

LEGAL CORPUS LINGUISTICS: *GAMBLING TO GAMING* LANGUAGE POWERS AND PROBABILITIES

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INTRODUCTION

Lawyers use words like mechanics use tools. The usefulness of words, to lawyers, lies largely in their meanings — both explicit and implicit, rational and emotional. Lawyers spend a great deal of time seeking to anticipate and eliminate ambiguity and uncertainty in what they say and write. Ambiguous words, like a broken wrench, mean more difficult work and less rewarding results.

This note uses concepts derived from the emerging field of corpus linguistics to quantify and analyze the differences between the legal and American English meanings of the term *gaming*. These differences will be of interest to lawyers practicing in the field of gaming. Perhaps more significant to lawyers are the interpretive and demonstrative possibilities presented by tools borrowed from the field of corpus linguistics, which can then be applied to the practice of law. These tools sharpen an understanding of meaning, identify and clarify the extent of ambiguities, and suggest useful interpretive and persuasive strategies.

This note examines language patterns of *gambling* and *gaming* over a 237-year timeline, spanning 1780 to 2017,² based on queries from four different

¹ I am indebted to Major Ary L. Dale, Prof. Rachel A. Hinman de Lloret, and Judge Richard A. Lloret for their invaluable support and advice. I am deeply grateful to the Gaming Law Journal staff and the William S. Boyd School of Law family for making this note a reality. Mistakes are my own.

² The timeline starts at the earliest year that one of the four jurisdictions began operating under the purview of the federal government and continues to August 2017. The United States Court of Appeals for the Third Circuit was established in 1801. *Federal Judiciary Center*, <https://www.fjc.gov/history/administration/federal-judicial-circuits-third-circuit> (last visited Aug. 1, 2017). Nevada became a state in 1864. *Nevada Statehood*, <http://www.onlinenevada.org/articles/nevada-statehood> (last visited Aug. 5, 2017). New Jersey became a state in 1787. *Short History of New Jersey*, NJ.GOV, http://www.nj.gov/nj/about/history/short_history.html (last visited Oct. 8, 2017). While there were federal courts operating in several of the present-day states that comprise the Third Circuit, the Third and Ninth were part of

electronic databases.³ Supporting documentation contained within Datasheet I⁴ allows the investigator to efficiently (within a single file) test each gambling and gaming hypothesis. With statistical functions and Microsoft Excel software, this paper examines *gambling* and *gaming* term ambiguity. *Gambling* and *gaming* are profitable enterprises worth investigating, whether in the legal field,⁵ business arena,⁶ or mobile games market.⁷ Discovering *gaming* language patterns may reveal the language behavior of this consumer-based, billion-dollar industry.⁸ Part I of this note supplies a short introduction to concepts from corpus linguistics. Part II contains the analysis of legal and colloquial English corpora concerning *gaming* and *gambling*. Part III suggests some of the legal possibilities of tools derived from corpus linguistics.

the thirteen federal circuits designated in 1891. See *United States Court of Appeals for the Third Circuit*, BALLOTPEDIA, https://ballotpedia.org/United_States_Court_of_Appeals_for_the_Third_Circuit (last visited Oct. 8, 2017).

³ These four databases are Corpus of Historical American English (COHA), Corpus of Contemporary American English (COCA), LexisNexis and WestLaw. Here, COHA, COCA, LexisNexis and Westlaw were selected because each corpora or database contains concordance functions. Specifically, an investigator is not required to utilize programming language to gain frequencies in a user-friendly format. Each corpora selected already contains natural language or Boolean search functions that deliver search results in a simple, structured format.

⁴ See Datasheet I, https://docs.google.com/spreadsheets/d/e/2PACX-1vQrBoFuNqXiuJJ3kL3rAg_7V8UWrAPqgf54gNAJJOofz1eOsjdOON7KnnAMY_PeirZdO5IUqv7A8DZd/pubhtml (last visited Mar. 20, 2018).

⁵ For example, gambling had a \$240 billion economic impact and employed 1.7 million people in 2013. Kimberly Pierceall, *The U.S. Gambling Industry is Worth \$240 Billion*, BUS. INSIDER (Sep. 30, 2014, 5:55 PM), <http://www.businessinsider.com/the-us-gambling-industry-is-worth-240-billion-2014-9> [hereinafter Pierceall, *\$240 Billion*].

⁶ For example, gaming industry generated \$240 billion economic impact, including \$38 billion in taxes paid by the gaming sector in 2013 to local/state/federal agencies. Interestingly, the same data and economic impact referenced in an article about *gaming* is also in article about *gambling*. This could serve as an example in use of term ambiguity or may simply be redundant information misappropriated from one author by another. Elizabeth Barber, *Report: U.S. Gaming Industry Generated \$240 Billion Economic Impact in 2013*, TIME (Sep. 30, 2014), <http://time.com/3451338/report-u-s-gaming-industry-generated-240-billion-economic-impact-in-2013> [hereinafter Barber, *Economic Impact*]; Pierceall, *\$240 Billion*, *supra* note 5.

⁷ For example, \$41 billion in mobile game revenue was generated worldwide in 2016. Dean Takahashi, *Worldwide Game Industry Hits \$91 Billion in Revenues in 2016, with Mobile the Clear Leader*, VENTUREBEAT.COM (Dec. 21, 2016, 7:00 AM), <https://venturebeat.com/2016/12/21/worldwide-game-industry-hits-91-billion-in-revenues-in-2016-with-mobile-the-clear-leader/>.

⁸ See *id.*; Barber, *Economic Impact*, *supra* note 6; Pierceall, *\$240 Billion*, *supra* note 5.

I. WHAT IS CORPUS LINGUISTICS AND HOW DOES IT BENEFIT LAWYERS?

A. *Legal Language is Power*

Language, whether written or spoken, is a powerful tool in the legal profession.⁹ Legal advocates with strong communication skills can be powerful and influential on a national scale — beyond the scope of advocacy.¹⁰ Awareness of how, where, when, and why changes in language effect the practice of law can aid an advocate or litigant in accomplishing their goals,¹¹ whether they be regulatory, litigious, or commercial.

While the field of law is as old as civilization, the corpus linguistic field¹² is quite new.¹³ In particular, legal corpus linguistics is an emergent academic method¹⁴ and a new type of language theory.¹⁵ Corpus linguistics “discover[s]

⁹ Elizabeth Mertz, *Legal Language: Pragmatics, Poetics, and Social Power*, 23 ANN. REV. ANTHROPOL. 435, 447-448 (1994) [hereinafter Mertz, *Social Power*].

¹⁰ The majority of presidential administrations in the U.S. have been headed by lawyers — twenty-five of forty-five, or 55%. Dan Slater, *Barack Obama: The U.S.'s 44th President (and 25th Lawyer-President!)*, WALL ST. J. L. BLOG (Nov. 5, 2008, 9:16 AM), <http://blogs.wsj.com/law/2008/11/05/barack-obama-the-uss-44th-president-and-24th-lawyer-president/>; Norman Gross, *Presidential Bar Leaders: Fascinating Facts About America's Lawyer-Presidents*, 34 B. LEADER 20-22 (2009-2010), http://www.americanbar.org/publications/bar_leader/2009_10/january_february/presidential.html. The inauguration of President Donald Trump raises the number of presidents from forty-four to forty-five. See Matt Flegenheimer & Michael Barbaro, *Donald Trump is Elected President in Stunning Repudiation of the Establishment*, N.Y. TIMES (Nov. 9, 2016), <https://www.nytimes.com/2016/11/09/us/politics/hillary-clinton-donald-trump-president.html>.

¹¹ Jonathan Yovel, *Language and Power in a Place of Contingencies: Law and the Polyphony of Lay Argumentation*, 32 YALE L. SCH. FAC. SCHOLARSHIP SERIES 1, 4 (Apr. 1, 2010) [hereinafter Yovel, *Language and Power*] (discussing how litigants appropriate law by using relational language).

¹² Corpus linguistics is the study of language as expressed in a corpus or a computerized collection of texts comprised of naturally occurring language. See Friederike Müller & Birgit Waibel, *Corpus Linguistics — An Introduction*, U. OF FREIBURG ENGLISCHES SEMINAR, http://www.anglistik.uni-freiburg.de/seminar/abteilungen/sprachwissenschaft/ls_mair/corpus-linguistics/corpus-linguistics-an-introduction#basics (last visited Oct. 5, 2017) (“A corpus is thus a systematic, computerized [sic] collection of authentic language used for linguistic analyses.”); see also Stefan Th. Gries, *What is Corpus Linguistics*, 3 LANGUAGE AND LINGUISTICS COMPASS 1-17 (2009), http://www.linguistics.ucsb.edu/faculty/stgries/research/2009_STG_CorpLing_LangLingCompass.pdf (discusses central assumptions, notions and methods compared to traditional linguistics study).

¹³ Corpus linguistics is a field dating from 1950 to present day. Tony McEnery & Andrew Hardie, Abstract and Keywords, *The History of Corpus Linguistics*, THE OXFORD HANDBOOK OF THE HIST. OF LINGUISTICS (2013), <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199585847.001.0001/oxfordhb-9780199585847-e-34>.

¹⁴ It is emergent because the published suggested application of corpus linguistics has only been within the last seven years; the first known law and corpus linguistics article was published in 2005 but the first suggested application of corpus

patterns of authentic language use through analysis of actual usage.”¹⁶ By using corpus linguistic analysis, a lawyer studying the results of written or spoken text may discover that meaning is affirmed by the use-in-context of a word or phrase. The meaning of a word or phrase could also be based on a referral to a standard or official definition. With this kind of empirical data, lawyers can examine what language patterns reveal about language behavior.¹⁷ For example, the meaning of the term *gaming* depends on the context in which it is used.¹⁸ As opposed to a static definition, context provides information about *how* and *when* a word is used.¹⁹ Before examining how and when *gaming* should be used for the greatest intended impact on an audience, there must be an initial investigation into the use of *gaming* language. Corpus linguistics is a helpful way to determine such a pattern.

*B. Raw Frequencies and Context Suggest Intended Meaning*²⁰

The corpus linguistics conception of meaning-making in language, as mediated by natural language practices, is helpful in the legal profession because objective data replaces intuition or guess work.²¹ Corpus analyses are

linguistics in advocacy was published in 2010. See Lawrence Solan, *The New Textualists' New Text*, 38 LOY. L. REV. 2027, 2059 (2005); Stephen Mouritsen, *The Dictionary is Not a Fortress: Definitional Fallacies and a Corpus-Based Approach to Plain Meaning*, 2010 BYU L. REV. 5 1915, 1919, 1955 (2010).

¹⁵ Ben Zimmer, *The Corpus in the Court: 'Like Lexis on Steroids,'* ATLANTIC (Mar. 4, 2011), <https://www.theatlantic.com/national/archive/2011/03/the-corpus-in-the-court-like-lexis-on-steroids/72054/> [hereinafter Zimmer, *Corpus in the Court*] (stating that a corpus is an enormous collection of texts and the plural form is corpora).

¹⁶ Daniel Krieger, *Corpus Linguistics: What It Is and How It Can Be Applied to Teaching*, 9 INTERNET TESL J. 3 (Mar. 2003) [hereinafter Krieger, *Corpus*].

¹⁷ See generally Zimmer, *Corpus in the Court*, *supra* note 15.

¹⁸ *Gaming* has at least three different meanings, depending on what register or field and what it describes. See *Gaming*, MERRIAM-WEBSTER.COM, <https://www.merriam-webster.com/dictionary/gaming> (last visited Oct. 5, 2017).

¹⁹ Adam Liptak, *Supreme Court Rules on AT&T Case*, N.Y. TIMES, (Mar. 1, 2011) <http://www.nytimes.com/2011/03/02/us/02scotus.html> (“Considering dictionary definitions for and the common usage of the word ‘personal’ standing alone, Chief Justice Roberts said the word should also be considered in the context of the phrase.”).

²⁰ *Gaming*, LAWDICTIONARY.COM, <http://thelawdictionary.org/gaming/> (last visited Oct. 3, 2017) (“In general, the words ‘gaming’ and ‘gambling,’ in statutes, are similar in meaning, and either one comprehends the idea that, by a bet, by chance, by some exercise of skill, or by the transpiring of some event unknown until it occurs, something of value is, as the conclusion of premises agreed, to be transferred from a loser to a winner, *without which latter element there is no gaming or gambling.*”) (emphasis added).

²¹ See Justice Thomas Lee & Stephen Mouritsen, *The Path Forward for Law and Corpus Linguistic*, WASH. POST, (Aug. 11, 2017), https://www.washingtonpost.com/news/volokh-conspiracy/wp/2017/08/11/the-path-forward-for-law-and-corpus-linguistics/?utm_term=.0bed1d060669 [hereinafter Lee & Mouritsen, *The*

useful because identifying how often (frequency) and where (context, term-in-use) a word occurs allows a lawyer to see what scenario is likely to result in a particular meaning. Armed with frequency and contextual information discovered through corpus linguistics, lawyers can access subliminal language patterns,²² and intentionally craft the language best suited to communicate a particular message with their intended audience.²³

Like a multi-purpose pocket knife, various devices are used in the corpus linguistics field, which have their analogs in legal canons of construction. In the field of law, canons of construction are typically used to clarify ambiguous terms. Here, *ejusdem generis* is the screwdriver, cycling through a list toward the goal of intended use.²⁴ *Noscitur a sociis* is the stud finder, searching for the meaning based on the context created by surrounding words.²⁵ To consider societal and other influences shaping the meaning of different terms, corpus linguistics can provide an additional, multi-purpose method to legal canons and their overlapping concepts.²⁶

C. Are Judges and Practitioners Using Corpus Linguistics?

Courts across the country have used corpus linguistics when applying two-dimensional statutory language to three-dimensional cases. In 2011, Justice Lee of the Supreme Court of Utah used corpus linguistics to reason through an interpretation challenge on an adoption case.²⁷ Although the Utah Supreme Court did not recognize corpus linguistics as an interpretive tool on par with

Path Forward] (suggesting that lawyers import corpus linguistics when addressing the question of ordinary meaning).

²² See Lee & Mouritsen, *The Path Forward*, *supra* note 21; Krieger, *Corpus*, *supra* note 16.

²³ See Krieger, *Corpus*, *supra* note 16 (“Corpus linguistics provides a more objective view of language than that of introspection, intuition and anecdotes.”). Also, corpus linguistics may provide a means of communication that is less subject to conscious manipulation. See e.g., Markus Wolf et al., *Linguistic Analyses of Natural Written Language: Unobtrusive Assessment of Cognitive Style in Eating Disorders*, 40 INT’L J. EATING DISORDERS 711, 712. (“[D]esire to present oneself in a favorable light. . .and offer another approach to nonreactive assessment. . .a person might be capable of consciously influencing the content. . .[they] will not be able to change the manner in which it is expressed. . .the language and words that are used.”).

²⁴ A legal canon that limits the meaning of a word in a list by the sense of other words in a list. *Ejusdem Generis*, BLACK’S LAW DICTIONARY (10th ed. 2014).

²⁵ A legal canon where one term may be determined by “the words immediately surrounding it.” *Noscitur a sociis*, BLACK’S LAW DICTIONARY (10th ed. 2014).

²⁶ See Eric G. Pearson, *Ditch the Canons of Construction*, 88 WIS. LAW. 7 (Jul. 2015), <http://www.wisbar.org/NewsPublications/WisconsinLawyer/Pages/Article.aspx?Volume=88&Issue=7&ArticleID=24231>; Daniel Ortner, *The Merciful Corpus: The Rule of Lenity, Ambiguity and Corpus Linguistics*, 25 B.U. PUB. INT. L. J. 101, 120-28 (2016) (providing an example of attempt to quantify degree of existent lenity ambiguity by corpus linguistics analytic methods).

²⁷ *In re Adoption of Baby E.Z.*, 266 P.3d 702, 704, 707, 725-29 (Utah 2011).

traditional legal canons,²⁸ in a 2015 case, Justice Lee's concurrence adamantly defended the use of corpus linguistics as a tool that could help inform the court's interpretation and understanding of statutes.²⁹ By 2016, the Supreme Court of Michigan used the Corpus of Contemporary American English (hereinafter "COCA") to identify the intended meaning and appropriate application of the term "information," and ultimately reversed a Court of Appeals' conclusion due to error.³⁰ Corpus linguistic analyses may therefore expand the variety of interpretive tools available to lawyers and judges beyond the scope of the canons or dictionary use.³¹

Legal interpretive theory benefits from an innovative way to "analyze ordinary meaning through a method that is quantifiable and verifiable."³² As recently as 2016, the first law and linguistics symposium took place at Brigham Young University Law School (BYU Law).³³ The 2017 Law and Corpus Linguistics Symposium hosted at BYU Law created an environment where legal and linguistics scholars explored incorporating linguistic study within legal practice.³⁴ Therefore, legal corpus linguistics continues to gain momentum by creating a space where legal and corpus linguistics practitioners can discuss, examine, and explore the application of a new approach to understanding communicative methods.³⁵

²⁸ State v. Rasabout, 356 P.3d 1258, 1264-66, 1269-73 (Utah 2015).

²⁹ *Statutory Interpretation: State v. Rasabout, Utah Supreme Court Debates Judicial Use of Corpus Linguistics*, 129 HARV. L. REV. 1468, 1468, 1470-72, 1475 (Mar. 10, 2016) [hereinafter *Judicial Use*]. See Rasabout, 356 P.3d at 1264-65.

³⁰ People v. Harris, 499 Mich. 332, 345-349, 358, 885 N.W.2d 832, 838-41, 845 (Mich. 2016) (discussing that empirical data from a corpus demonstrated the opposite position to dissent's claim about ordinary use of term interpretation).

³¹ Legal scholars are using corpus linguistics to determine original intent through language pattern use during the foundation the United States. James C. Phillips, Daniel M. Ortner, & Thomas R. Lee, *Corpus Linguistics & Original Public Meaning: A New Tool to Make Originalism More Empirical*, 126 YALE L. J. F. 20, 23, 26 (May 16, 2016). See *Judicial Use*, supra note 29, at 1471-73; see generally Yovel, *Language and Power*, supra note 11, at 1.

³² Harris, 499 Mich. at 347 (quoting Stephen C. Mouritsen, *Hard Cases and Hard Data: Assessing Corpus Linguistics as an Empirical Path to Plain Meaning*, 13 COLUM. SCI. & TECH. L. REV. 156, 202 (2012)).

³³ Conference, *Law & Corpus Linguistics Conference*, BYU L. SCH., <http://lawcorpus.byu.edu/> (last visited Dec. 9, 2017).

³⁴ *Id.*

³⁵ Conference, *Corpus Linguistics Conference*, BYU L. SCH., <http://www.law2.byu.edu/news2/corpus-linguistics-conference> (last visited Nov. 7, 2016); Conference, *Overview: Discovering Patterns through Legal Corpus Linguistics*, THE FABRIC OF LAW AND LANGUAGE CONFERENCE 2016, <https://cal2.eu/the-fabric-of-law-and-language-overview> (last visited Oct. 2, 2017). See Lee & Mouritsen, *The Path Forward*, supra note 21 (suggesting that lawyers import corpus linguistics when addressing the question of ordinary meaning); see also Zimmer, *Corpus in the Court*, supra note 15.

II. CORPUS LINGUISTICS ANALYSIS OF GAMING AND GAMBLING

With word frequencies, a lawyer can examine whether or not utilized terms of art like *gaming* are due to random chance. Moreover, with context, a lawyer can decide which meaning of the word *gaming* most appropriately corresponds to the intended audience. In order to illustrate, this note's analysis reviewed several billion words, compared written and spoken corpora, and charted natural language and legal language trends over a 237-year timeline. By employing statistical probability instead of faulty intuition or local assumptions, lawyers can choose between the use of *gaming* or *gambling* to effectively convey the intended message.³⁶

A. *Know Your Audience — Appreciate the Differences*

Language patterns yield insight and clarity³⁷ to legal practitioners and business professionals who seek to know their audience. Applications of language pattern results include aiding with statutory interpretation,³⁸ improving purposeful and effective communication during litigation,³⁹ and

³⁶ The results of analyzing *gaming* are valuable because language behavior provides insight on the most appropriate meaning. Krieger, *Corpus*, *supra* note 16 (citing Jane Willis, *Concordances in the Classroom Without a Computer*, in MATERIALS DEVELOPMENT IN LANGUAGE TEACHING 51 (Brian Tomlinson, ed., Cambridge, 1998)). A lawyer, like a student, may be able to determine different meanings and uses of common words, useful words and typical collocations a person might use themselves, the structure and nature of spoken and written discourse, certain language features that are more typical of some kinds of text than others. *See generally* Lawrence M. Solan & Tammy A. Gales, *Finding Ordinary Meaning in Law: The Judge, the Dictionary or the Corpus?*, BROOKLYN L. SCH. LEGAL STUD., Research Paper No. 474 (Oct. 2016).

³⁷ Clarity is achieved through addressing communication difficulties. A common difficulty associated with successful communication between two speakers exchanging information is the impact that a listener's familiarity with the subject matter has on understanding the speaker's message. *Overview on Referential Communication*, CTR. FOR ADVANCED RES. ON LANGUAGE ACQUISITION, <http://carla.umn.edu/learnerlanguage/reference.html> (last visited Oct. 2, 2017) [Hereinafter CARLA] (discussing that reference to things and people "are evaluated in terms of their communicative effectiveness" such as which entity, where the action took place, and what the entity did are used to evaluate communicative clarity). *See* GEORGE YULE, REFERENTIAL COMMUNICATION TASKS (2nd ed. 2013) (discussing that the definition of referential communication as those "communicative acts, generally spoken, in which some kind of information is exchanged between two speakers"). The effectiveness of communication is further dependent on whether the speaker's information is old or new to the listener. That is, if the speaker assumes the audience is familiar or not with the communicated material. *See* CARLA, *supra* note 37.

³⁸ Claimed statutory ambiguity, for example, may instead be an issue of reference or vagueness. Sanford Schane, *Ambiguity and Misunderstanding in the Law*, 25 T. JEFFERSON L. REV. 167 (2002).

³⁹ An example of employing unambiguous (or contrarily vague) language would be on direct examination. *See* FED. R. EVID. 611(c); *see also* Anar Sarsenova & Diana

adopting a successful commercial marketing strategy.⁴⁰ Effective communication is a means of relating to an audience on a personal level while also imparting ideas and theories or resolving a conflict,⁴¹ and is therefore a tool that any lawyer can put to use in practice.

Particularly in the legal profession, the diverse meaning imparted with *gaming* can create an ambiguity that can cause serious problems.⁴² For instance, a person who uses the word *gaming* may intend for the audience to understand the term as either a legal, business, or video game term of art.⁴³ Thus, writers who seek to convey a particular word's meaning should be aware of how the meaning can change with the contextual differences in meaning between legal and general usage. Indeed, the ambiguity may need to be spelled out if the expected audience consists of both types of listeners, and the writer may need to adopt document-specific conventions⁴⁴ to point to a specific

Madibekova, *Misunderstanding in Language and Ambiguity in Law*, DIPLO FOUNDATION (Nov. 6, 2017) <https://www.diplomacy.edu/blog/misunderstanding-language-and-ambiguity-law> (“[W]e cannot know a word is vague, unless we know something about its use.”).

⁴⁰ Deceptive advertising can have civil penalties, even if only deemed “unfair” when the act affects commerce. Fed. Trade Comm’n, *Enforcement Policy Statement on Deceptively Formatted Advertisements*, 81 FED. REG. 74, 22596, 22599 (Apr. 18, 2016), https://www.ftc.gov/system/files/documents/public_statements/896923/151222deceptiveenforcement.pdf.

⁴¹ J. Kevin Barge, *Creating Healthy Communities Through Affirmative Conflict Communication*, 19 CONFLICT RESOL. Q. 89-90, 99 (Fall 2001) (discussing that text analytic methods quantify, among other categories, a writer’s “cognitive strategies”). Evidence of the cognitive strategy of the writer, supplied through text analytic methods, is a useful tool to assess, understand, and evaluate the impact of the communicative message expressed to an audience, as well as to the state of mind or intent of the writer. See Markus Wolf et al., *supra* note 23.

⁴² Assuming the scenario is one where clear communication is preferred over deliberate ambiguity. See Luuk Lagerwerf, *Deliberate Ambiguity in Slogans. Recognition and Appreciation*, 3 DOCUMENT DESIGN 245, 247 (2002), https://www.researchgate.net/publication/233623028_Deliberate_ambiguity_in_slogans_Recognition_and_appreciation (stating that there is a difference between deliberate ambiguity and word play).

⁴³ The meaning of *gaming* depends on the context. It can be, among other things, a term of art in the legal community, a business school simulated exercise, or a reference to video games in the gamer community. *Gaming*, BUSINESSDICTIONARY.COM, <http://www.businessdictionary.com/definition/gaming.html> (last visited Oct. 18, 2017); *Gaming*, TECHOPEDIA, <https://www.techopedia.com/definition/1913/gaming> (last visited Oct. 8, 2017). See Lauren Hall-Stigerts, *The United States of Gaming Data: A Peek into the Minds of American Games*, BIG FISH BLOG (Jan. 19, 2016), <http://www.bigfishgames.com/blog/gaming-data-a-peek-into-the-minds-of-american-gamers/> (using gaming term to refer directly to video games and utilizing “gamers” for people who play video games not gambling; references the eSports video game tournament’s clear winner and loser value transfer comparative).

⁴⁴ Techniques from second-language teaching practices may be helpful when a person transition from a non-legal background to an environment like law school. See CARLA, *supra* note 37 (citing ELAINE TARONE & GEORGE YULE, FOCUS ON

meaning and avoid serious misunderstandings.

The terms *gambling* and *gaming* are often used similarly in statutory language.⁴⁵ Both words describe social activities involving a “game,”⁴⁶ the results of which involve and determine value transfers.⁴⁷ Table 1 below illustrates the various meanings of the term *gambling*, depending on the dictionary source. Here, the *italic* words highlight similarities between the contemporary English dictionary (Merriam-Webster) and a legal dictionary (the Law Dictionary) — the latter of which derives its definitions from the second edition of Black’s Law Dictionary.

Table 1: *Gambling* - Contemporary American English and Legal Registers

<i>Gambling</i>		
Merriam-Webster Definition ⁴⁸		The Law Dictionary Definition ⁴⁹
Verb with Direct Object ⁵⁰ 1) to <i>risk</i> by gambling or wager 2) venture, hazard	To play a game in which you can <i>win or lose</i> money or possessions : to bet money or other valuables	Betting; wagering. Results in either a <i>gain or total loss</i> of wager, the money or asset put up.
Verb without Direct Object ⁵¹ 1(a) to play a game for money or property 1(b) to bet on an uncertain outcome	To <i>risk</i> losing (an amount of money) in a game or bet To <i>risk</i> losing (something valuable or	<i>Neither risk-taking</i> nor investing, nor like insurance. <i>Risk taking</i> or speculation takes on <i>substantial short-term risk</i> to <i>potentially get high gain</i> . Investing uses property or assets to potentially increase in worth,

THE LANGUAGE LEARNER: APPROACHES TO IDENTIFYING AND MEETING THE NEEDS OF SECOND LANGUAGE LEARNERS (1989)).

⁴⁵ *Gaming*, THE LAW DICTIONARY, <http://thelawdictionary.org/gaming/> (last visited Mar. 10, 2017) (quoting *Gaming*, BLACK’S LAW DICTIONARY (2nd ed. 1910)) (“The words ‘gaming’ and ‘gambling,’ in statutes, are similar in meaning, and either one comprehends the idea that, by a bet, by chance, by some exercise of skill, or by the transpiring of some event unknown until it occurs, something of value is, as the conclusion of premises agreed, to be transferred from a loser to a winner, without which latter element there is no gaming or gambling.”).

⁴⁶ *Game* and its abstractions, such as “game theory,” are themselves a fascinating study. See David K. Levine, *What is Game Theory?*, DEP’T OF ECON., UCLA, <http://levine.sscnet.ucla.edu/general/whatis.htm> (last visited Oct. 8, 2017).

⁴⁷ *Gaming*, THE LAW DICTIONARY, *supra* note 45.

⁴⁸ *Gamble*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/gambling> (last visited Oct. 8, 2017).

⁴⁹ *Gambling*, THE LAW DICTIONARY, <http://thelawdictionary.org/gambling/> (last visited Oct. 8, 2017).

⁵⁰ *Gamble*, MERRIAM-WEBSTER, *supra* note 48.

⁵¹ *Id.*

2) to stake something on a contingency, take a chance	important) in order to do or achieve something	securing long-term capital gains. Insurance can prevent financial loss but has no way to gain.
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Unlike *gambling*, *gaming* definitions are not similar across dictionaries. Here, a major difference between the contemporary and legal dictionaries is “the playing of games that simulate actual conditions (as of business or war)”⁵² or “playing of video games.”⁵³ Table 2 below illustrates the complexity of *gaming* as a three-fold ambiguous term, since its meaning varies depending on the reference or context in which it is used.⁵⁴ The *italic* words highlight similarities across the definitions, while those that are underlined showcase a dissimilar or outright separate meaning.

Table 2: *Gaming* - Contemporary American English and Legal Registers

<i>Gaming</i>	
Merriam-Webster Definition ⁵⁵	The Law Dictionary Definition ⁵⁶
1) the practice of gambling 2) (a) the playing of games that simulate actual conditions (<u>as of business or war</u>) especially for training or testing purposes, 2(b) <u>the playing of video games</u>	The act or practice of <i>playing games</i> for stakes or wagers; <i>gambling</i> ; the playing at any game of hazard. An agreement between two or more persons to play together at a <u>game of chance for a stake or wager</u> which is to become the property of the winner, and to which all contribute. <u>Gaming is an agreement between two or more to risk money</u> on a contest or chance of any kind, where <u>one must be loser and the other gainer</u> .

⁵² *Gaming*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/gaming> (last visited Oct. 8, 2017).

⁵³ *Id.*

⁵⁴ Meaning can also depend on the language register or level of formality required by the situation. See Sarah E. Eaton, *Language Register and Why It Matters (Or: Why You Can't Write an Academic Paper in Gangsta Slang)*, LEARNING, TEACHING AND LEADERSHIP, <https://drsaraheaton.wordpress.com/2012/05/22/language-register-and-why-it-matters-or-why-you-cant-write-an-academic-paper-in-gangsta-slang/> (last visited Oct. 8, 2017).

⁵⁵ *Gaming*, MERRIAM-WEBSTER, *supra* note 52.

⁵⁶ *Gaming*, THE LAW DICTIONARY, *supra* note 45.

As you can see in these tables, the word *gaming* has multiple meanings that depend on the context and audience.⁵⁷ To discover the term's intended meaning in a given text, one can begin with instances of the term used in context. Additional methods to observe and analyze term use include charting language patterns and mapping probabilities.

B. *What Does a Language Pattern Look Like?*

With a visual representation of how a term is used, lawyers can review that term's ordinary meaning in action. In this study, a charted control group and test groups illustrate the change of a word's meaning over time.⁵⁸ The control group contained dated compiled from Corpus of Historical American English (COHA)⁵⁹ and Corpus of Contemporary American English (COCA)⁶⁰ query results. The control group serves as a baseline for frequency and contextual use. Comparing and contrasting the control group to the test group's case law data can unveil possible language trends.

This study's test group represented four jurisdictions: Nevada, New Jersey, the Ninth Circuit, and the Third Circuit. New Jersey and Nevada were selected because each contain a traditional gambling metropolitan area,⁶¹ while written opinions from the Ninth and Third Circuits expand the sample group and

⁵⁷ See *infra* note 73.

⁵⁸ The timeline starts at the earliest year one of the four jurisdictions began operating under the purview of the federal government and continues to August 2017. New Jersey became a state in 1787. http://www.nj.gov/nj/about/history/short_history.html (last visited Aug. 5, 2017 at 10:17PM). Nevada became a state in 1864. <http://www.onlinenevada.org/articles/nevada-statehood> (last visited Aug. 5, 2017 at 10:16PM). The United States Court of Appeals for the Third Circuit was established in 1891. <https://www.fjc.gov/history/administration/federal-judicial-circuits-third-circuit> (last visited Aug. 1, 2017 at 7:13PM). While there were federal courts operating in several of the present-day states that comprise the Third Circuit, the Third and Ninth were part of the thirteen federal circuits designated in 1891. See https://ballotpedia.org/United_States_Court_of_Appeals_for_the_Third_Circuit (last visited Aug. 1, 2017 at 7:18PM).

⁵⁹ *Chart Search*, CORPUS OF HIST. AM. ENG., <http://corpus.byu.edu/coha/> (last visited Dec. 7, 2017) [hereinafter COHA] ("COHA contains more than 400 million words and covers written American English from the 1810s-2000s.").

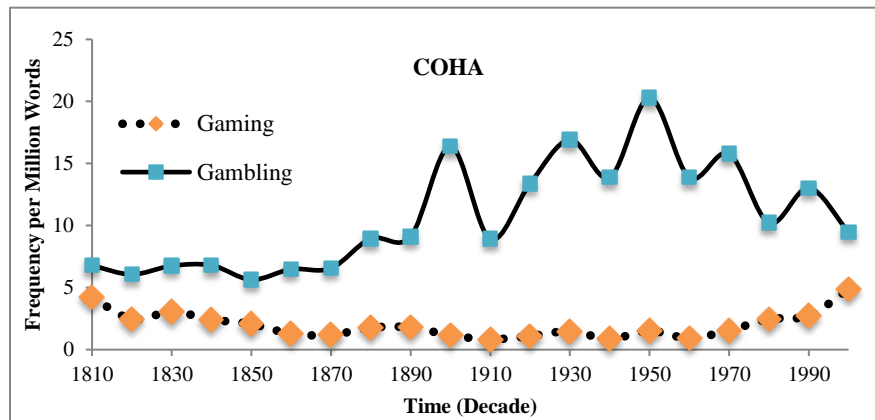
⁶⁰ COCA contains over 520 million words, is the largest freely-available English corpus, and contains data of words spoken or published in the United States between 1990 and 2015 across five categories. *Chart Search*, CORPUS OF CONTEMP. AM. ENG., <http://corpus.byu.edu/coca/> [hereinafter COCA] (last visited Oct. 10, 2017).

⁶¹ New Jersey contains Atlantic City where games of chance have operated exclusively. Michael Belletire, et al, *Legislating and Regulating Casino Gaming: A View from State Regulators*, 5, Mar. 1, 1999, <http://govinfo.library.unt.edu/ngisc/reports/belletire.pdf> ("In New Jersey, casinos are limited to a single location—Atlantic City."). Single location casino operations differ from the Nevada licensure model. *Id.* at 4, ("Casino gaming in Nevada most closely approximates the free market. . . model of economic activity.").

improve dataset diversity. By applying corpus linguistics analysis to this data, lawyers can test theories on *gaming's* ordinary meaning, and determine whether the term's social and legal uses are similar or significantly different.

Here, data gleaned from the COHA queries illustrate the frequency of the two similar terms over 190 years. While *gambling* and *gaming* are separated in 2000 by only 4.57 normalized points,⁶² *gambling* remained the most common term without overlap or dipping below *gaming* frequencies. Table 3 is an illustration of the COHA results for the use of *gaming* and *gambling* from the 1810s to 2000s.

Table 3⁶³



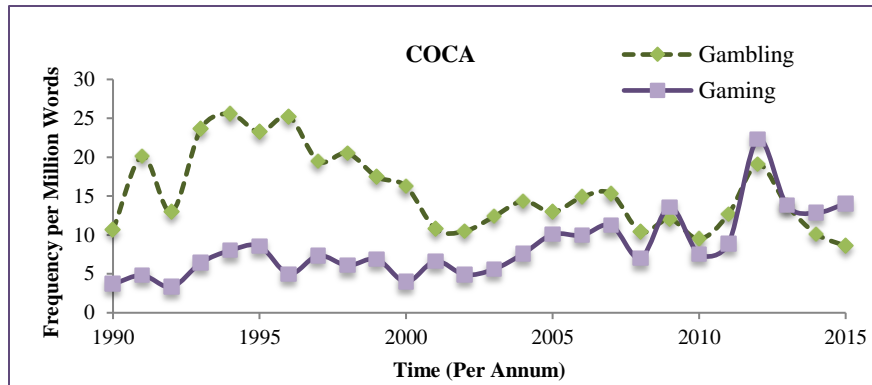
In contrast, the data collected from COCA shows what appears to be an increase in *gaming* over *gambling* starting in 2009.⁶⁴ Table 4 below is an illustration of the COCA results for the use of *gaming* from the 1990s to 2017. The COCA results are fascinating — over a twenty-five-year period, use of the multi-faceted term *gaming* surpassed the verb *gambling* in frequency.⁶⁵

⁶² COHA 1990 1810 to 2000 timeframe; 9.44 gambling - 4.87 gaming = 4.57 parts per million. See *Chart Search "gambling,"* CORPUS OF HIST. AM. ENG., <http://corpus.byu.edu/coha/> (last visited Oct. 9, 2017); see also *Chart Search "gaming,"* CORPUS OF HIST. AM. ENG., <http://corpus.byu.edu/coha/> (last visited Oct. 9, 2017).

⁶³ The moving average smooth scatter plot shown is the most useful for this fluctuating dataset; the logarithm, polynomial, power, linear, and exponential trend lines were considered but all had an R value between .4 and .8, not within .01 of 1. See *Choosing the Best Trendline for Your Data*, MICROSOFT, <https://support.office.com/en-us/article/Choosing-the-best-trendline-for-your-data-1bb3c9e7-0280-45b5-9ab0-d0c93161daa8> (last visited Oct. 9, 2017); see also *infra* Appendix I; Datasheet I, *supra* note 15, at tab COHA COCA Norm.

⁶⁴ *Chart Search,* CORPUS OF CONTEMP. AM. ENG., <http://corpus.byu.edu/coca/> [hereinafter COCA] (last visited Oct. 10, 2017).

⁶⁵ The reason for this shift is an area open to further study of the term in context.

Table 4⁶⁶

1. *Is There a Significant Statistical Difference Between Gambling and Gaming?*

Although Table 3 appears to show that *gaming* occurs more frequently in ordinary communication than *gambling*, looks can be deceiving. To test the theory that use of the term *gaming* is surpassing the use of *gambling*, the “statistical significance” must be calculated through the probability (p) equation. For a difference to be statistically significant — as opposed to being “practically significant” — the resultant p-value should be less than 0.05.⁶⁷ Table 5 below illustrates the probabilities of *gaming* and *gambling* as used in the COHA and COCA.

Table 5: *Gambling and Gaming Probabilities*⁶⁸

Linguistic Corpora	<i>Gambling to Gaming</i>
COHA 1810 to 2000	1.66E-08 < P < .05
COCA 1990 to 2015	2.17E-06 < P < .05

⁶⁶ See Datasheet I, *supra* note 4, at tab COHA COCA Norm (providing numerical values).

⁶⁷ 0.05 is the conventional or arbitrary p-value. Jeff Sauro, *What Does Statistically Significant Mean?*, MEASURINGU (Oct. 21, 2014), <https://measuringu.com/statistically-significant/> [hereinafter Sauro, *Significant*].

⁶⁸ To find the probability between gambling and gaming, I applied the following excel formula: T.TEST(array1, array2, tails, type). See Datasheet I, *supra* note 15, at tab COHA COCA Norm, cells H6 & L65. The Data Analysis Toolpak is not included in Excel for Mac so I used a shortcut method in lieu of access to Data Analysis Toolpak. *Running a -est in Excel*, RWU, https://www.rwu.edu/sites/default/files/downloads/fcas/mns/running_a_t-test_in_excel.pdf (last visited Dec. 9, 2017). I used normalized data from each timeline for Array 1 and 2 where Array 1 was the gambling frequency per year group and Array 2 was the gaming frequency per year group. Two tails were chosen to mitigate the risk of only capturing movement in one direction; the use of three variables was appropriate because the variance between the two was either unknown or not substantially similar within a degree of one.

Because the probability value is less than 0.05, a statistically significant⁶⁹ difference exists between the use of *gambling* to *gaming* in historical and contemporary American English. But what about gaming as a *legal* term of art?

2. *Is the Difference Among Cases Containing Gambling Compared to Gaming Statistically Significant?*

The statistical probability of a significant difference is particularly interesting when viewing the results from legal corpora data. Probabilities greater than 0.05 ($P > 0.05$) mean that an investigator could observe a difference whether or not it truly exists. Table 6 below illustrates the frequency of *gaming* and *gambling* in the author's research. To begin, the WestLaw data for Nevada and New Jersey resulted in $P > 0.05$. Therefore, amongst both states, the difference in the use of *gambling* and *gaming* is not significant enough to support the hypothesis.⁷⁰ Conversely, the LexisNexis data resulted in $P < .05$, proving that a statistically significant difference exists between *gambling* and *gaming* use across both states.

Table 6: Legal Corpora Probabilities⁷¹

Jurisdiction: Timeline	Lexis <i>Gambling to Gaming</i>	WestLaw <i>Gambling to Gaming</i>
Nevada: 1860 to Aug. 2017	.025 < P < .05	.269 > P > .05
New Jersey: 1780 to Aug. 2017	.002 < P < .05	.530 > P > .05
Ninth Circuit: 1891 - Aug. 2017	3.06E-05 < P < .05	.01 < P < .05
Third Circuit: 1891 - Aug. 2017	.001 < P < .05	.03 < P < .05

Moreover, unlike Nevada or New Jersey, a statistically significant difference exists between *gambling* and *gaming* frequencies in Ninth and Third Circuit case law across each calculated probability from the LexisNexis and WestLaw data sets. While they may be used similarly in statutes, the terms likely occur in different contexts and may therefore have multiple meanings. Therefore, a future study could examine the likelihood of *gambling* or *gaming* occurring in a given communicative context.⁷²

⁶⁹ The probability of both words occurring with a similar variation is highly unlikely, because both p-values are not only less than 0.05, they are less than .001. That means there is a 1 in 1000 possibility the relationship between *gambling* and *gaming* is a result of random chance. See Sauro, *Significant*, *supra* note 67.

⁷⁰ There is no statistically significant difference between the frequency means for *gambling* and *gaming*, supporting a null hypothesis. See Sauro, *Significant*, *supra* note 67.

⁷¹ Datasheet I, *supra* note 4, at tab Lexis West Norm, cells B111 to L111 (state probabilities), cells E26, H26, L26 & N26 (circuit probabilities).

⁷² For example: What kind of audience uses the terms *gaming* and *gambling* in similar contexts? Or, how have judges used the terms and does this use denote a change in the meaning of *gaming* within the legal community?

One difference that became apparent throughout the course of this study was that LexisNexis and WestLaw systems vary regarding the cases that are covered in each jurisdiction. WestLaw and LexisNexis are competing systems, owned and operated by different companies, and each database uploads and maintains different legal material. Although the accuracy of any corpus linguistic investigation is limited by the sample size and user error, in the interest of continuing a legal corpus linguistic discussion, the case law data in the upcoming Part II section C of this note only reflects LexisNexis datasets.

C. What does a Circuit or State Jurisdiction Language Pattern Look Like?

1. Are the Ninth and Third Circuits Utilizing Gambling and Gaming at a Similar Rate?

The Ninth and Third Circuits frequency per number of cases differ within each decade. Tables 7 and 8 below are illustrations of Circuit frequencies of *gaming* and *gambling* queried from 1891 to August 2017.

Table 7⁷³

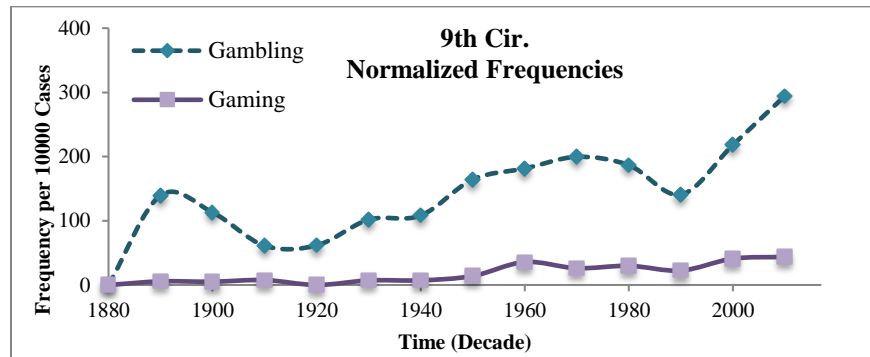
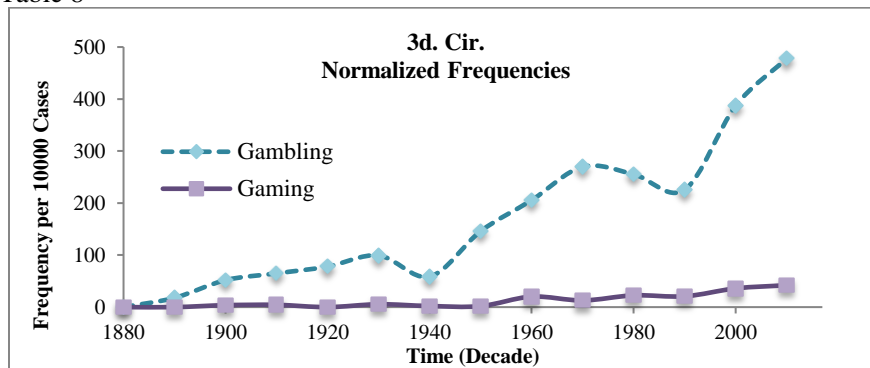


Table 8⁷⁴



⁷³ Datasheet I, *supra* note 4, at tab Lexis West Norm, starting at cell C24.

⁷⁴ *Id.* at tab Lexis West Norm, starting at cell I24.

As evidenced by tables above, *gambling* appears to be more prominently used than *gaming* in both Circuits. However, it is worth noting that the Table 7 and 8 datasets represent the total number of cases *per decade*, rather than the total reported cases. Illustrating the reported case frequencies may create a very different impression of the utilization of *gambling* and *gaming*.⁷⁵ Nonetheless, the rate at which the term *gaming* appears to arise across both Circuits could be significant, and it may indicate that the frequency of the term is not static.⁷⁶ Future contextual studies could examine the frequency at which the use of *gaming* versus *gambling* changes depending on the context in which they appear in cases.⁷⁷

2. *Does Gambling Occur at a Greater Frequency Than Gaming in New Jersey or in Nevada?*

New Jersey and Nevada's jurisdictional language patterns are fascinating. The state comparison is an illustration of yet another corpus linguistic application for lawyers. Tables 9 and 10 below illustrate the New Jersey and Nevada frequencies. While recent⁷⁸ New Jersey frequency patterns appear similar to the movement in the Ninth and Third Circuits during the same time period, *gaming* seems to outperform *gambling* normalized frequencies in 1840.⁷⁹ This overlap may maintain a point separation where *gambling* occurs more often than *gaming*. Overall, a possible influence on New Jersey's legal use of either term may be due to the economic changes within the state's casino business.⁸⁰

⁷⁵ The contrast and comparison of *gaming* to *gambling* in published opinions is an area open to further study.

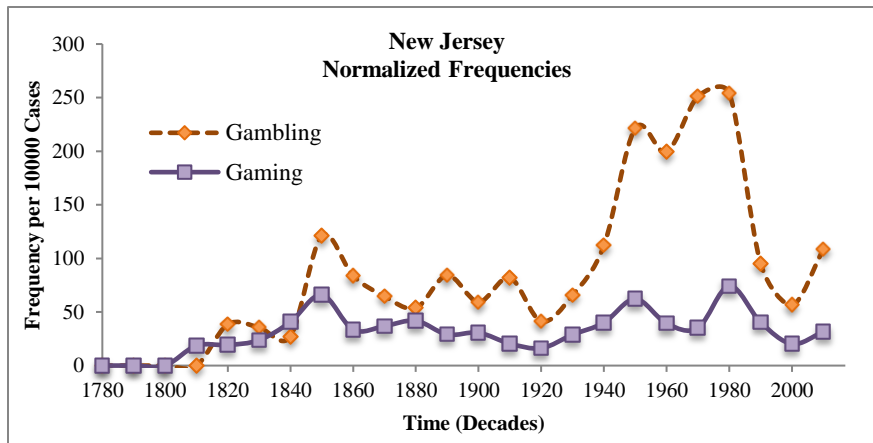
⁷⁶ The confidence interval of each term by jurisdiction is an area open to further investigation.

⁷⁷ Judges already use dictionaries at an increased rate comparative to 1960 judicial use, even though cautioned by Supreme Court Justice against the mechanical examination of words in isolation. Adam Liptak, *Justices Turning More Frequently to Dictionary, and Not Just for Big Words*, N.Y. TIMES (Jun. 13, 2011), <http://www.nytimes.com/2011/06/14/us/14bar.html?referer=>.

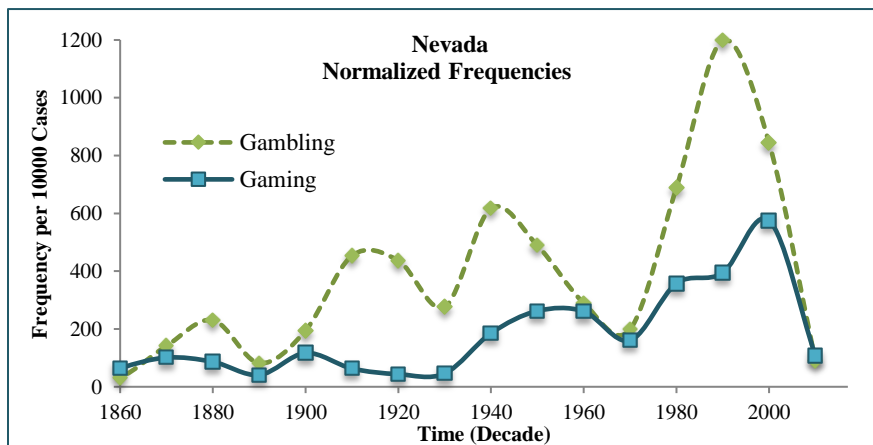
⁷⁸ Datasheet I, *supra* note 15, at tab Lexis West Norm, starting at cell B83 (providing data from 1990 to 2017).

⁷⁹ Comparing 40.71 *gaming* normalized frequencies to 27.14 *gambling*. *Id.* at tab Lexis West Norm, cells I92, J92.

⁸⁰ See generally N.J. DIV. OF GAMING ENF'T, SUMMARY OF CASINO AND ATLANTIC CITY TAXES AND FEES 3-4 (2017), <http://www.nj.gov/lps/ge/docs/Financials/QuarterlyFinRpt2017/ACSpecificTaxesFees1978-2017.pdf>.

Table 9⁸¹

Separate from the other three jurisdictions, Nevada language patterns highlight the possibility that *gaming* has risen to the point of surpassing *gambling*.⁸² This suggests that the current dominant legal term to express activities of chance and skill may⁸³ no longer be *gambling* but *gaming* within Nevada.

Table 10⁸⁴

⁸¹ Datasheet I, *supra* note 4, at tab Lexis West Norm, starting at cell I83.

⁸² Comparing 107.98 *gaming* normalized frequencies to 89.56 *gambling*. *Id.* at tab Lexis West Norm, cells D109, C109.

⁸³ Author uses “may” because this analysis is comprised of normalized frequencies and does not separate the terms-in-use into subcategories, such as eliminating proper nouns from sourced data, annotating common collocates, or identifying type of adjective/adverb within a certain number of words to term.

⁸⁴ Datasheet 1, *supra* note 4, at tab Lexis West Norm, cells C 86-109 & D 86-109.

Furthermore, the variations in frequency between Nevada and New Jersey may be due to the timeline differences of when the states' legislatures enacted relevant gaming statutes.⁸⁵

As demonstrated by this study's data, it appears that *gaming's* frequency of use is increasing across the four jurisdictions. This language pattern may be due to a number of contextual clues. For example, *gaming* may be replacing *gambling* as the formal reference to risk-laden games of skill or chance with a clear winner and loser. In a quantitative, comparable numeric format, the normalized frequencies and significant probabilities between *gambling* and *gaming* legal corpora hits may indicate a legal language shift.

III. EFFECTIVE LANGUAGE USE ANALYSIS AND BENEFITS

The commercial benefit of the informed use of language presented through a four-text data set suggests that industry use⁸⁶ of *gaming* may establish the term's legitimacy over the cultural understanding of *gambling*.⁸⁷ In other words, *gaming* as a term of art may be utilized to establish social legitimacy⁸⁸ of what was previously considered illegal and immoral gambling activity.⁸⁹

⁸⁵ There were several decades between when the Nevada legislature established the Gaming Control Board (1955) and Gaming Commission (1959), and when the New Jersey legislature established the Casino Control Commission (1977), passed the first Casino Control Act (1988), and established the current, *gaming-language-heavy* Casino Control Act (2011). See *Gaming Regulation History*, NEV. RESORT ASS'N, <http://www.nevadaresorts.org/regulation/history.php> (last visited Oct. 10, 2017); *A Brief History of the Casino Control Commission*, STATE N.J. CASINO CONTROL COMM'N., <http://www.nj.gov/casinos/about/history/> (last visited Oct. 10, 2017); Chuck Humphrey, *New Jersey Gambling Laws*, GAMBLING-LAW-US.COM, <http://www.gambling-law-us.com/State-Laws/New-Jersey/> (last visited Oct. 10, 2017); *Casino Control Act*, N.J.S.A. 5:12-1 et seq. (2017).

⁸⁶ Industry use and labels affect consumer behavior. See Ashlee McGandy, *How You Name it Matters: 'Gambling' vs. 'Gaming'*, CORNELL CHRON. (Oct. 15, 2013), <http://www.news.cornell.edu/stories/2013/10/how-you-name-it-matters-gambling-vs-gaming> [hereinafter McGandy, *How You Name*] (referencing original rhetoric article on consumer influence); see generally Ashlee Humphreys & Kathryn A. LaTour, *Framing the Game: Assessing the Impact of Cultural Representations on Consumer Perceptions of Legitimacy*, CORNELL U. SCH. OF HOTEL ADMIN. (Aug. 23, 2013), <http://scholarship.sha.cornell.edu/articles/597> [hereinafter Humphreys & LaTour, *Framing*].

⁸⁷ See Humphreys & LaTour, *Framing*, *supra* note 86; see also McGandy, *How You Name*, *supra* note 86.

⁸⁸ From the earliest part of Nevada state history, the legislative perspective on games of chance and skill was that of a legitimate, valued, revenue source. Nevada Constitutional provisions exempted the state from the Johnson Act provisions; gambling was essential to economy and general welfare. Mike Roberts, *The Constitutionality of Gaming in Tennessee*, 61 TENN. L. REV. 675, 681-682 (1994).

⁸⁹ See Ronald J. Rychlak, *Lotteries, Revenues and Social Costs: A Historical Examination of State-Sponsored Gambling*, 34 B.C. L. REV. 11, 13-14 (1992) [hereinafter Rychlak, *Historical Gambling*] (discussing that costs associated with gambling include social ills where gambling was regulated as early as 1611 to

Awareness of a term's ambiguity is an essential element to effectively communicating product legitimacy and market viability, particularly when it comes to a former vice like gaming. Gambling and gaming operations in the United States are regulated by federal, state, and local laws.⁹⁰ Across these laws, the question of what exactly constitutes legal betting fluctuates depending on (for example) the type of value transfer, and whether the interaction is online or in-person.⁹¹ Purposeful communicative use of terms like *gaming* versus *gambling* in legal discourse can heighten the legitimacy of the profession and promote organizational goals.

Policy decision makers and litigators can benefit from this new form of argument and analysis of language.⁹² By using Legal Corpus Linguistic concepts to understand a specific term's usage, attorneys can be equipped with persuasive statistical data to consider when arguing for the use of one term against another. This is important to the legal profession, since language behavior affects and directs an audience. Therefore, establishing rapport through persuasion may be accomplished by choosing between familiar or formal language.⁹³

Corpus linguistics goes beyond interpretive use in the context of statutes and case law. Gaming is present from Atlantic City, New Jersey all the way to and beyond Las Vegas, Nevada. Games of chance can be found from public gas stations along an interstate and atop public waterways,⁹⁴ to resorts on Native land. Thus, the choice of using one term over the other may have real-world effects. For instance, tourists to a gaming mecca contribute significantly to the local population. In a single fiscal year, Southern Nevada visitors generated

prevent negatively influence the youth). Even the Puritans did not absolutely outlaw gambling, however, there were restrictions regarding certain activities in order to thwart idleness. *Id.* at 24; see generally Emanuel V. Towfigh et al., *Dangerous Games: The Psychological Case for Regulating Gambling*, 8 CHARLESTON L. REV. 147, 167 (2013-2014) (discussing that the relationship between skill and chance is complex, requiring specialized statistical analysis through imperfect proxies — it is important to focus analysis directly on public policy considerations). Strict zoning in New Jersey limited gambling or gaming activity even though lottery existed as early as 1727 in the state. See Roberts, *supra* note 88, at 678-79.

⁹⁰ See Belletire, *Legislating and Regulating*, *supra* note 61, at 1.

⁹¹ See *An Introduction to U.S. Gambling Laws for Betting Online and Offline*, LEGALBETTINGONLINE.COM, <http://www.legalbettingonline.com/laws/> (last visited Oct. 12, 2017).

⁹² This particular analysis benefits from further specific inquiry regarding term-in-use across multi-phrase modalities. With additional legal corpus linguistics quantitative studies, determining why the terms hit and in what manner, provides additional guidance toward unambiguous, clear meaning of phrases used by professionals when they communicate with their intended audiences.

⁹³ Author's general reference to convergent and divergent discourse.

⁹⁴ See Belletire, *Legislating and Regulating*, *supra* note 61, at 5 (“...require operational riverboats”).

two billion dollars in public revenue.⁹⁵ On the Las Vegas strip, casino hotels are the largest employers in the region by over fifty percent — making it a sector that provides over 280,000 jobs.⁹⁶ Drawing from this study’s analysis, any business formerly known as a *gambling* business should consider promoting itself as a *gaming* business due to the recent increase in the latter term’s use and its growing association with games of chance.⁹⁷

CONCLUSION

The birth, influence, and effect of *gaming* law connote prescriptive power, which shapes the legal present and molds the future of skill and chance wagers with a clear winner and loser. That being said, it is of particular importance for lawyers and policy makers to understand the difference between the terms *gaming* and *gambling*, along with the connotations they carry and the contexts in which they appear. As this study discussed, Legal Corpus Linguistics is an evolutionary process⁹⁸ where the application of corpus linguistics in the legal field produces diverse interpretative methods. The application of Legal Corpus Linguistics continues to grow in popularity as an alternative to the familiar legal canons that are used as interpretive tools. Through corpus linguistics methods, a lawyer can better understand their audience, become aware of term ambiguity, and gain an advantage over miscommunication — all of which are especially valuable in a field like gaming.

⁹⁵ Visitors to Southern Nevada accounted for over \$2 billion to public revenue during fiscal year 2015. See *Fiscal Impact of Southern Nevada Tourism: Industry’s Contribution to Major Public Revenues*, APPLIED ANALYSIS ECON. IMPACT SERIES BRIEF, at 1 (Apr. 2016), http://www.lvcva.com/includes/content/images/media/docs/EIS-Fiscal-Impacts-April-2016_FINAL.pdf.

⁹⁶ Twelve of the twenty largest employers in Southern Nevada are casino hotels and there were 289,000 positions as of July 2015. *The Importance of Tourism to the Southern Nevada Labor Market*, APPLIED ANALYSIS ECON. IMPACT SERIES BRIEF, at 1 (Sept. 2015), <http://www.lvcva.com/includes/content/images/media/docs/EIS-Importance-of-Tourism-to-So-NV-Labor-Market-Sep-2015.pdf>.

⁹⁷ There may be specific audience segments that respond more favorably to the term *gambling* than to the term *gaming*. Nevertheless, the cultural and legal shift revealed by the data suggest that “gaming” is currently more often used than “gambling” to describe games of chance that determine value transfers. The direction of change in the data suggest that this shift continues, and that the term “gaming” will become more useful. See Dataset I, *supra* note 15.

⁹⁸ Legal theory and ordinary meaning interpretation methods are not simply changing over time — the diversity created by new forms of legal thought involve descent through statistical and legal inherited tenants. See generally *An Introduction to Evolution*, UNDERSTANDING EVOLUTION, http://evolution.berkeley.edu/evolibrary/article/evo_02 (last visited Oct. 12, 2017).