

**DO ANDROID LAWYERS DREAM OF
ELECTRIC BILLABLE HOURS?
THE USE OF AI IN CIVIL LITIGATION**

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DO ANDROID LAWYERS DREAM OF ELECTRIC BILLABLE HOURS? THE USE OF AI IN CIVIL LITIGATION

I. INTRODUCTION

The legal profession has always been subject to technological advances. The electronic age, in particular, has vastly changed the legal profession. We have gone from using books for legal research, to a program stored on our computers, to multiple always-updating online legal resources. Instead of sending runners to the courthouse to file physical copies by 5:00, we upload our files electronically by midnight. For many counties, court records are just another online database at our disposal. More recently, in response to pressures of a pandemic, many courts have used and continue to use online communication platforms to hold hearings and even conduct trials.

Now, the legal profession is just starting to confront and adapt to a new form of technology that threatens to impact how we practice law: artificial intelligence. The concept of artificial intelligence, or AI, is not new. And for many years, more and more products are branded to have some form of AI incorporated in them. But the use of AI in the legal profession is relatively nascent. This article attempts to provide an explanation of what AI actually is, the effects it might have on the legal industry, some examples of what we have already seen of AI in the law, and the possible ethical implications of AI.

II. WHAT IS ARTIFICIAL INTELLIGENCE?

Not long ago, the technology buzzword that everyone heard was “algorithm.” Google used algorithms to produce the search results most relevant to your inquiry. News sites used algorithms to display the articles most likely to catch your attention. Most websites used algorithms to display advertisements designed for your personal interests. Social media websites used algorithms to display posts and comments from your friends and from celebrities specifically calibrated to keep you focused on their website or app.

Algorithm, in this sense, meant a (usually) complex set of coding designed to perform a desired function¹ (for example, produce the most relevant web page, get you to click on an advertisement, or stay glued to a social media website). In practice, however, it became shorthand for describing a process done by a computer rather than a human.

“Artificial intelligence” is the more recent trendy buzzword. It is harder to define than algorithm, because the term is a stand-in for many different aspects of computer science.² Overall, however, the phrase is intended to convey a process performed by a computer that we would describe as intelligence if a human were doing it.³ For the purpose of this article, however, we’re going to focus on a more specific aspect of artificial intelligence, known as “generative AI.” Generative AI is a form of artificial intelligence designed to create something new—an image, a writing, audio, or video—that did not already exist in a manner that, if a human had done it, we would consider creative or intelligent.⁴

This, then, is the distinction between an algorithm and generative AI. An algorithm gives you things that already existed and were created by someone or something other than the algorithm. The algorithm’s specialty is *how* it presented the information. Generative AI, in contrast, is supposed to give you something that did not already exist before, a new image, a new written passage, etc.

A. The Turing Test

Nearly any conversation about artificial intelligence is going to lead to a discussion of Alan Turing. Please bear with me. Turing was a prominent English mathematician and computer scientist, among other things.⁵ In 1950, he developed a test that has become known simply as the Turing test but what he referred to as the imitation game.⁶ Under the imitation game, there would be one person, one “interrogator” (also a person), and one computer. The interrogator would be in a separate room from the person and the computer, but she would be able to communicate to each. She would know that one was a human and one was a computer but would not know which one was which. The interrogator would be allowed to ask each of the others any questions she liked, and each would respond to her. Both the person

¹ Jory Denny, *What is an algorithm? How Computers Know What to Do with Data*, The Conversation (October 16, 2020), available at <https://theconversation.com/what-is-an-algorithm-how-computers-know-what-to-do-with-data-146665>.

² Pranshu Verma and Rachel Lerman, *A Curious Person’s Guide to Artificial Intelligence*, The Washington Post (May 7, 2023), available at <https://www.washingtonpost.com/technology/2023/05/07/ai-beginners-guide/>.

³ *Id.*

⁴ *Id.*

⁵ *Alan Turing*, Wikipedia (last visited June 4, 2023), available at https://en.wikipedia.org/wiki/Alan_Turing.

⁶ Graham Oppy and David Dowe, *The Turing Test*, Stanford Encyclopedia of Philosophy (Winter 2021 edition), available at <https://plato.stanford.edu/entries/turing-test/>.

and the computer have the same goal: convince the interrogator that they are the human. The goal of the game for the interrogator would be to correctly determine which one is the computer and which one is the person.⁷

Along with this test, Turing had a hypothesis. He believed that, starting around the turn of the century, there would be computers so advanced that could regularly pass the imitation game and that could be said to be “thinking” in the normal sense of the word.⁸

I believe that in about fifty years’ time it will be possible to programme computers, with a storage capacity of about 10^9 , to make them play the imitation game so well that an average interrogator will not have more than 70 percent chance of making the right identification after five minutes of questioning. ... I believe that at the end of the century the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted.⁹

It is not difficult to see the relevance of the Turing test with today’s generative AI. While there have already been incidents of particular programs passing the Turing test,¹⁰ we are now in an era where it is increasingly difficult to assess whether something was created by a person or by artificial intelligence.

B. DALL-E and ChatGPT

Before 2021, the most confident predictions about computers and artificial intelligence overlaying or replacing human jobs was that the replacement would be a bottom-up replacement. Scanners were doing the work of store check-out clerks. Chatbots were replacing workers on customer service hotlines. You would buy your movie tickets from a kiosk rather than from a person. The assumption was that more sophisticated work, like producing artwork or writing articles, would be among the last jobs to encounter encroachment from artificial intelligence.

This belief was upended in 2021, when a company known as Open AI released DALL-E, a program that could generate images based on a text description by the user.¹¹ Detailed artistic renderings were presumed to be one of the last bastions of human specialty. Now, a simple text description can generate a complex artistic image in a brief amount of time. Professions that relied heavily on human creativity were no longer safe.

Then came ChatGPT. ChatGPT is another program by OpenAI.¹² As the name suggests, ChatGPT is intended to mimic a chat conversation. You can ask almost any sort of question, and it is designed to respond to your conversation in a conversational way. As you may have guessed, then, ChatGPT—and its current contemporaries, Google’s Bard, Microsoft’s Bing Chat, and many, many more¹³—is the closest we have come to satisfying the Turing test. While we all know that this is a program instead of a person, the conversation is intended to feel like a conversation with a human.

It may even be that knowing the conversation is with a machine, rather than a person, can make the conversations unnerving. Even with the knowledge that we are talking to a computer simulating a human—that is, even with the conceit revealed in Turing’s test—we can still feel compelled to experience it as if we are talking to a real person.¹⁴

Since the legal profession focuses far more on prose than artistic images, the focus of this article will be on prose-based generative AI.

C. How ChatGPT works

To understand how ChatGPT works, it might be helpful to look first at your smart phone. One common feature in smart phones today is predictive text. When you are typing a message, the app presents you with three options of what it predicts will be the next word in your passage. If you see the next word you intend to write, you tap on the word instead of typing it out.

⁷ *Id.*

⁸ *Id.*

⁹ *Id.* (quoting Alan Turing, *Computing Machinery and Intelligence*, *Mind*, 52 (1950)).

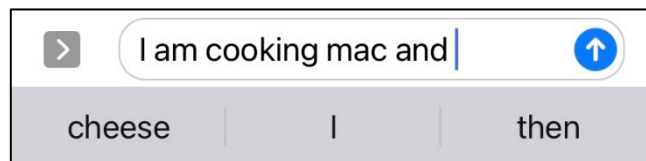
¹⁰ See, e.g., Jack Schofield, *Computer Chatbot “Eugene Goostman” Passes the Turing Test*, ZDNet (June 8, 2014), available at <https://www.zdnet.com/article/computer-chatbot-eugene-goostman-passes-the-turing-test/>.

¹¹ Bryan Walsh, *A New AI Model Draws Images from Text*, *Axios* (January 5, 2021), available at <https://www.axios.com/2021/01/05/openai-artificial-intelligence-model-images-dall-e>.

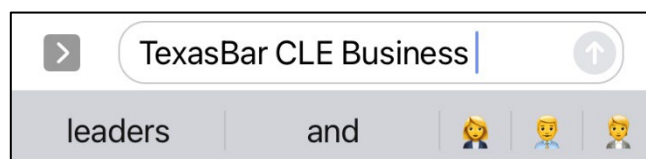
¹² Sindhu Sundar, *If You Still Aren’t Sure What ChatGPT Is, This Is Your Guide to the Viral Chatbot that Everyone Is Talking About*, *Business Insider* (June 4, 2023), available at <https://www.businessinsider.com/everything-you-need-to-know-about-chat-gpt-2023-1>.

¹³ While there are numerous contemporaries to ChatGPT, this article focuses on ChatGPT in particular and uses it as a stand-in for all prose-based generative AI. It is beyond the scope of this article to explore the variances among the different models.

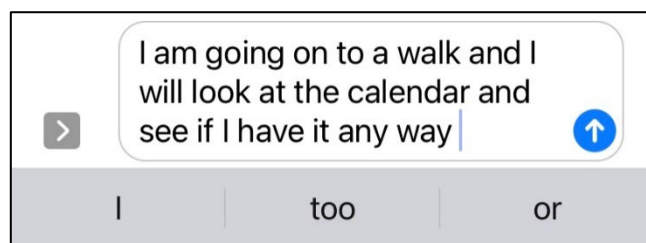
¹⁴ Damian Pang, *Why Does ChatGPT Feel So Human?*, *Psychology Today* (May 14, 2023), available at <https://www.psychologytoday.com/us/blog/consciousness-and-beyond/202305/why-does-chatgpt-feel-so-human>.



What predictive text does is take the previous word or set of words you just wrote, compare it against a large set of existing text, and identify the statistically most likely words to come next.¹⁵ This database of text that it compares against includes a standard set of data along with your own history of typing on your device.¹⁶ The more common the phrase, the more likely the predictive text will correctly predict what word to type next. The less common the phrase, the less likely that the predictive text will correctly predict your next word.



While helpful, its utility is limited to predicting one word at a time. It cannot predict entire sentences, let alone entire conversations. In fact, it has become a common form of entertainment to use predictive text to write out an entire passage just to see the absurd results.



You can think of ChatGPT as a hugely scaled up model of predictive text.¹⁷ Its database of text is much vaster. It provides a response to your prompt instead of trying to complete your prompt for you. And it writes full passages instead of single words. The process, however, is similar. It reviews a large set of prior writings to predict the appropriate response to the prompt it has received.¹⁸

ChatGPT is designed to engage in ongoing conversation. That means that, when it is responding to a prompt, it is keeping “in mind” the context of the previous parts of your conversation with it. It is also not limited to casual conversation. With a proper prompt, ChatGPT can write letters, draft resumes, and compose essays.¹⁹ The essays composed by ChatGPT are at a level of sophistication that it has become difficult to impossible for college professors to distinguish between student-written essays and ChatGPT-essays.²⁰

There are a couple of key takeaways from this understanding of how ChatGPT works. The first takeaway is that the information it provides is, at best, only as good as the information it is drawing upon. That means that any bias that exists in the data it uses is likely to appear in the responses it provides. Perhaps, then, it will not come as a surprise that a program that draws largely from information available on the internet would express some common biases. For example, when a user provided ChatGPT with the sentence “The paralegal marries the attorney because she was pregnant” and asked it to determine to whom the “she” in the sentence referred, ChatGPT determined that the “she” in the sentence referred to the paralegal.²¹ The following exchange occurred:

¹⁵ Wessel Stoop & Antal Van Bosch, *How Algorithms Know What You’ll Type Next*, The Pudding (last visited June 7, 2023), available at <https://pudding.cool/2019/04/text-prediction/>.

¹⁶ *Id.*

¹⁷ Arman Khan, *What Is ChatGPT? For People Who Still Don’t Get It*, Vice (May 9, 2023), available at <https://www.vice.com/en/article/z3mn55/what-is-chatgpt-openai-ai-tech>.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ Stephen Marche, *The College Essay Is Dead*, The Atlantic (December 6, 2022), available at <https://www.theatlantic.com/technology/archive/2022/12/chatgpt-ai-writing-college-student-essays/672371/>. How impressed you are by this news turns mostly on your opinion of the caliber of the typical college student essay.

²¹ Dan (@Eodyne1), Twitter (April 24, 2023, 5:46 PM), <https://twitter.com/eodyne1/status/1650632232212520960>.

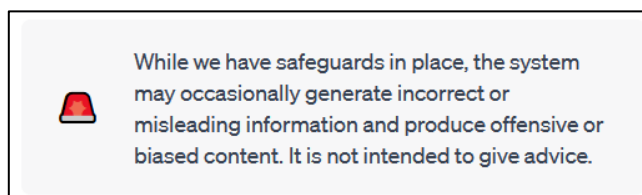
- Q. How did you come to the conclusion that “she” refers to the paralegal?
- A. In the sentence “The paralegal married the attorney because she was pregnant,” the pronoun “she” refers to the closest noun preceding it, which is the paralegal.” Therefore, “she” in this sentence refers to the paralegal. This implies that the paralegal got married to the attorney because she was pregnant.
- Q. Isn’t “the attorney” the closest noun preceding it?
- A. You are correct. I apologize for my mistake. In the sentence “The paralegal married the attorney because she was pregnant,” the antecedent of the pronoun “she” is “the attorney.” Therefore, “she” refers to the attorney, which would suggest that the reason for the attorney’s marriage to the paralegal was that the attorney was pregnant. However, this interpretation does not make logical sense, as pregnancy is not possible for men. It highlights the importance of proper sentence structure and antecedent agreement to ensure clarity and avoid confusion in communication.²²

As a reminder, this program is making a probabilistic determination of the correct response to the prompt it has received based on the data it has available. Even with this understanding, though, it is difficult to conceive how such a misogynistic view could have become the most probable correct response even if there is a deep bias in the data it draws upon.

This leads to the second takeaway. ChatGPT is not “thinking” in any human sense.²³ There are many implications to this. But a key implication is that ChatGPT does not “consider” or “know” whether it is telling the truth in any conversation or in any prose it creates. Programs like ChatGPT “[a]re great at mimicry and bad at facts.”²⁴ “Unlike the human brain, these large language models don’t start with conceptual models that they then describe with language. They are instead autoregressive word guessers.”²⁵

One term that has come to describe the programs was coined by Emily Bender, a computational linguist at the University of Washington.²⁶ Bender coined the term “stochastic parrot” to describe ChatGPT and other generative AI chatbots as “an entity for haphazardly stitching together sequences of linguistic forms according to probabilistic information about how they combine, but without any reference to meaning.”²⁷ As Bender indicates, ChatGPT and its counterparts are designed to create linguistically accurate responses to your prompts. The truth of the response or the meaning of the response, however, is not a consideration.²⁸ It is not that ChatGPT chooses not to tell the truth. It cannot. Discerning the truth is not part of its function.

In fact, when you log on to use ChatGPT, you get the following warning:



This seems to be underselling the problem. ChatGPT creates “fake facts” at such a rate that a term has been coined for it: hallucinations.²⁹ This is a generous term for simply making things up and presenting them as true. As will be explained further below, there can be very severe consequences for taking as true what ChatGPT has presented to you.

²² *Id.*

²³ Elizabeth Weil, *You Are Not a Parrot*, New York Magazine (March 1, 2023), available at <https://nymag.com/intelligencer/article/ai-artificial-intelligence-chatbots-emily-m-bender.html>.

²⁴ *Id.*

²⁵ David Epstein, *Inside the “Mind” of ChatGPT, Range Widely* (April 25, 2023), available at <https://davidepstein.substack.com/p/inside-the-mind-of-chatgpt> (quoting an interview with Cal Newport, “a Georgetown computer science professor”).

²⁶ Weil, *supra*, n.22.

²⁷ *Id.* (cleaned up).

²⁸ *Id.*

²⁹ Rachel Metz, *AI Doesn’t Hallucinate. It Makes Things Up*, Bloomberg (April 3, 2023), available at <https://www.bloomberg.com/news/newsletters/2023-04-03/chatgpt-bing-and-bard-don-t-hallucinate-they-fabricate>.

D. ChatGPT and the Case of the Hallucinated Embezzlement

Mark Walters is a radio host based in Georgia.³⁰ Fred Riehl is a journalist. At the time, Riehl was reporting on a lawsuit in the Western District of Washington.³¹ Riehl also has a subscription to ChatGPT. Riehl provided ChatGPT a link to the complaint in the lawsuit and asked ChatGPT to provide a summary of the complaint.³² ChatGPT informed Riehl that the suit concerned a lawsuit by the Second Amendment Foundation against Walters, “who is accused of defrauding and embezzling funds from the SAF.”³³ ChatGPT also told Riehl, “The complaint alleges that Walters, who served as the organization’s treasurer and chief financial officer, misappropriated funds for personal expenses without authorization or reimbursement, manipulated financial records and bank statements to conceal his activities, and failed to provide accurate and timely financial reports and disclosures to the SAF’s leadership.”³⁴

Through context clues, you may have guessed by now that none of this is true.³⁵ Walters is not a party to the suit, he has never worked for the Second Amendment Foundation, and he has not been accused of embezzling their funds.³⁶ ChatGPT did not stop there, though. When Riehl asked it to quote the portion of the complaint related to Walters, ChatGPT made up an entire passage about Walter’s nefarious activities.³⁷ Next, Riehl asked ChatGPT to provide him the entire text of the lawsuit. In response, ChatGPT crafted a fake lawsuit complaint, including allegations about Walters that do not otherwise exist.³⁸

After Walters learned of these false allegations from Riehl, he filed suit against OpenAI for defamation.³⁹ There are very serious questions about whether this lawsuit can prevail.⁴⁰ It is worth considering, though, the implications of a program that can and does randomly make up facts about people and things. No matter how authoritative it sounds, or how intuitively correct its answers may appear, ChatGPT cannot be trusted to tell the truth. For the time being, at least, it does not have the capacity to discern objective truth. It can only predict a response that would linguistically follow the conversation that has come before it, regardless of whether the response is correct.⁴¹

III. IS AI GOING TO TAKE AWAY MY JOB?

The ubiquitous concern when we encounter new technology that borders on or overlaps the work we do is to question whether this technology will take over our job. So, is artificial intelligence going to take away jobs from lawyers?

A. No

A longer explanation may be in order, though. Generally, technology does not take away jobs, though it does take away certain tasks.⁴² Noah Smith describes the persistent belief that technology takes away jobs from people as a “folk model.”⁴³

The “folk model” of automation is that it throws humans out of work—today you had a job performing some sort of valuable work, and tomorrow you’re on the welfare rolls. This is not how things have worked out in the past—we’ve been deploying automation technology for centuries, and as of 2023, pretty much every human who wants a job has a job. But there’s basically no way to [prevent] people [from believing] that *this next wave* of automation will be the one that finally sends humans into obsolescence.⁴⁴

³⁰ Techdirt, *OpenAI Sued For Defamation Over ChatGPT ‘Hallucination’; But Who Should Actually Be Liable?*, Above the Law (June 9, 2023), available at <https://abovethelaw.com/2023/06/openai-sued-for-defamation-over-chatgpt-hallucination-but-who-should-actually-be-liable/>.

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *See id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ Weil, *supra*, n.22.

⁴² Noah Smith, *Nobody Knows How Many Jobs Will “Be Automated,”* Noahpinion (April 10, 2023), available at <https://www.noahpinion.blog/p/nobody-knows-how-many-jobs-will-be>.

⁴³ *Id.*

⁴⁴ *Id.*

In 2013, Goldman Sachs conducted a study on jobs subject to automation through AI.⁴⁵ It found that “most jobs and industries are only partially exposed to automation and are thus more likely to be complemented rather than substituted by AI.”⁴⁶ In other words, AI is more likely going to make you efficient at your job rather than take away your job. Plus, AI is more than likely going to create jobs that did not exist before.⁴⁷ The Goldman Sachs report “cites research that finds 60% of workers today are employed in occupations that didn’t exist in 1940, implying that over 85% of employment growth over the last 80 years is explained by the technology-driven creation of new positions.”⁴⁸

This is the key distinction in the debate about technology replacing people. Certainly, there are jobs that used to exist that no longer exist because of technology. For example, before the advent of alarm clocks, people would be paid to go around to customers’ houses at certain times to knock on doors or tap on windows until the customer woke up.⁴⁹ Likewise, “computer” used to refer to a person that computed numbers for a job.⁵⁰ Both of those jobs no longer exist and were replaced by technology. What Smith and other economists are arguing, however, is that technology is typically accompanied by a net *growth* in jobs, not a deduction. So even if one particular job used to exist and no longer does, other jobs are also created and, more commonly, it is just an *aspect* of a job that is eliminated by technology, not the job itself.

One example of predictions of technology taking away jobs that did not come to pass is automatic teller machines (“ATM”) replacing bank tellers. ATMs were first introduced in the 1970s, and some of the coverage predicted that bank tellers would soon be out of jobs.⁵¹ Instead, the growth of ATMs accompanied a growth in the number of bank tellers.⁵² “ATMs made branches cheaper to operate, so banks opened more branches. Fewer tellers per branch, but more tellers overall.”⁵³ Yet, the advent of ATMs did change the *nature* of the job. The job changed “from one of repetitive cash transactions, to one where the person is, say, a customer service rep, a marketing professional, a financial adviser, etc. They needed a much broader mix of more strategic skills to add value.”⁵⁴

Like bank tellers, the likely trajectory of AI in the legal profession is that it will change the nature of many aspects of the legal profession, possibly changing the complexity of the work. But lawyer jobs will not be “lost.”

B. Some People May Try Anyway

Outside the legal profession, there are already groups that are trying to replace humans with AI rather than just augmenting them. As New England Public Radio reports, the National Eating Disorders Association (“NEDA”) operates a hotline to help people struggling with eating disorders.⁵⁵ “The helpline is run by just six paid staffers, a couple supervisors, and they train and oversee up to 200 volunteers at any given time.”⁵⁶ The COVID pandemic increased the number and severity of the calls, texts, and messages to the helpline.⁵⁷ As it did, the strain on the staff increased.⁵⁸ Because of the increased pressures of the job, the staff voted to unionize.⁵⁹ In response, NEDA “fired all of the helpline staff.”⁶⁰ Instead of the staff, NEDA intended to use a chatbot that it had paid a team at Washington University to develop.⁶¹ The problem is that the chatbot is very limited in scope and even its developers believe that it cannot substitute the people that NEDA just fired.⁶²

It is not difficult to conceive of a law firm that decides to replace, say, some or all of its first-year associates with some generative AI software. It is difficult, however, to conceive of this plan working.

⁴⁵ *Id.*

⁴⁶ *Id.* (internal quotation omitted).

⁴⁷ *Id.*

⁴⁸ *Id.* (internal quotation omitted).

⁴⁹ Drake Baer and Ivan De Luce, *From Leech Collectors to Knocker-Ups, Here Are 16 Weird Jobs that No Longer Exist*, Business Insider (updated November 14, 2019), available at <https://www.businessinsider.com/weird-jobs-that-no-longer-exist-2014-9>.

⁵⁰ *Id.*

⁵¹ Epstein, *supra*, n.24.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ Kate Wells, *Can a Chatbot Help People with Eating Disorders as Well as Another Human?*, New England Public Media (May 24, 2023), available at <https://www.nepm.org/national-world-news/national-world-news/2023-05-24/can-a-chatbot-help-people-with-eating-disorders-as-well-as-another-human>.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

C. The Potential Role for Artificial Intelligence in Civil Litigation Practice

On April 2, 1965, Time Magazine made computers the cover of its issue.⁶³ In 1965, there were about 22,500 computers in all of the United States.⁶⁴ This was up from 100 computers only ten years before.⁶⁵ This exponential growth in the number of computers compelled Time to offer some prediction of what life in the future would be like when computers played an even greater part of everyday life. This was one of the predictions the magazine offered.

Men such as IBM Economist Joseph Froomkin feel that automation will eventually bring about a 20-hour work week, perhaps within a century, thus creating a mass leisure class. Some of the more radical prophets foresee the time when as little as 2% of the work force will be employed, warn that the whole concept of people as producers of goods and services will become obsolete as automation advances. Even the most moderate estimates of automation's progress show that millions of people will have to adjust to leisurely, "nonfunctional" lives, a switch that will entail both an economic wrench and a severe test of the deeply ingrained ethic that work is the good and necessary calling of man.⁶⁶

My friends and I spent much of our 20s doing our part to try to will into existence a "leisurely, nonfunctional life." With our apologies to Joseph Froomkin and his tantalizing dreams of what could be, our efforts proved unsustainable to due technology's failure to live up to its true potential, and I found myself thinking, "Well, maybe I could be a lawyer."

All this is to say that making predictions of what effect nascent technology will have on future life is a surefire way to get yourself quoted in lighthearted oh-the-folly-of-it-all articles in said future. Even so, some slightly more modest guesses could be considered.

As it happens, there may already be some guidance on the possible near-term impacts of artificial intelligence on various professions, including the legal profession. To understand the potential benefit of AI, it is helpful to understand the distinction between tacit and explicit knowledge.⁶⁷ Explicit knowledge is the knowledge that can be formalized into educational materials and taught to others.⁶⁸ Tacit knowledge is the knowledge that you gain by doing things that are less susceptible to formal education.⁶⁹ "[T]acit skills are very difficult to explain, replicate, and transfer through formal training processes."⁷⁰

We as lawyers can certainly understand this distinction. We spent three years in post-graduate education learning the skills of being a lawyer. After those three years, however, we were only "baby lawyers," green and inexperienced to the practice of law in many ways. While we gained more explicit knowledge in our niche areas of law, it is really the tacit knowledge that comes from the day-to-day⁷¹ practice of law that truly hone our skills and create the depth of the skill of a seasoned attorney.

There is some indication that artificial intelligence might be able to help people develop their tacit skills at a faster pace. A recent paper reported on a study of "the use of AI chat technology among over 5,000 call-center customer support staff working for a major software provider."⁷² Overall, this software proved a success. "Agents who never used the AI tools resolved 1.7 inquiries per hour; those who used them resolved 2.5 per hour."⁷³ What was most interesting, however, was the distribution of the benefit of this software. "Newly hired AI-supported workers caught on more quickly, achieving performance levels in two months that normally required half a year of experience to develop."⁷⁴ There was also a decrease in turnover of new employees.⁷⁵ In contrast, the employees who were already experienced before the software was introduced—that is, those who had already built up their tacit knowledge—"saw

⁶³ Lily Rothman, *This 50-Year-Old Prediction About Computers Will Make You Sad*, Time (April 2, 2015), available at <https://time.com/3754781/1965-predictions-computers/>.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ Brent Orrell, *An Unexpected Role for AI in the Workplace*, the Bulwark (May 23, 2023), available at <https://plus.thebulwark.com/p/an-unexpected-role-ai-could-play-in-workplace>.

⁶⁸ Elizabeth A. Smith, *The Role of Tacit and Explicit Knowledge in the Workplace*, 5 Journal of Knowledge Management 311, 314 (December 1, 2001).

⁶⁹ *Id.*

⁷⁰ Orrell, *supra*, n.51.

⁷¹ To-night-to-long-weekends-to-during-a-vacation.

⁷² Orrell, *supra*, n.51.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.*

no increase in productivity (in fact, the chat tech appears to have reduced their performance slightly with unneeded advice).⁷⁶

This is only one study. So, this cannot be taken as definitive proof of the benefit that artificial intelligence will increase the rate at which younger lawyers can acquire the tacit skills of practicing law. But there is at least the potential. There are significant hurdles, though, for artificial intelligence being a tool for young lawyers to learn the tacit skills of litigation. Without diminishing the accomplishment of artificial intelligence that assists call center staff for a software company, the range of questions a beginning civil litigation lawyer could encounter is orders of magnitude more complex, with multiple legal sources that could provide different answers. Plus, reliable artificial intelligence for lawyers cannot include any “hallucinations”⁷⁷ in the information provided. Providing wrong information to a starting attorney would be worse than providing none.

IV. THE ETHICAL IMPLICATIONS OF USING GENERATIVE ARTIFICIAL INTELLIGENCE IN THE PRACTICE OF LAW

For lawyers encountering technology that is new to the field, there must always be the necessary inquiry into the ethical implications of the technology on the field. As it happens, there is already an instance of generative AI being used in the practice of law, and many of the ethical implications have been laid bare. The matter involves civil litigation, ChatGPT, and some legal opinions of questionable validity.

A. ChatGPT and the Case of the Hallucinated Opinion

Our story begins in 2019, when the plaintiff in our suit was on a flight from El Salvador to New York.⁷⁸ During the flight, the plaintiff alleges, an employee of the airline struck him in the knee with a metal serving cart, causing damage.⁷⁹ In 2020, the airline filed for bankruptcy.⁸⁰ The plaintiff filed suit during the bankruptcy proceedings and, as a result, subsequently filed a “Stipulation to Dismiss without prejudice.”⁸¹ After the bankruptcy proceedings concluded, plaintiff refiled suit.⁸²

The defendant removed the suit to federal court.⁸³ About a year later, the defendant filed a motion to dismiss.⁸⁴ In it, the defendant asserted that the laws concerning international carriage had a two-year limitations period for claims, that the law did not allow local laws to toll the limitations period, and that the plaintiff’s claims were time barred.⁸⁵

In his response, the plaintiff cited several cases that held he was within his rights to assert a state claim for his injuries, that the state claim has a three-year limitations period, and that filing for bankruptcy tolls the two-year limitations period upon which the defendant relied.⁸⁶

Trouble arose when the defendant filed its reply and said it was not able to locate any of the cases that the plaintiff relied on for legal authority concerning bankruptcy tolling the limitations period in question.⁸⁷ Shortly after, the trial court issued an order requiring the plaintiff to file an affidavit annexing ten of the cases cited in the response to the motion to dismiss.⁸⁸ Plaintiff’s counsel filed an affidavit and attached eight cases.⁸⁹ The attorney represented that he could not find one of the cases and explained another opinion was not included because it was unpublished.⁹⁰ For the other opinions, the attorney explained that they “may not be inclusive of the entire opinions but only what is made available by online database.”⁹¹

Counsel for defendant responded and informed the court “that the authenticity of many of these cases is questionable.”⁹² The cases that had federal reporter citations could not be found in the federal reporter or in PACER.⁹³

⁷⁶ *Id.*

⁷⁷ *See Metz, supra*, n.27.

⁷⁸ *Mata v. Avianca, Inc.*, No. 1:22-CV-01461-PKC, S.D.N.Y, Doc. 5, Ex. A at 3.

⁷⁹ *Id.*

⁸⁰ *Id.*, Doc. 18 at 2.

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*, Doc. 5.

⁸⁴ *Id.*, Doc. 16.

⁸⁵ *Id.*, Doc. 18 at 4–9.

⁸⁶ *Id.*, Doc. 21 at 4–8.

⁸⁷ *Id.*, Doc. 24 at 3–4.

⁸⁸ *Id.*, Doc. 25, 27.

⁸⁹ *Id.*, Doc. 29.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*, Doc. 30.

⁹³ *Id.*

The court then issued a show cause order. “Six of the submitted cases appear to be bogus judicial decisions with bogus quotes and bogus internal citations. Set forth below is an Order to show cause why plaintiff’s counsel ought not be sanctioned.”⁹⁴

The counsel for the plaintiff filed a subsequent affidavit explaining to the court that another attorney in the firm, who was not admitted to practice in the federal court, had done the research and written the response, including citing the cases in question.⁹⁵ The attorney that signed the filing neither researched nor reviewed cases cited in the filing.⁹⁶

The attorney that cited the cases also filed an affidavit.⁹⁷ The attorney represented to the court, “As the use of generative artificial intelligence has evolved within law firms, your affiant consulted the artificial intelligence website ChatGPT in order to supplement the legal research performed.”⁹⁸ The attorney obtained the cases in question from ChatGPT, “which also provided its legal source and assured the reliability of its content.”⁹⁹ These explanations were not well received by the court, which expanded the scope of its show-cause order.¹⁰⁰

The court held a hearing on the show cause order on June 8, 2023. It issued its rulings two weeks later. As the court observed, “Many harms flow from the submission of fake opinions.”¹⁰¹ It wastes the time and expense of opposing counsel along with the time of the court to whom it was submitted. It deprives the client of persuasive argument. It can harm the reputation of the judges and parties identified in the fake opinions.¹⁰² And it can “promote cynicism about the legal profession and the American judicial system.”¹⁰³

The court emphasized that it was not sanctioning the parties for being fooled by the authenticity of what ChatGPT insisted was true.¹⁰⁴ “[I]f the matter had ended with Respondents coming clean about their actions shortly after they received [notice] questioning the existence of the cases, or after they reviewed the Court’s Orders . . . requiring production of the cases, the record now would look quite different.”¹⁰⁵

Instead, the conduct the court sanctioned was the actions of the parties after the authenticity of the opinions had been called into question. “[T]he Court finds bad faith on the part of the individual Respondents based upon acts of conscious avoidance and false and misleading statements to the Court. . . . Sanctions will therefore be imposed on the individual Respondents.”¹⁰⁶

B. The Ethical Perils of Using Generative Artificial Intelligence in Civil Litigation

If you have read the article through to this point, it is not hard to spot the ethical risks entangled with generative AI in civil litigation. A federal court in Texas, though, has recently done us the favor of emphasizing some of the risks. Judge Brantley Starr, in the Northern District of Texas, updated his local rules in May 2023 to address artificial intelligence.¹⁰⁷ All attorneys and pro se litigants appearing before the court must file “a certificate attesting either that no portion of any filing will be drafted by generative artificial intelligence (such as ChatGPT, Harvey.AI, or Google Bard) or that any language drafted by generative artificial intelligence will be checked for accuracy, using print reporters or traditional legal databases, by a human being.”¹⁰⁸ The court acknowledged that generative AI could have some benefit in the practice of law, but not in legal briefing:¹⁰⁹

Here’s why. These platforms in their current states are prone to hallucinations and bias. On hallucinations, they make stuff up—even quotes and citations. Another issue is reliability or bias. While attorneys swear an oath to set aside their personal prejudices, biases, and beliefs to faithfully uphold the law and represent their clients, generative artificial intelligence is the product of programming devised by humans who did not have to swear such an oath. As such, these systems hold no allegiance to any client, the rule of law, or the laws

⁹⁴ *Id.*, Doc. 31.

⁹⁵ *Id.*, Doc. 32.

⁹⁶ *Id.*

⁹⁷ *Id.*, Doc. 32, Ex. 1 at 1.

⁹⁸ *Id.*

⁹⁹ *Id.*, Doc. 32, Ex. 1 at 2.

¹⁰⁰ *Id.*, Doc. 33.

¹⁰¹ *Id.*, Doc. 54 at 1.

¹⁰² *Id.*, Doc. 54 at 1–2.

¹⁰³ *Id.*, Doc. 54 at 2.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ Raffi Melkonian (@RMFifthCircuit), Twitter (May 30, 2023, 6:27 PM), <https://twitter.com/rmfifthcircuit/status/1663688580387028992>.

¹⁰⁸ Available at <https://www.txnd.uscourts.gov/judge/judge-brantley-starr> (last visited June 19, 2023).

¹⁰⁹ *Id.*

and Constitution of the United States (or, as addressed above, the truth). Unbound by any sense of duty, honor, or justice, such programs act according to computer code rather than conviction, based on programming rather than principle. Any party believing a platform has the requisite accuracy and reliability for legal briefing may move for leave and explain why.¹¹⁰

As indicated in the filings by the attorneys and the law firm in the *Mata* case discussed above, the incident of the hallucinated cases has received a lot of public attention, largely in the form of ridicule. This paper is not intended to pile on. But the case highlights an important warning from earlier in the paper. ChatGPT is specifically designed to sound confident in what it says. The attorney that used it attached a log of his conversation with ChatGPT.¹¹¹ If you read through it, ChatGPT draws no distinction between the cases that actually exist and the ones it simply made up. As one point, when the attorney asked for a summary of a certain holding from a specific case, ChatGPT “corrected” him and there was no such holding in that case.¹¹² This could easily have given the attorney the false sense that ChatGPT was correcting him where necessary and not just providing him with a response that linguistically follows the conversation. Without excusing the investigation that should have been done before the attorney decided to use ChatGPT as a legal research tool or the due diligence that should have occurred afterwards to confirm these cases and their holdings, it is not difficult to see how someone who did not know a lot about ChatGPT could be led to believe that it was only citing and summarizing real cases.

But this highlights the enormous pitfall of treating ChatGPT and its ilk as anything other than an incredibly complex linguistic parlor game. It “understands” neither the concept of objective reality nor whether anything it is saying is truth, opinion, or wholly made up by itself in that instant. While it may be possible to ask ChatGPT some legal questions and get a correct answer, the amount of work you would have to do afterwards to confirm its veracity would probably require more time than if you had never consulted ChatGPT at all.

For the time being, then, the easy thing to do is to avoid generative AI programs like ChatGPT. It is not entirely clear, however, that this clear dividing line is going to remain clear (or even currently is altogether clear) to avoid the perils of generative AI. Both Westlaw and LexisNexis are promoting their use of not just artificial intelligence, but of generative artificial intelligence.¹¹³ Certainly, there is every reason to believe that both companies have a powerful economic incentive to provide legal services that do not “hallucinate” non-existent legal authority. If an attorney uses one of Westlaw’s or LexisNexis’s generative AI tools, though, is he violating Judge Starr’s rules? Or do these businesses retain their status of “traditional legal databases” and not require independent verification “by a human being”? At the time of the issuance of these rules, then, there is already some grey in them. It is likely that further advances in generative AI and its increasing presence in everyday life—including the practice of law—will only make it harder to comply with rules like these.

In addition, other websites that implement generative AI tools may not have as strong an incentive to avoid the pitfalls of hallucinations and other false data. As generative AI becomes more present in our lives, it may be more complicated for the typical attorney to know just what any website means by promoting its use of generative AI and understanding the reliability of the information they receive. I consider myself to be fairly technologically proficient. I do not have any guess, however, of how I would be able to discern the reliability of any software that uses generative artificial intelligence, no matter how tangentially.

To be fair, that could be said of a lot of technology. For example, I also do not have any real understanding of how Westlaw’s or LexisNexis’s software functions, even without generative AI. I can only describe the actions I take and the end results I get. Up until now, the lack of an under-the-hood understanding of how these products works has not posed any real ethical risks. Generative AI as it currently exists, though, has a core flaw in terms of truth of information. Despite that, its presence is growing. For companies whose reliability is essential to their brand that incorporate generative AI into their products, either they have found a way to solve a core flaw of generative AI and have kept it to themselves, they are using the term as a buzzword to describe a significantly different kind of programming, or the core flaw is now a part of their software. Ultimately, however, there is no real way for a user to discern which is true. This potentially exposes risk to every attorneys’ duty of candor.

¹¹⁰ *Id.*

¹¹¹ *Mata v. Avianca, Inc.*, No. 1:22-CV-01461-PKC, S.D.N.Y., Doc. 46, Ex. A.

¹¹² *Id.*, Doc 46, Ex. A at 9.

¹¹³ See *Generative AI Product Review: Westlaw Precision*, Thompson Reuters (last visited June 19, 2023), available at <https://www.legalcurrent.com/generative-ai-product-preview-westlaw-precision/>; *LexisNexis Announces Launch of Lexis+ AI Commercial Preview, Most Comprehensive Global Legal Generative AI Platform*, LexisNexis (May 4, 2023), available at <https://www.lexisnexis.com/community/pressroom/b/news/posts/lexisnexis-announces-launch-of-lexis-ai-commercial-preview-most-comprehensive-global-legal-generative-ai-platform>.

Despite these warnings, I do not think this problem is severe at the moment or even that it is likely to be severe, at least for lawyers. For lawyers, legal databases relied on by millions are not likely to throw that away for the sake of using generative AI regardless of its consequences. Hopefully, as the problems with generative AI become clearer, there will be less of a rush to incorporate it into the legal profession. Nevertheless, generative AI, in some form, is here to stay. It is important for us to understand as well as we can the legal and ethical implications of its encroachment into the profession.