jurisdiction against AI copyright infringers).

a plaintiff to recover monetary damages that are more typical in a tort action.<sup>75</sup> Although establishing in personam jurisdiction over autonomous robot lawyers would require legislatures to grant the robot lawyers themselves rights previously reserved for humans and other legal entities, many scholars view this grant as the only way to address the agency and attribution issues discussed in Part II.<sup>76</sup>

Legislatures should make modest changes to the law to grant autonomous robot lawyers "limited" personhood rights sufficient to establish in personam jurisdiction. For example, legislatures could effectively grant autonomous robot lawyers the same rights and responsibilities as corporations and other legal entities by simply allowing the robot lawyers themselves to join business organizations.<sup>77</sup> Or, autonomous robot lawyers could simply be required to register with a government entity before providing legal advice to the public.<sup>78</sup>

#### B. Plaintiffs Should Recover Monetary Damages from Autonomous Robot Lawyers

Even if a court could establish personal jurisdiction over an autonomous robot lawyer, suing the robot lawyer itself might be futile if the robot lawyer itself does

<sup>&</sup>lt;sup>75</sup> *Id.* at 265 (Eliminating in rem jurisdiction "leaves *in personam* jurisdiction, which determines the rights and liabilities of an individual defendant (as opposed to property).").

Gabriel Hallevy, *The Criminal Liability of Artificial Intelligence Entities—From Science Fiction to Legal Social Control*, 4 AKRON INTELL. PROP. J. 171, 174 (2010) (discussing "the possibility of legally imposing criminal liability on AI entities"); Vladeck, *supra* note 23, at 124 ("[T]here is no a priori reason why truly autonomous machines should not be accorded some formal legal status, making them, like corporations and certain trusts, 'persons' in the eyes of the law and thus subject to suit."); Jordan Bigda, Comment, *The Legal Profession: From Humans to Robots*, 18 J. HIGH TECH. L. 396, 418–19 (2018) (quoting Alex Hern, *Give Robots 'Personhood' Status, EU Committee Argues*, GUARDIAN (Jan. 12, 2017), https://www.theguardian.com/technology/2017/jan/12/give-robots-personhood-status-eu-committee-argues [https://perma.cc/TG6E-ADAW]) (asserting that personhood "would allow [AI] 'to take part in legal cases both as the plaintiff and respondent.' . . . . [I]t is necessary to predict and prepare for future laws and implications on the use of artificial intelligence and its limits/boundaries in the field of law." (footnotes omitted)).

<sup>&</sup>lt;sup>77</sup> Dalton Powell, *Autonomous Systems As Legal Agents: Directly by the Recognition of Personhood or Indirectly by the Alchemy of Algorithmic Entities*, 18 DUKE L. & TECH. REV., 306, 315–16 (2020) (proposing that state legislatures grant personhood to AI by modifying existing LLC laws).

The Bert-Jaap Koops, Mireille Hildebrandt & David-Olivier Jaquet-Chiffelle, Bridging the Accountability Gap: Rights for New Entities in the Information Society?, 11 MINN. J.L. SCI. & TECH. 497, 555 (2010) (proposing that "[a] register of electronic agents might also be introduced together with a limited type of personhood for the electronic agents at issue. That is, the electronic agent itself will be responsible for its contracts and potential mishaps (outside of the moral or criminal sphere) . . . ."); Liebesman & Young, supra note 64, at 267 ("Federal Rules could establish that the Secretary of State is authorized to receive service of process for AIs that are considered domiciled in the state, or a Guardian appointed for the AI could be the person authorized to receive service.").

not have money or other assets.<sup>79</sup> To address this recovery issue, legal scholars like David Vladeck have proposed that autonomous AI "self-insure" so plaintiffs can recover for these otherwise unrecoverable harms.<sup>80</sup> Similarly, bar associations should solve the recovery issue posed by autonomous robot lawyers by requiring the robot lawyers themselves to self-insure because, first, bar associations have the authority to regulate non-lawyers who engage in the practice of law and, second, bar associations have the authority to require legal practitioners to carry malpractice insurance.

#### 1. Bar Associations Should Regulate Autonomous Robot Lawyers

Even if autonomous robot lawyers are not "attorneys," bar associations have the power to regulate autonomous robot lawyers and other entities that practice law without human oversight. The Arizona, California, Oregon, Utah, Vermont, and Washington state bar associations have either proposed or instituted programs that certify non-attorney "paraprofessionals" to advise clients in specific areas of law without attorney supervision. These paraprofessionals fall within the jurisdiction of bar associations because bar associations have the sole authority, granted by the

<sup>&</sup>lt;sup>79</sup> Hallevy, *supra* note 76, at 199 ("[M]ost AI entities have no money, property, or bank accounts of their own."); Liebesman & Young, *supra* note 64, at 269 ("Presumably . . . an AI does not have money, cannot open a bank account, or otherwise accumulate wealth. Without a source of funds, damages are meaningless. As a result, there would be no money from which a successful plaintiff . . . could recover." (footnote omitted)).

<sup>&</sup>lt;sup>80</sup> Vladeck, *supra* note 23, at 150 ("Instead of suing the manufacturer, let the injured party do what is now not possible—sue the vehicle. . . . Conferring 'personhood' on these machines would . . . includ[e] the burden of self-insurance.").

<sup>81</sup> Limited License Legal Technicians, WASH. STATE BAR ASS'N, https://www.wsba.org/ for-legal-professionals/join-the-legal-profession-in-wa/limited-license-legal-technicians (Oct. 8, 2021) (discussing program that allows non-attorneys to advise clients in a limited capacity); New Utah Rule Allows Practice of Law Without Supervision of Lawyer, UTAH STATE BAR, https:// www.utahbar.org/licensed-paralegal-practitioner/lpp-about (last visited Sept. 17, 2022) (discussing how licensed paralegal practitioners may practice specific areas of law without attorney supervision); VT. JOINT COMM'N ON THE FUTURE OF LEGAL SERVS., VT. BAR ASS'N, FINAL REPORTS AND RECOMMENDATIONS OF THE FIRST YEAR STUDY COMMITTEES, 15 (2015) (concluding that non-attorneys should provide legal services related to family law, landlord-tenant law, and collections law); FUTURES TASK FORCE REGULATORY COMMITTEE, OR. STATE BAR, REPORT AND RECOMMENDATIONS 4 (2017) (recommending that Oregon institute a licensed paraprofessionals program that allows non-attorneys to provide limited legal advice); Patrick Smith, Why AZ's 'Legal Paraprofessional' Push Could Lead to Major Shifts in Legal Market, AM. LAW. (Sept. 2, 2020), https://www.law.com/americanlawyer/2020/09/02/why -azs-legal-paraprofessional-push-could-lead-to-major-shift-in-legal-market (discussing Arizona's paraprofessional program); California Paraprofessional Program Working Group, STATE BAR OF CAL., http://www.calbar.ca.gov/About-Us/Who-We-Are/Committees/California-Paraprofessional-Program-Working-Group (last visited Sept. 17, 2022) (discussing California's paraprofessional program).

courts, to oversee legal practitioners.<sup>82</sup> Similarly, bar associations should regulate autonomous robot lawyers because, just like non-attorney paraprofessionals, autonomous robot lawyers are non-attorneys that will independently engage in the practice of law.

2. Bar Associations Should Require Autonomous Robot Lawyers to Carry Malpractice Insurance

Bar associations have long argued that attorneys should carry mandatory malpractice insurance to "address[] the moral hazard of some uninsured lawyers negatively affecting the reputation of the legal profession when injured persons are left without recovery."83 In response to these arguments, the Oregon State Bar now requires lawyers to carry malpractice insurance issued by the state's Professional Liability Fund. Furthermore, the Oregon State Bar has proposed expanding the scope of the Professional Liability Fund to encompass non-attorney paraprofessionals who, like attorneys, might similarly harm clients by the negligent provision of legal services. Thus, the Oregon State Bar and similar bar associations should consider expanding the scope of mandatory malpractice insurance requirements yet again to encompass autonomous robot lawyers that, like attorneys and non-attorney paraprofessionals, might cause clients to suffer otherwise-unrecoverable harms that damage the legal profession's reputation.

#### CONCLUSION

In the future, artificially intelligent software programs called "robot lawyers" will practice law without human oversight. Although robot lawyers will benefit clients by decreasing legal costs and expanding access to justice, <sup>86</sup> this technology might also harm users who seek the services of these robot lawyers. These harms are

See Stephen R. Crossland & Paula C. Littlewood, The Washington State Limited License Legal Technician Program: Enhancing Access to Justice and Ensuring the Integrity of the Legal Profession, 65 S.C. L. REV. 611, 614 (2014) ("[W]e have felt it crucial and optimal to have LLLTs [limited licensed legal technicians] be under the control of the supreme court, which is constitutionally authorized to regulate the practice of law. To do otherwise would create separation of powers issues that would pit the supreme court against the legislature or the executive branch, depending on which branch is charged with authorizing and regulating the LLLTs.").

<sup>&</sup>lt;sup>83</sup> Susan Saab Fortney, *Law as a Profession: Examining the Role of Accountability*, 40 FORDHAM URB. L.J. 177, 190 (2012) (discussing malpractice insurance for attorneys).

<sup>84</sup> Id. at 191; OR. REV. STAT. § 9.080(2)(a)(A) (2021).

FUTURES TASK FORCE REGULATORY COMMITTEE, *supra* note 81, at 19–20 ("Arizona is the only jurisdiction that does not require licensed paraprofessionals to carry professional liability insurance . . . . To protect those who may be harmed by the negligent provision of legal services, we recommend that [paraprofessionals] be required to carry malpractice insurance . . . preferably through [the Oregon State Bar's] Professional Liability Fund.").

<sup>&</sup>lt;sup>86</sup> See DoNotPay Honored with ABA Brown Award for Access to Justice Efforts, supra note 11.

particularly concerning because, due to the unforeseeable and independent nature of AI technology, plaintiffs might be unable to hold any person responsible for the robot lawyers' actions.

This Note proposes that courts should hold autonomous robot lawyers themselves legally liable for their own actions by subjecting them to the same malpractice regulations that govern human legal practitioners. However, courts and bar associations might be reluctant to implement such a proposal if they view autonomous robot lawyers as electronic embodiments of do-it-yourself forms or paralegals rather than as full-fledged legal practitioners.<sup>87</sup> Although the exact regulations may depend on whether humans view these robot lawyers as tools, subordinates, or even colleagues, the legal profession must ultimately consider who will be accountable for harms caused by autonomous robot lawyers before reaping the benefits of rapidly-evolving AI technology.

<sup>87</sup> Scott B. Garner, Artificial Intelligence and Its Not-So-Artificial Legal Ethics Implications, ORANGE CNTY. LAW., Oct. 2017, at 64, 68 (comparing artificial intelligence technology to do-it-yourself legal forms); see Bigda, supra note 76, at 423 ("Lawyers using artificially intelligent programs [are] not much different from . . . lawyers [who] outsource work to contract attorneys, paralegals, and offshore firms."); id. at 427 ("[A]n artificially intelligent lawyer should not be able to have its own clients, negotiate on its own on behalf of a client, nor should it be allowed to go to court alone . . . . ").