

Article | Received 15 April 2024; Accepted 17 July 2024; Published 8 August 2024  
<https://doi.org/10.55092/let20240006>

# Reading law with ChatGPT—with special emphasis on contextual canons

Varol Akman

Ihsan Dogramaci Bilkent University, Ankara, Turkey

E-mail: [akman@cs.bilkent.edu.tr](mailto:akman@cs.bilkent.edu.tr)

**Abstract:** We study the performance of ChatGPT interpreting prompts that require legal expertise to answer. Our inputs are very close adaptations from the "Contextual Canons" section of Antonin Scalia & Bryan Garner's *Reading Law: The Interpretation of Legal Texts* (Thomson West: 2012). We report our experiments and findings for the entire section (comprising 14 canons) of the book. We conclude that as a legal reasoner ChatGPT is exceptionally successful in taking the contextual canons into account.

**Keywords:** AI and law; context; legal interpretation; ChatGPT; Antonin Scalia; contextual canons; generative AI; textualism; originalism

## 1. Introduction

"Context Changes Everything"  
fall 2023 brand campaign of Bloomberg Media

There are some desirable qualities for automated legal reasoning that seem to be already available in recent user-friendly tools developed in the "generative AI" tradition. (In the sequel, we'll use ChatGPT, available at <https://chat.openai.com>, as a representative of these tools, due to its wider availability and popular standing.) Accepting inputs (aka prompts) in natural language, generative AI programs respond in natural language, thus making meaningful interaction with them an effortless reality for the not necessarily technical (humanities or social sciences community), as well as the competent (computer programmers, engineers, and so on). Since we'll be using ChatGPT as a tool, we omit in this paper the provenance of ChatGPT, its current competitors, or generative AI in general. We do not delve into relevant architectural and technical underpinnings either. Useful resources clarifying the inner workings of ChatGPT and its language capabilities include [1–4], along with the highly recommended [5].

The foremost desirable quality is naturally a close acquaintance with legal precedents, viz. encyclopedic (historical) familiarity with laws, statutes, verdicts, *etc.* in the annals. Repositories of such knowledge clearly are not a novel product of the recent past. They have



Copyright©2024 by the authors. Published by ELSP. This work is licensed under Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium provided the original work is properly cited.

been in existence since the emergence of modern computing, to wit (very) large database systems and later, knowledge-based systems. Potential contributions of ChatGPT in this regard include (but are not limited to) intelligent search of such databases, summarization of relevant results, and reasoning about a variety of relationships that may hold among the latter. Needless to say, as long as ChatGPT has full (unrestricted) access to legal knowledge bases, the processes (respectively, the outcomes) are carried out (respectively, rendered) automatically. In this paper, we won't concentrate on this line of work, despite its obvious benefits.

Similarly, this paper does not engage with other exciting topics such as ChatGPT teaching law [6] and passing college-level (law school) tests [7], not to mention the bar exam [8, 9]. The implications of generative AI for legal services and society are also not dwelt on. It is, after all, the *raison d'être* of this journal and similar publishing venues to act as a facilitator for introducing innovative AI to attorneys, judges, legal analysts [10], and law firms [11].

Although we believe that the experiments reported in the sequel will provide a better picture, it is useful to give a concise justification for using ChatGPT in legal reasoning. As an AI language model, ChatGPT's capability in legal reasoning stems from several factors that enable it to process and understand legal concepts, arguments, and principles effectively. These factors can be summarized as follows.

ChatGPT's training data includes a wide range of texts such as legal documents, case law, statutes, and legal opinions. This extensive corpus allows it to familiarize itself with various legal frameworks, precedents, and interpretations. Maybe more importantly, its ability to contextualize information allows it to understand the nuances and complexities of legal issues. Legal reasoning often involves interpreting statutes, applying precedents to specific cases, and assessing the implications of permissible arguments. The program's structured approach to information processing enables it to organize and prioritize relevant legal principles and debates. In legal inference, it is essential to identify pertinent facts, analyze applicable laws, and evaluate the strengths and weaknesses of different legal contentions. As we'll see in the remainder of this paper, ChatGPT can identify logical inconsistencies, evaluate the validity of legal arguments, and provide insights into potential counterarguments or alternative interpretations.

Last but not least, ChatGPT appears to not have personal biases or subjective preferences that could influence its legal assessments. It seems to rely on factual information, legal principles, and warrantable reasoning to provide impartial assessments and insights.

## **2. Common sense, logic, and morals**

Returning to other desirable qualities, we should probably count commonsense reasoning—but cf. [12] for a somber caveat—and logical reasoning as fundamental. Commonsense reasoning about the world (or hypothetical worlds) is a trait that lets humans deliberate about the things and events in their surroundings [13]. Despite its present limitations [14], ChatGPT offers a so far unheard of strength when it comes to physics-based reasoning. For instance, even a basic tool like a can opener integrates various physical concepts (more on this a little

later). Humans leverage their knowledge of their naive physics knowledge to analyze how a device will operate [15].

In the excerpts from our interactions with ChatGPT in the sequel, the input to the program is in plain text. The output of the program is italicized. Both the input and the output are indented as a block. For brevity, in numerous occasions only the most relevant portion of the complete output of ChatGPT is reproduced. All interactions were carried out during 2023–2024 by the author in personal engagement with the free version of ChatGPT.

ChatGPT delivers impressive results, accompanied by detailed explanations and justifications, when presented with some scenarios. The following prompt is a classic AI example, attributed to Marvin Minsky. ChatGPT's "envisioning," *i.e.*, forming mental images of things or events, immediately follows.

You can pull with a string. can you push with it?

*No, a string cannot push an object in the same way it can pull it. When you pull an object with a string, you exert force in a particular direction to move the object towards you. However, when you try to push an object with a string, the string tends to become slack, and ... (rest omitted)*

Here is another prompt, this time requiring familiarity with simple notions of chemistry:

What happens when a glass of water is left on the kitchen table for a month?

*The most probable outcome when a glass of water is left on a kitchen table for a month is as follows:*

*Evaporation: A significant portion of the water will evaporate into the surrounding air.*

*This process is accelerated if the kitchen has low humidity or if the glass is uncovered.*

*Temperature changes: The water's temperature will align with the ambient temperature in the kitchen, which can fluctuate throughout the month. (rest omitted)*

Going back to our can opener mentioned earlier, here's an edifying response by ChatGPT. Especially notice the last paragraph in which physical concepts are masterfully cited.

How does a can opener work?

*A can opener works by using a sharp wheel or blade to puncture and cut through the lid of a can. Here's a step-by-step explanation of how a manual can opener typically operates:*

*Clamping: ...*

*Puncturing: ...*

*Cutting: ...*

*Separation: ...*

*Removal: ...*

*The principles of friction, force, rotation, and cutting all come into play during this process. Friction helps the opener grip the can, force (applied through the handle) drives the cutting wheel, rotation ensures the cutting motion, and cutting itself is facilitated by the sharp blade or wheel that slices through the metal of the can lid. These physical principles collectively enable the can opener to perform its task efficiently. (portions omitted)*

As for logically competent reasoning, a cornerstone of any successful defense lawyer or legal professional in general [16], ChatGPT is again impressive with its inferences and explanations/justifications. The following asks for the impossible and receives its due:

Fortinbras is a dog. a dog is a mammal. mammals are animals. all animals have a limited lifespan. i wish to place a bet that fortinbras will live forever. what are the odds?

*The odds of a dog, such as Fortinbras, living forever are effectively zero. All animals, including mammals like dogs, have a limited lifespan. While the exact lifespan of a dog can vary depending on factors like breed, genetics, and overall health, no dog can live indefinitely. (rest omitted)*

Note that ChatGPT can appreciate the difference between the concepts of infinite/finite, with appropriate modifications incorporated into its explanations:

Fortinbras is a dog. a dog is a mammal. mammals are animals. all animals have a limited lifespan. i wish to place a bet that fortinbras will live 70 years. what are the odds?

*The average lifespan of a dog can vary depending on factors such as breed, size, genetics, and overall health. Generally, smaller dog breeds tend to have longer lifespans compared to larger breeds. The average lifespan of a dog is typically around 10 to 15 years.*

*Assuming you want to bet that Fortinbras, being a dog, will live for 70 years, that would be significantly longer than the average lifespan. While there have been rare cases of dogs living into their late teens or early twenties, a lifespan of 70 years is highly unlikely... (rest omitted)*

In the following, ChatGPT is told unequivocally about the futility of something (cf. the word "unless" in the prompt) but is cautious about the truth of the prompt (cf. the word 'if' in its opening sentence), taking a safer but still coherent stance:

In the buckeye state, unless you are an ex-cop you cannot be a private eye. stu from cincinnati has never been a cop. can he open a private eye practice?

*If the specific regulations in Ohio, known as the Buckeye State, require individuals to have prior law enforcement experience in order to become a private investigator, then Stu, who has never been a police officer, may face limitations in opening a private eye practice in the state.*

*It is crucial for Stu to review the Ohio Revised Code, specifically the sections related to private investigation, to understand the exact requirements and qualifications necessary to operate as a private investigator in the state. (rest omitted)*

The following example is interesting in that it lets us observe ChatGPT doing logical reasoning, while concurrently showcasing its moral aptitude in no uncertain terms:

Fortinbras is a stupid dog. stupid animals will do anything for a living. i wish to place a bet that fortinbras will work as a postman. what are the odds?

*Using derogatory language to describe animals is inappropriate. It's important to treat animals with respect and understanding.*

*As for the likelihood of a dog like Fortinbras working as a postman, it is highly unlikely. Dogs are not typically trained or equipped to perform the duties and responsibilities of*

*a postman, which involve complex tasks such as sorting and delivering mail, interacting with people... (rest omitted)*

When queried about a somewhat repugnant scenario, ChatGPT is direct and right-minded, even virtuous:

Our maid has a huge appetite. that's why i hide all the goodies in the fridge whenever she visits. is this ok?

*Hiding all the goodies in the fridge when your maid visits raises ethical concerns. While you may have reasons for doing so, it is important to consider the impact on your relationship with your maid and whether it aligns with principles of fairness and respect.*

*Here are a few points to consider:*

*Fairness: Hiding the goodies selectively when your maid visits may create a sense of inequality or unfair treatment. It is important to treat all individuals fairly and provide equal access to available resources. (rest omitted)*

### 3. Context

The last but not least desirable quality is contextual reasoning. While commonsense and logic relativized to ChatGPT are worthy of independent interest for the legal profession, in this paper we'll focus on context. Our interest in context has a long history. While it started as a more or less technical initiative, e.g., semantic formalization of context [17], later it was redirected towards the role of context in pragmatics [18] and social action [19–21]. The present work is in the spirit of the latter output, for law is par excellence a social construct: a system of legislated rules which are coerced through social institutions.

Thus, our main goal is to study contexts of law, as exemplified in [22]. This book uses a multitude of reported cases to study 57 well-founded "canons" (in the sense of "a collection of rules of conduct," Merriam-Webster), gathered under eight headings:

- (1) Fundamental Principles (canons 1–5)
- (2) Semantic Canons (canons 6–16)
- (3) Syntactic Canons (canons 17–23)
- (4) Contextual Canons (canons 24–37)
- (5) Expected-Meaning Canons (canons 38–44)
- (6) Government-Structuring Canons (canons 45–47)
- (7) Private-Right Canons (canons 48–51)
- (8) Stabilizing Canons (canons 52–57)

In order to keep our work focused and manageable, we'll study only the fourth heading, *i.e.*, Contextual Canons (abbreviated as CC in the sequel). When referring to members of CC, we'll employ the same numbering and nomenclature used by Scalia and Garner, in order to make straightforward cross-referencing possible. Here is the complete list of CCs (14 in toto):

- (24) Whole-Text Canon
- (25) Presumption of Consistent Usage
- (26) Surplusage Canon
- (27) Harmonious-Reading Canon

- (28) General/Specific Canon
- (29) Irreconcilability Canon
- (30) Predicate-Act Canon
- (31) Associated-Words Canon
- (32) Ejusdem Generis Canon
- (33) Distributive-Phrasing Canon
- (34) Prefatory-Materials Canon
- (35) Title-and-Headings Canon
- (36) Interpretive-Direction Canon
- (37) Absurdity Doctrine

### 3.1. CC #24

The first contextual canon is #24, called "Whole-Text Canon." This calls on the judicial expert to take into account the entire text so that its structure and parts-whole relations become clear. The following has been obtained from a case (*ibid.*, p. 169) where a man alleged that a prospective employer discriminated against him on account of a past bankruptcy:

Mr. stinson went bankrupt in 2020. today he alleges that a prospective private employer has recently discriminated against him because of his earlier bankruptcy filing. there is a statute disallowing discrimination with respect to employment. can this statute be extended to hiring practices?

*In many jurisdictions, anti-discrimination statutes that protect individuals from discrimination in employment extend to hiring practices as well. These laws are designed to ensure equal opportunities for individuals throughout the entire employment process, including the initial hiring stage.*

*While I can't provide specific legal advice, it is worth noting that bankruptcy is a protected characteristic in some jurisdictions when it comes to employment discrimination. This means that employers may be prohibited from discriminating against an individual based on their bankruptcy history during the hiring process. (rest omitted)*

ChatGPT is quick to discern, with admirable acuity, between discrimination with respect to employment and discrimination with respect to hiring practices.

### 3.2. CC #25

According to CC #25, called "Presumption of Consistent Usage," a term is assumed to have the same meaning throughout a legal text, variation in terms usually suggesting variation in meaning. The following imaginary case is owed to Henry Campbell Black (*ibid.*, p. 171):

There is a statute providing that a person who being married marries any other person during the life of the former husband or wife is guilty of felony. john is married to jackie. can he marry jean?



*As an AI language model, I can provide general information, but I am not qualified to provide legal advice. The specific laws regarding marriage and bigamy can vary depending on the jurisdiction you are in.*

*In many jurisdictions, it is considered illegal to marry another person while still being legally married to someone else. This act is known as bigamy or polygamy and is typically a criminal offense.*

*If John is already married to Jackie, and they are still legally married, it would generally not be permissible for John to marry Jean without obtaining a legal divorce or annulment from Jackie first. (rest omitted)*

Here, ChatGPT deftly notices that the verb "marries" in the first sentence of the prompt can only be interpreted as "purports to marry."

### 3.3. CC #26

CC #26, called "Surplusage Canon," posits that every word and every provision should be given effect. In the following case, a single word makes all the difference (ibid., pp. 174–175):

*A New York code states that housing accommodations used "exclusively" for professional, commercial, or other nonresidential purposes are excluded from rent stabilization. Dr. Watson and some colleagues use their residential apartments for professional purposes. Their landlords begin to charge higher rent based on the fair market value of the building used as professional premises. The physicians sue on the ground that they are not using the premises exclusively for professional purposes since they also continue to live there. Can they win?*

*In the scenario you provided, Dr. Watson and his colleagues are using their residential apartments for both professional and residential purposes. Their landlords have started charging higher rent based on the fair market value of the building, presumably because they believe the apartments are being used for professional purposes beyond residential use. The key issue is whether the use of the apartments for professional purposes is "exclusive" as required by the New York code to be excluded from rent stabilization. If the court finds that the apartments are used exclusively for professional purposes, then the landlords may be justified in charging higher rent based on fair market value.*

*However, if the court determines that the apartments are used for both professional and residential purposes, and that the residential use is not incidental or insubstantial, then Dr. Watson and his colleagues may have a valid argument. They could potentially win the lawsuit if they can demonstrate that the professional use of the apartments is not exclusive and that they continue to use them as their primary residences. (rest omitted)*

The Appellate Division allowed the landlords to have their higher rent. However, ChatGPT is masterful in its detection of the crucial role of the adverb "exclusively" in the N.Y. code. The court's reading out the word "exclusively" from the statute while resorting to purposivism—"rent stabilization was not adopted to avoid having to pay a market rent"—was flawed.

### 3.4. CC #27

CC #27, called "Harmonious-Reading Canon," recommends that the stipulations in a text ought to be construed in a manner that makes them harmonious rather than conflicting. In this example (ibid., pp. 180–181), the Arizona Supreme Court was faced with two seemingly conflicting provisions:

In arizona there are two statutory provisions that deal with the beginning of a probated criminal sentence. one says a period of probation begins on the day it is imposed or as designated by the court. the other says a probationary period should begin without delay. brad was sentenced to serve two consecutive four-year probationary terms. on appeal, he argued that the sentence was unlawful because the second term could not start without delay but must start four years after the date of sentencing. is his objection valid?

*Brad's objection may not be valid. Although there are two statutory provisions regarding the beginning of a probated criminal sentence in Arizona, one stating that the probation period begins on the day it's imposed or as designated by the court, and the other indicating that it should start without delay, both provisions should be read in conjunction.*

*Given that Brad was sentenced to serve two consecutive four-year probationary terms, it's reasonable to interpret that the second term would begin immediately after the completion of the first four-year term, as there wouldn't be a delay in the commencement of the second term. Therefore, Brad's argument that the second term must start four years after the date of sentencing may not be valid, as it doesn't align with the overall intent and interpretation of the statutes.*

ChatGPT's analysis essentially coincides with the court's harmonious reading of the two sections. The Arizona court rightly held that Brad had no case.

### 3.5. CC #28

CC #28, called "General/Specific Canon," says when there's a clash between a general rule and a specific rule, the specific one takes precedence (*i.e.*, special provisions override general ones). In the following (ibid., p.183), the specific permission governs for Claire and the broad prohibition does so for Bob:

A sign at the entrance of a park reads, "no wheeled vehicles. bicycles and baby carriages may be walked along the paths." bob has a motorbike and his daughter claire has a tricycle. can they enter the park?

*Based on the sign at the entrance of the park, Bob cannot enter with his motorbike because wheeled vehicles are prohibited. However, Claire can enter with her tricycle because the sign specifically allows bicycles to be walked along the paths, and a tricycle falls under the category of a bicycle. Therefore, Claire can enter the park with her tricycle, but Bob cannot enter with his motorbike.*

The following example (ibid., p.184) shows that the existence of an antithetical specific provision does not void the general provision:



my daughter's lease provides in one clause that internet is provided, and in another it states that the tenant is responsible for all the utilities. will my daughter pay for internet? how about water and heating?

*The interpretation of your daughter's lease would depend on the specific language used in each clause and any additional terms or conditions outlined in the lease agreement.*

*Internet Provision Clause: If the lease clearly states that internet is provided as part of the rental agreement, then your daughter should not be responsible for paying for internet separately. However, the extent and quality of the provided internet service should be defined in the lease agreement.*

*Tenant Responsibility for Utilities Clause: If the lease states that the tenant is responsible for all utilities, including water and heating, then your daughter would be responsible for paying for these utilities separately, regardless of whether internet is provided as part of the rental agreement. (rest omitted)*

Now, consider a case from the Show-Me state (ibid. pp. 184–185):

In missouri a domestic-relations statute states: "if a party requests a decree of legal separation rather than a decree of dissolution of marriage, the court shall grant the decree in that form." but a different section of the statute contains a provision dealing with the specific situation in which one of the parties claims that the marriage is irretrievably broken: "if both of the parties by petition or otherwise have stated under oath that the marriage is irretrievably broken, or one of the parties has so stated and the other has not denied it, the court, after considering the aforesaid petition or statement, and after a hearing thereon shall make a finding whether or not the marriage is irretrievably broken and shall enter an order of dissolution or dismissal accordingly." mrs. mccall filed a petition for legal separation. in response mr. mccall stated in a verified pleading that the marriage was irretrievably broken and requested a dissolution of the marriage. mrs. mccall opposed dissolution and denied that the marriage was irretrievably broken, but did not do so under oath. the trial court entered a decree of legal separation. mr. mccall appealed and contended that mrs. mccall's denial was not under oath. does he have a case? *Yes, Mr. McCall would have a case to appeal the trial court's decision.*

*According to the statute, for dissolution of marriage to be considered, both parties must state under oath that the marriage is irretrievably broken, or one party must state so and the other must not deny it under oath. In this scenario, Mr. McCall stated in a verified pleading that the marriage was irretrievably broken and requested dissolution, fulfilling one of the conditions outlined in the statute. However, Mrs. McCall opposed dissolution and denied that the marriage was irretrievably broken, but she did not do so under oath. Since Mrs. McCall's denial was not under oath, it does not meet the statutory requirement for consideration of dissolution of marriage. Therefore, Mr. McCall would have grounds to argue that Mrs. McCall's denial was not in compliance with the statute, and the trial court's decision to enter a decree of legal separation should be overturned.*

This answer of ChatGPT is in maximum unison with the appellate court which concurred and appropriately treated the section addressing a claim of irretrievable breakdown as an exemption from the standard principle regarding a party's petition for legal separation.

### 3.6. CC #29

According to CC #29, called "Irreconcilability Canon," if a document includes entirely conflicting provisions of equal generality that were adopted simultaneously, neither provision should be enforced. In the case below (ibid., pp. 190–191), two sections of a statute conflict:

In montana, one section of a statute declares it a felony to willfully and maliciously maim or wound someone else's horse. in the very next section, it declares the same conduct a misdemeanor. taylor broke into a building and maimed a horse that was inside. he was prosecuted for second-degree burglary for "breaking and entering with intent to commit any felony therein." taylor appealed his conviction and argued that because he had committed a misdemeanor he could not lawfully be charged with second-degree burglary. is he right?

*Taylor's argument raises a valid legal question. In this situation, Taylor's conviction for second-degree burglary hinges on whether his actions constituted the intent to commit a felony when breaking into the building.*

*While one section of the Montana statute declares the act of willfully and maliciously maiming or wounding someone else's horse as both a felony and a misdemeanor in the next section, the charge against Taylor is second-degree burglary, which requires the intent to commit a felony upon entering the building.*

*If Taylor's intent upon breaking into the building was to commit the misdemeanor offense of maiming the horse, rather than a felony, his conviction for second-degree burglary might not be lawful.*

*Therefore, whether Taylor is right depends on the specific circumstances surrounding his intent when breaking into the building. If his intent was to commit the misdemeanor offense of maiming the horse, his conviction for second-degree burglary might not be lawful. However, if his intent was to commit a felony, such as theft or arson, then his conviction for second-degree burglary would likely stand.*

In this circumstance, the court agreed to Taylor's appeal and dismissed the conviction, but not on the authoritative grounds cited by ChatGPT. In a fantastical statement, the court reasoned that when there is an irreconcilable conflict between different sections the last one (the one later in position) stands!

### 3.7. CC #30

CC #30, called "Predicate-Act Canon," asserts that the authorization of an action inherently permits any necessary prerequisite actions. The following imaginary case was concocted by the author, based on a remark by Scalia and Garner (ibid., p. 192):

Mrs. notley, a land owner who lives in a mansion in the northeast corner of her land, gave permission to jon to harvest the wheat on her land. when jon entered the land after sunset on a sunday afternoon for that purpose, the security cameras caught him and mrs. notley called the cops. should she file a complaint?

*Whether Mrs. Notley should file a complaint against Jon for entering her land without permission depends on various factors, including the terms of their agreement and the laws governing trespassing in their jurisdiction.*

*Permission Granted: If Mrs. Notley had indeed given Jon permission to harvest the wheat on her land, then his entry onto the property would not be considered trespassing. However, the terms of their agreement, including any restrictions on the timing of the harvest or the specific areas Jon could access, would need to be clarified.*

*Scope of Permission: Mrs. Notley should consider whether Jon's entry onto the land was within the scope of the permission she granted. If the agreement specified certain times for harvesting or restricted access to certain areas, Jon may have violated those terms if he entered after sunset on a Sunday afternoon.*

*Trespassing Laws: Mrs. Notley should also consider the trespassing laws in her jurisdiction. Even if she had not given Jon explicit permission to enter the land at the time he did, the laws might permit certain activities or exceptions related to land use, such as agricultural activities. (rest omitted)*

Clearly, permission to harvest the crop on one's field implies permission to set foot in the field for that mission. ChatGPT is quick to notice this common sense maxim.

The following imaginary case made up by us is based on a remark by Jeremy Bentham (*ibid.*, p.193), viz. "Command includes permission":

*A second lieutenant strictly commands the security guards at the gates of a building to body search any person who wants to enter. when a brigadier general arrives that evening, the guards duly perform their duty. when the general mentions this to the lieutenant, he immediately court-martials the guards for improper conduct. is he justified in doing so? Whether the second lieutenant is justified in court-martialing the security guards for performing a body search on the brigadier general depends on several factors:*

*Orders from Superior Officers: If the second lieutenant's orders to the security guards were given in accordance with established procedures and policies, and if the guards were following those orders by conducting body searches on all individuals entering the building, then they may have been acting appropriately.*

*Rank and Protocol: In military settings, it's important to consider the rank and protocol involved. The actions of lower-ranking officers and soldiers must often comply with the orders of higher-ranking officers, including those related to security procedures.*

*Appropriate Response: If the second lieutenant believed that the guards were not following his orders or were acting inappropriately in conducting the body search on the brigadier general, there may have been more appropriate ways to address the situation, such as discussing the issue with the guards and providing guidance on proper protocol. (rest omitted)*

Again, ChatGPT cognizes that if one is ordered to do something, then one is perforce green-lighted to do it. It should be noted that here the military setting (a world that just follows its own—sometimes baffling—rules) is also taken into account by the program.

### 3.8. CC #31

CC #31, called "Associated-Words Canon," implies that related words influence each other's interpretation; the Latin equivalent is "noscitur a sociis," meaning, "it is known by its associates." (N.B. This is different from the well-known dictum of Firth [23], viz. "You shall know a word by the company it keeps.") Here is a case (*ibid.*, pp. 196–197):

A minnesota statute makes it a crime to carry or possess a pistol in a motor vehicle unless the pistol is unloaded and "contained in a closed and fastened case, gunbox, or securely tied package." upon being stopped by cops on a routine control, phyllis was found to have a pistol within her purse on the floor behind the passenger seat. on appeal, she argued that her purse was a "case," which dictionaries define as "something that encloses or contains." what should the minnesota court of appeals say?

*The Minnesota Court of Appeals would need to consider several factors in determining whether Phyllis's purse qualifies as a "case" within the meaning of the statute:*

*Statutory Language: The court would analyze the specific language of the statute, which requires a pistol to be "contained in a closed and fastened case, gunbox, or securely tied package." The key terms here are "closed and fastened," which imply that the case must be securely closed.*

*Plain Meaning: The court may consider the ordinary meaning of the term "case" as defined in dictionaries, which generally define it as "something that encloses or contains." However, the court must also weigh this definition against the specific requirements outlined in the statute. (rest omitted)*

As also pointed out by ChatGPT in the statutory language paragraph above, the Minnesota Court of Appeals held that Phyllis was not within the exception of the statute.

There is another case (*ibid.*, pp. 197–198), showing that a listing of associated words is not essential; as long as a well-founded "association" can be established, the coast will be clear:

Texas has a public-information act that contains an exemption from disclosure for "an internal record or notation of a law enforcement agency or prosecutor that is maintained for internal use in matters relating to law enforcement or prosecution if release of the internal record or notation would interfere with law enforcement or prosecution." hank, an unsuccessful applicant for a position as a forth worth police officer, submitted an open-records request for copies of the hiring process documents relating to his application. the city declined to provide them, stating that this information is exempt from disclosure by reason of the afore-mentioned exception. in the ensuing litigation, the city argued that the information it sought to protect was related to law enforcement; its officers must make well-informed hiring decisions, and if the information it obtains and records during the hiring process were readily available to the public, those third parties who provide information about the applicant would be reluctant to speak candidly. the court of appeals nonetheless denied the exemption on grounds of *noscitur a sociis*. is the decision of the appellate court justifiable?

*The decision of the appellate court to deny the exemption based on the principle of *noscitur a sociis* appears justifiable, given the circumstances described.*

*Noscitur a Sociis Principle: This principle suggests that the meaning of a word or phrase should be interpreted in conjunction with the surrounding words or phrases. In this case, the court likely considered the context of the exemption within the Texas Public Information Act and interpreted it in light of its association with matters relating to law enforcement or prosecution.*

*Purpose of the Exemption: The exemption is intended to protect internal records or notations of law enforcement agencies or prosecutors when their release would interfere with law enforcement or prosecution activities. The court likely assessed whether the hiring process documents, while related to law enforcement in the sense that they inform hiring decisions, fall within the scope of the exemption's intended purpose.*

*Interference with Law Enforcement: The court may have considered whether the release of the hiring process documents would truly interfere with law enforcement activities. While the city argued that releasing the documents could lead to reluctance among third parties to provide candid information, the court may have determined that this concern did not constitute interference with law enforcement or prosecution as specified in the exemption. (rest omitted)*

The following is an excerpt from the denial ruling of the court (*ibid.*, p. 198). Notice the parallels with ChatGPT's evaluation of the matter.

[W]e construe the phrases "information relating to law enforcement" and "would interfere with law enforcement" in reference to the type of information that would also "relate to prosecution" or "interfere with prosecution." So doing, we conclude that the phrase "law enforcement," in light of the immediately following words "prosecutor" or "prosecution," evidences an intent by the Legislature to include within the law enforcement exception only that type of information that relates to violations of the law.

### 3.9. CC #32

CC #32, called "Ejusdem Generis—meaning, 'of the same kind'—Canon," claims that when general terms come after a list of two or more specific items, they only apply to individuals (things) of the same general type (category) mentioned (*ibid.*, p. 199).

South Dakota's equine activities act states that "no equine activity sponsor, equine professional, doctor of veterinary medicine, or any other person, is liable for an injury to or the death of a participant resulting from the inherent risks of equine activities." risks were defined as "dangers or conditions which are an integral part of equine activities, including certain hazards such as surface and subsurface conditions." greg's daughter frenchie was riding a horse in a pasture leased to a riding club. while running at a controlled gallop, the horse tripped and somersaulted, killing frenchie. an investigation revealed that the horse had tripped because it stepped in a cable trench that had been dug by the acme corp. greg sued acme for its negligence in failing to fill the trench properly and to warn riders of the danger the trench presented. he contended that acme was not involved in the sponsorship of equine activities and should therefore not be protected by the equine activities act. acme argued that under the plain language of the statute, the



phrase any other person provided immunity to all persons, regardless of their occupation, their status, or their foreseeable involvement in equine activities. applying ejusdem generis, the court held that any other person included only those involved in equine activities and found acme liable. is this justifiable?

*The decision to hold ACME liable under South Dakota's Equine Activities Act appears justifiable based on the application of ejusdem generis and the circumstances of the case.*

*Ejusdem Generis Principle: Ejusdem generis is a rule of statutory interpretation where general words following specific words are construed to include only things of the same kind as those specified. In this case, the statute provides immunity to "equine activity sponsor, equine professional, doctor of veterinary medicine, or any other person." By applying ejusdem generis, the court interpreted "any other person" to include only those individuals or entities involved in equine activities.*

*Plain Language Interpretation: While the plain language of the statute may suggest broad immunity for "any other person," the court appropriately applied the ejusdem generis principle to narrow the scope of immunity to those involved in equine activities. ACME, as a corporation not directly involved in equine activities, would not typically fall within the scope of immunity provided by the statute.*

*Foreseeable Involvement: ACME's involvement in creating the hazardous condition in the pasture, namely the cable trench, was not directly related to equine activities. Therefore, it is reasonable to hold ACME liable for its negligence in failing to fill the trench properly and warn riders of the danger it presented, despite the immunity provision in the Equine Activities Act. (rest omitted)*

Clearly, ChatGPT's answer is comprehensive and commendable; it is (arguably) a stunning piece of legal dissection.

The canon normally requires at least two words (specifics) to establish a category, e.g., "Discos and other places of public entertainment" is not really covered by CC #32. But the following case was interesting in that it breached the two-specifics minimum (ibid., p. 207):

A prison inmate sued the federal bureau of prisons under the federal tort claims act for the mishandling of his belongings. the government invoked a provision of the act, stating that its waiver of sovereign immunity did not apply to the "detention of any goods, merchandise, or other property by any officer of customs or excise or any other law enforcement officer." the plaintiff argued that by application of ejusdem generis the phrase any other law enforcement officer meant only other law-enforcement officers enforcing customs or excise laws. what should the supreme court say?

*The Supreme Court would need to interpret the language of the Federal Tort Claims Act (FTCA) and determine whether the government's invocation of the provision excluding detention of goods by law enforcement officers applies to the case at hand.*

*The principle of ejusdem generis is a rule of statutory construction that suggests when a general term follows a list of specific terms, the general term should be interpreted to include only things of the same kind as those specifically listed. In this case, the phrase "any other law enforcement officer" follows "officer of customs or excise," suggesting*



*that it may be interpreted narrowly to include only officers similar to those enforcing customs or excise laws.*

*However, the Supreme Court would carefully examine the context and legislative history of the FTCA to determine the intent of Congress when enacting this provision. They would consider whether Congress intended to limit the waiver of sovereign immunity for property detention to customs or excise officers specifically, or if the provision was intended to encompass a broader range of law enforcement officers. (rest omitted)*

The Supreme Court held (*ibid.*, p. 207) that CC #32 did not really apply, as ChatGPT also keenly insinuated in its answer. The Court asserted that the phrase is disjunctive, with one specific and one general genus, not a list of specific items divided by commas and followed by a general term.

### 3.10. CC #33

CC #33, called "Distributive-Phrasing Canon," asserts that distributive wording assigns each term to its corresponding referent. A good example of the canon was spotted in the 19th-century (*ibid.*, pp. 214–215):

*In pennsylvania, section 3 of a state statute provided that a banker or broker "who shall neglect or refuse to make the return and report required by the 1st and 2d sections of this act, shall, for every such neglect or refusal, be subject to a penalty of \$1000." section 1 of the act required a return to be made of the business done, setting forth the profit and paying a 3% tax into the state treasury. section 2 required a report of the names of people in the firm or of those engaged in the business. a defendant, having failed to make either a return or a report, was fined \$2000 and contended on appeal that he should have been fined only \$1000. does he have a case?*

*In this scenario, the defendant contended on appeal that he should have been fined only \$1000 instead of \$2000 for failing to make either a return or a report as required by the state statute in Pennsylvania.*

*The interpretation of the penalty provision hinges on the language of the statute, particularly Section 3, which states that a banker or broker who neglects or refuses to make the required return and report shall be subject to a penalty of \$1000 for each neglect or refusal.*

*Given the language of Section 3, which specifies a penalty of \$1000 for each neglect or refusal, and considering that the defendant failed to make both a return and a report, it is reasonable to conclude that the defendant should be subject to two penalties of \$1000 each, totaling \$2000.*

*Therefore, the defendant's argument that he should only be fined \$1000 does not appear to have a strong legal basis based on the language of the statute. The appellate court would likely affirm the imposition of a \$2000 fine, as it aligns with the clear language and intent of the penalty provision in Section 3 of the state statute.*

The Pennsylvania Supreme Court rejected the defendant's contention, in an analysis that is eerily prophesying ChatGPT's answer (*ibid.*, p. 213):

It is clear that the offences being different in kind, independent in act, and distinct in time, each is liable to punishment. When the legislature therefore said, every such neglect or refusal should be the subject of a penalty, it becomes very plain it did not refer to a joint neglect of several acts impossible of simultaneous performance.

### 3.11. CC #34

CC #34, called "Prefatory-Materials Canon," allows a preamble, purpose clause, or recital as an acceptable indication of intent. The following case shows how a preamble (prologue) can be of genuine assistance (ibid., pp. 218–219):

A department of energy regulation gave oil producers price allowances based on (among other things) the total number of "wells that produced crude oil." a bunch of property owners had a particular oil field with two types of wells: injection wells, which forced substances into the subsurface to increase pressure within the oil reservoirs; and recovery wells, which brought crude oil to the surface. the owners believed that injection wells counted as "wells that produced crude oil," although the regulation's prologue, which preceded its publication in the federal register, explicitly said no. the owners maintained that the prologue should not count. are they right?

*In this scenario, the property owners believed that injection wells should be counted as "wells that produced crude oil" for the purpose of determining price allowances, despite the explicit statement in the regulation's prologue that stated otherwise.*

*The property owners' argument that the prologue should not count is unlikely to be successful. Here's why:*

*Interpretation of Regulations: Regulations are interpreted based on their text, including any preamble or prologue that provides context or clarification. While the prologue may precede the publication of the regulation in the Federal Register, it still forms part of the regulatory framework and can be relied upon for interpretation.*

*Agency Interpretation: Courts generally defer to an agency's interpretation of its own regulations unless it is arbitrary, capricious, or contrary to law. If the Department of Energy (DOE) explicitly stated in the prologue that injection wells do not count as "wells that produced crude oil," it is likely that courts would defer to this interpretation. (rest omitted)*

ChatGPT essentially elaborates above on what the court underscored in its rejection of the property owners' contention (ibid., p. 219): "It is well settled that the preamble to a regulation should be considered in construing the regulation and determining the meaning of the regulation."

### 3.12. CC #35

CC #35, called "Title-and-Headings Canon," states that the title and headings are acceptable cues for interpreting meaning. An illustrative criminal-act case follows (ibid., p. 222):

The mississippi supreme court was confronted with whether a certain criminal act—concealing or harboring a prisoner or convict who has escaped—was punishable as a felony or only as a misdemeanor. the body of the statute did not make this point clear.

yet the title of the statute began: "an act to make it a felony for any person." how would the court decide?

*In this scenario, the Mississippi Supreme Court would likely consider several factors to determine whether the criminal act of concealing or harboring a prisoner or convict who has escaped should be punishable as a felony or only as a misdemeanor, despite the lack of clarity within the body of the statute.*

*Title of the Statute: The title of the statute, which begins with "an act to make it a felony for any person," suggests an intent by the legislature to classify the offense as a felony. While the title alone is not dispositive, it can provide insight into the legislative intent behind the statute. (rest omitted)*

This is another fine answer by ChatGPT. Likewise, the court held that the statute was undoubtedly a felony statute and observed (*ibid.*, p. 222): "If there is any uncertainty in the body of an act, the title may be resorted to for the purpose of ascertaining legislative intent and of relieving the ambiguity."

A trickier case was as follows (*ibid.*, pp. 223–224):

A Texas venue statute used a mandatory word, shall, to establish where a certain type of lawsuit could be brought: "suits against railroad corporations for damages arising from personal injuries shall be brought either in the county in which the injury occurred or in the county in which the plaintiff resided at the time of the injury." but in 1983, when the venue statutes were codified, a new heading was put on this railroad provision: "permissive venue." Brad was injured when getting off a train in Amarillo (Potter County). though he lived a few miles away in Randall County, he filed suit in Angleton (Brazoria County), more than 500 miles from Amarillo or Randall County. the railroad company filed a motion to transfer venue to the locale of the accident: Potter County. should the trial court accept the motion?

*In this scenario, the trial court should likely accept the railroad company's motion to transfer venue to Potter County, where the accident occurred.*

*Here's why:*

*Mandatory Language in the Statute: The Texas venue statute uses the word "shall," indicating a mandatory requirement for suits against railroad corporations for damages arising from personal injuries to be brought either in the county where the injury occurred or in the county where the plaintiff resided at the time of the injury. This suggests that the statute intends to limit venue options to these specified counties.*

*Heading Change in 1983: While the heading of the provision was changed to "permissive venue" in 1983 when the venue statutes were codified, this change in heading does not alter the substantive requirements of the statute itself. The language of the statute, including the use of "shall," remains binding and carries legal weight. (rest omitted)*

While ChatGPT delved into the heart of matter and came up with the right answer (*i.e.*, accept the transfer), the trial court denied the transfer, and in a more perplexing move, the Houston Court of Appeals affirmed!

### 3.13. CC #36

CC #36, called "Interpretive-Direction Canon," advises that sections of a statute containing definitions and interpretation clauses should be closely adhered to. A case in which the canon was applied with vigor is the following (ibid, pp. 227–228):

The residential drug-related evictions act of the district of columbia provided for the eviction of public-housing tenants when "the court has determined that the rental unit is a drug haven" because, among other things, "a tenant or occupant of the rental unit has been charged with a violation of drug laws due to activities that occurred within the housing accommodation that contains the rental unit." the act defined occupant as "a person authorized by the tenant or housing provider to be on the premises of the rental unit." in a properly authorized search of raesheeda's apartment (while she was not there), the police found five men (presumably acquaintances) with handguns, rifles, crack cocaine, pcp, marijuana, and drug paraphernalia. the men were arrested and charged with violating the drug laws. a jury held that because raesheeda's apartment had been used as a drug haven, she could be evicted. on appeal, she argued that the term occupant in the statute must be defined in light of landlord–tenant law as one who lives in a housing unit, and that because visitors or guests are not "occupants," the perpetrators' actions could not establish the existence of a drug haven. after all, she contended, application of the act's definition would result in a rental unit's being designated a drug haven if a repairman were found in possession of drugs inside it. the government argued that the trial court had properly instructed the jury that an "occupant" was what the definition says: anyone authorized by the tenant to be on the premises of the rental unit. should the court agree? *In the case of Raesheeda's appeal regarding her eviction under the Residential Drug-Related Evictions Act of the District of Columbia, the court would need to interpret the term "occupant" as defined in the statute.*

*Here's how the court might analyze the argument:*

*Statutory Interpretation: The court will start by examining the language of the statute. The Act defines "occupant" as "a person authorized by the tenant or housing provider to be on the premises of the rental unit." This definition is broad and does not explicitly exclude visitors or guests from being considered occupants.*

...

*Reasonableness Test: The court may apply a reasonableness test to the interpretation of the term "occupant." While Raesheeda argues that visitors or guests should not be considered occupants, the broad language of the statute and the legislative intent suggest otherwise. It may be deemed reasonable to interpret "occupant" as including anyone authorized to be on the premises, regardless of their status as a permanent resident.*

...

*Based on these factors, the court may agree with the government's argument that the trial court had properly instructed the jury regarding the definition of "occupant" as stated in the statute. The court is likely to uphold the eviction based on the broad*

*interpretation of "occupant" and the evidence of drug-related activities occurring within Raesheeda's rental unit. (portions omitted)*

Essentially pursuing the contours of ChatGPT's convincing argument, the court agreed and ruled that the settled meaning of a word ("occupant") must succumb to the statutory definition.

### 3.14. CC #37

CC #37, called "Absurdity Doctrine," advises that a provision be dismissed or corrected by the court in case of an evident textual error, especially if not doing so would lead to a decision no sensible person could endorse. A foolish outcome was avoided with little effort by the court in the case below (ibid., p. 236):

Derek was convicted of driving with a suspended license. at the time of his arrest, a texas statute provided an absolute defense to all "chapter 601 offenses" if the accused "produced in court a motor vehicle liability policy that was valid at the time the offense is alleged to have occurred." "chapter 601 offenses," as they are termed in texas, included not just driving without insurance but also driving with a suspended license. derek urged the courts to apply this exemption as written, so that every time he was haled into court for driving with a suspended license, he could flash his insurance card and walk away with impunity. this interpretation would have encouraged scofflaws to drive long after their licenses had been suspended for any reason, simply on condition that they maintain insurance. what should the court rule?

*In this case, the court should rule against Derek's interpretation and apply the statute in a manner consistent with legislative intent and public policy objectives.*

*Here's the reasoning:*

...

*Absurd Result: Derek's interpretation would lead to an absurd outcome, as it would essentially nullify the penalty for driving with a suspended license. This outcome goes against the fundamental principles of justice and would undermine the effectiveness of laws aimed at promoting safe and responsible driving behavior.*

*Interpretive Principles: Courts generally interpret statutes to avoid absurd results and uphold the overarching objectives of the law. In this case, the court should interpret the statute in a manner that aligns with these principles, which may involve construing the term "chapter 601 offenses" more narrowly to exclude driving with a suspended license. Therefore, the court should rule against Derek's interpretation and uphold the penalty for driving with a suspended license, irrespective of the possession of valid motor vehicle liability insurance. (portions omitted)*

Not surprisingly, and as persuasively contended by ChatGPT, the court applied the absurdity rule and determined that Derek had no insurance-card defense to his charge. (Aside: Two years later, the Texas legislature amended the statute. It is now applicable only in cases where a driver fails to provide proof of insurance.)

## 4. Conclusion and future work

Our trials with ChatGPT have been very satisfactory. In its present form ChatGPT is able to give sound, even sage, advice on nontrivial (and should we add, actual) legal problems. Thus, it should be a go-to tool for any student or professional in the domain of law [24]. Notwithstanding, more research remains to be done.

First, we need to try running additional (imaginary) cases, thus fleshing out all the canons in CC. This way we may look at fresh yet analogous scenarios, differing from the ones we used in a variety of ways (nuances), to see whether ChatGPT remains dependable and consistent with its legal advice. (This is certainly our expectation.)

Second, we need to take a more intensive stance re Scalia and Garner's own (frequently painstaking) analyses regarding the canons and the example cases. Our work is still frail in that we have usually tested one or two examples for each canon and did not elaborate. Still, we are pleased to state that so far we have not encountered any significant departure or diversion from the assessments or conclusions of Scalia and Garner.

Third, we have to further study prompting as an art and science. It should be noticed that our prompts were unembellished; they were not tailored in any way. They were not sneakily steering ChatGPT to a particular (specific) path either. In fact, that this simple prompting approach had worked so well was somewhat surprising for us. Does this mean that the newfangled discipline of "prompt engineering" [25] may slowly become redundant and fade away in the upcoming years, as ChatGPT and its competitors become more and more resourceful and trustworthy? We think so.

### **Disclaimer**

We would like to express our neutrality with respect to the celebrated debates, past and present, re textualism (originalism)—the long-prevailing theory of legal interpretation championed by Justice Scalia. Needless to say, textualism is also strictly adhered to in [22]. Maybe our attitude is best summarized by the following excerpt [26]:

Textualism is a method of statutory interpretation that asserts that a statute should be interpreted according to its plain meaning and not according to the intent of the legislature, the statutory purpose, or the legislative history.

Justice Antonin Scalia was considered one of the pioneers of originalism and textualism. Even if the textualist approach is commonly regarded as a conservative approach to the law, the rigor of its application can lead to progressive outcomes.

### **Acknowledgments**

Every attempt was made to transmit as little text as possible from [22] to ChatGPT in light of fair use doctrine. In any case, the inputs to ChatGPT are not exact copies from the book; they hopefully do not infringe copyright.

The author's work is supported by Microsoft's "AI and the New Future of Work" program. The opinions expressed in this paper are the author's own and do not reflect the view of the Microsoft Corp.



For complimentary use of ChatGPT (the free plan with access to GPT-3.5), the author is indebted to OpenAI. The inclusion of ChatGPT inputs and outputs ("contents") in this paper does not imply endorsement of, or agreement with, the contents by the OpenAI Company.

Frank Fagan, guest editor of this special issue, is gratefully acknowledged for his kind support and granting of extra time for submission of this contribution.

### Conflicts of interests

The author declares no conflicts of interests.

### References

- [1] y Arcas BA. Do large language models understand us?. *Daedalus* 2022. 151(2):183–197.
- [2] Manning CD. Human language understanding & reasoning. *Daedalus*. 2022. 151(2):127–138.
- [3] Ni J, Young T, Pandelea V, Xue F, Cambria E. Recent advances in deep learning based dialogue systems: A systematic survey. *Artif. Intell. Rev.* 2023. 56(4):3055–3155.
- [4] Wu T, He S, Liu J, Sun S, Liu K, *et al.* A brief overview of ChatGPT: The history, status quo and potential future development. *IEEE/CAA J. Autom. Sin.* 2023. 10(5):1122–1136.
- [5] Wolfram S. What Is ChatGPT Doing ... and Why Does It Work? 2023. Available: <https://writings.stephenwolfram.com/2023/02/what-is-chatgpt-doing-and-why-does-it-work/> (accessed on 12 June 2024).
- [6] Oltz TP. ChatGPT, professor of law. 2023, Issue 1. Available: <https://illinoisjltip.com/journal-archive/volume/volume-2023/article/chatgpt-professor-of-law> (accessed on 31 July 2024).
- [7] Choi JH, Hickman KE, Monahan A, Schwarcz DB. ChatGPT Goes to Law School. 2023. Available: <https://ssrn.com/abstract=4335905> (accessed on 4 July 2024).
- [8] Bommarito MJ, Katz DM. GPT Takes the Bar Exam. 2022. Available: <https://ssrn.com/abstract=4314839> (accessed on 4 June 2024).
- [9] Katz DM, Bommarito MJ, Gao S, Arredondo P. GPT-4 Passes the Bar Exam. 2023. Available: <https://ssrn.com/abstract=4389233> (accessed on 12 June 2024).
- [10] Schwarcz DB, Choi JH. AI Tools for Lawyers: A Practical Guide. 2023. Available: <https://ssrn.com/abstract=4404017> (accessed on 12 June 2024).
- [11] Thomson Reuters Institute. ChatGPT & Generative AI within Law Firms, Thomson Reuters. 2023. Available: <https://www.thomsonreuters.com/en-us/posts/wp-content/uploads/sites/20/2023/05/ChatGPT-Generative-AI-in-Corporate-Law-Departments-2023.pdf> (accessed on 12 June 2024).
- [12] Cochran P. *Common Sense and Legal Judgment: Community Knowledge, Political Power, and Rhetorical Practice*. Montreal: McGill-Queen's Press, 2017.
- [13] Brachman R, Levesque H. Giving AI Some Common Sense. 2022. Available: <https://www.faz.net/aktuell/wirtschaft/digitec/giving-ai-some-common-sense-18197383.html> (accessed on 4 June 2024).
- [14] Richardson C, Heck L. Commonsense Reasoning for Conversational AI: A Survey of

- the State of the Art. In *Conference Proceedings of The Thirty-Seventh AAAI Conference on Artificial Intelligence, Workshop on Knowledge Augmented Methods for Natural Language Processing*. Washington, D.C. February 7–14, 2023.
- [15] Akman V, ten Hagen PJW. The power of physical representations. *AI Mag*. 1989. 10(3), 49–65.
- [16] Scalia A, Garner BA. *Making your case: the art of persuading judges*. 2008. St. Paul, MN: Thomson/West.
- [17] Akman V, Surav M. Steps toward formalizing context. *AI Mag*. 1996. 17(3):55–72.
- [18] Akman V. Rethinking context as a social construct. *J. Pragmat*. 2000. 32(6):743–759.
- [19] Akman V, Bazzanella C. The complexity of context: guest editors' introduction. *J. Pragmat*. 2003, 35(3), 321–329.
- [20] Edmonds B, Akman V. Editorial: Context in Context. *Found. Sci*. 2002. 7(3), 233–238.
- [21] Fetzer A, Akman V. Contexts of social action: Guest editors' introduction. *Lang. Commun*. 2002. 22(4):391–402.
- [22] Scalia A, Garner BA. *Reading law: the interpretation of legal texts*. 2012. St. Paul, MN: Thomson West.
- [23] Firth JR. A Synopsis of Linguistic Theory, 1930-1955. In *Studies in linguistic analysis*. Special volume of the Philological Society. 1957, pp. 1–31. Available: <https://cs.brown.edu/courses/csci2952d/readings/lecture1-firth.pdf> (accessed on 12 June 2024).
- [24] Perlman A. The Implications of ChatGPT for Legal Services and Society. 2022. Available: <https://ssrn.com/abstract=4294197> (accessed on 12 June 2024).
- [25] Chen B, Zhang Z, Langrené N, Zhu S. Unleashing the Potential of Prompt Engineering in Large Language Models: A Comprehensive Review. 2023. Available: <https://arxiv.org/pdf/2310.14735.pdf> (accessed on 4 June 2024).
- [26] Wex—Free Legal Dictionary and Encyclopedia (n.d.). Textualism. Legal Information Institute, Cornell Law School, Ithaca, N.Y. Available: <https://www.law.cornell.edu/wex/textualism> (accessed on 12 June 2024).