



# Signs of Legal and Pseudolegal Authority: A Corpus-Based Comparison of Contemporary Courtroom Filings

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## Abstract

Legal language exists in a peculiar state of tension. It is theoretically expected to meet the specific technical needs of a range of professions while simultaneously remaining entirely accessible to the public at large. Its success at that latter aim is at best limited, with laypeople generally more able to recognize that a given text is legal in character than they are to grasp its technical content. For such readers, the primary semiotic function of legal language is an indexical one, indicating that a text possesses a particular authoritative status even if its intended legal function remains opaque. This paper explores that authoritative indexicality of legal language through the multisemiotic analysis of two corpora: a corpus of legitimate legal documents filed in an American courthouse written by licensed attorneys and a corpus of pseudolegal documents filed in that same courthouse written by members of the Sovereign Citizen conspiracy movement. Sovereign Citizens appropriate features characteristic of legitimate legal language in their pseudolegal writings in an effort to imbue them with real legal authority. The comparison of these two corpora therefore provides a unique perspective on which features of legal writing most clearly communicate authority to non-lawyers. In addition to discussing the ways in which legal authority is manifested in these two corpora, this paper also outlines a novel method for the visualization of the spatial distribution of target features in a corpus of static multimodal texts by employing probability density estimation to generate a series of feature-based heatmaps.

**Keywords** Language and Law · Corpus linguistics · Semiotics of Law · Sovereign citizens · Pseudolaw · Multimodality

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## 1 Introduction

The purpose of this special issue is to explore the spatial dynamics of and cultural changes in contemporary legal practice. This study aims to do so by considering the layout and design features (i.e. all aspects other than literal word use) of two corpora of contemporary American courtroom filings: one comprising documents written by licensed attorneys and a second comprising documents written by members of the Sovereign Citizen conspiracy movement. Sovereign Citizen courtroom filings are notable for a legally authoritative appearance which belies their irredeemably conspiratorial character [e.g. 1, 2]. By quantitatively comparing the layout and design features of a corpus of legitimate legal documents to a corpus of pseudolegal (i.e. legal seeming but ungrounded in actual law) documents, this study both empirically identifies the features that characterize legitimate legal courtroom filings and considers the ways in which the “authoritative indexicality” of those features appears to have influenced the appearance of documents produced by members of the Sovereign Citizen movement. Simultaneously, this study also makes a contribution to the field of corpus-assisted multimodal discourse analysis [3] by outlining a novel method of visualization for the quantitative linguistic analysis of layout and design features in static texts.

## 2 Pseudolaw, Properly so Called

This is a multidisciplinary study which draws upon aspects of legal, semiotic, and anthropological theory. It is therefore important to establish from the outset the sense in which its key terms will be employed. This section begins with a brief description of legal positivism, after which it describes the connection between the concepts of law and authority. It then concludes with a discussion of the nature of pseudolaw and the history and beliefs of the Sovereign Citizen movement.

### 2.1 Legal Positivism

This study adopts the legal positivist position regarding the nature of law. In its classic formulation as Austin’s command theory, “[a law] may be said to be a rule laid down for the guidance of an intelligent being by an intelligent being having power over him” [4]. From this starting point, two essential conclusions may be drawn: first, that a law’s validity comes from its own normative force rather than any requisite moral component, and second, that any such normative force stems from the socio-political arrangements of the society in which that law operates [5]. This is not to say that a law cannot be ascribed a particular moral character, but rather to make clear that questions of morality are separate from those of legality and thereby obviate the need to align this study with a particular system of ethics. For the purposes of classifying the data examined below, it is therefore sufficient to say that a given text

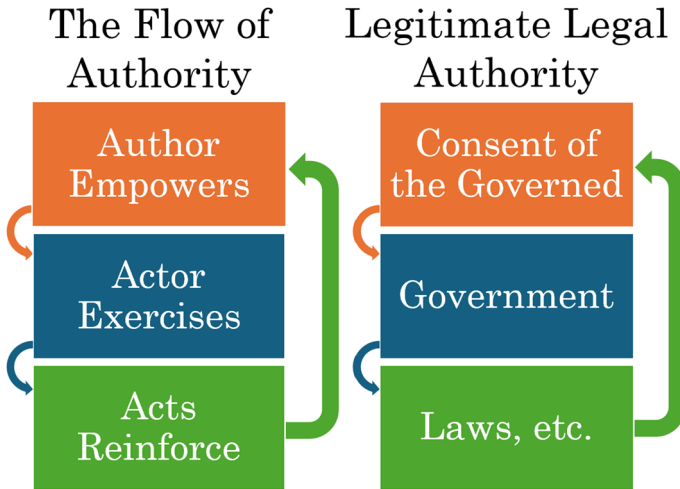


Fig. 1 The flow of legitimate legal authority

will be considered “legitimately” legal when it has been produced in line with the expectations of the relevant state or federal branch of the United States government.

## 2.2 Author, Actor, and Acts

Central to Austin’s command theory of law is the ability of an intelligent being to exercise power in a socially sanctioned way over another intelligent being. In practice, the being in the position to exercise power can be thought of as the state itself (or at the very least as a representative of the state) and in modern democracies the source of that social sanction is the consent of the governed (e.g. the “we the people” from the preamble to the United States federal Constitution). This can be mapped directly onto Hobbes’ description of the exercise of authority:

[S]ome have their words and actions *Owned* by those whom they represent. And then the Person is the *Actor*, and he that owneth his words and actions, is the *Author*: In which case the Actor acteth by Authority... So the Right of doing any Action, is called Authority. So that by Authority, is always understood a Right of doing any act: and *done by Authority*, done by Commission, or License from him whose right it is. [6 emphasis in original]

In the context of the American legal system, the consent of the governed is the “author” from whom authority springs, the state is the “actor” empowered by that author, and the laws it passes and, when necessary, enforces are its “acts” (see also Bourdieu’s concepts of “authorized actors” and “authorized acts” in [7]). In brief, therefore, the operation of the law can be described as the exercise of authority. This relationship is summarized below in Fig. 1.

Critically, the form taken by the acts represented in the above diagram, both in terms of their content and their ratification (via, e.g., the use of an enacting statement in a statute or an official seal in a given text), serves to reinforce their connection to the original “author”. This cyclical and self-reinforcing flow of authority within the legal system is crucial to its proper functioning. After all, a “law” in the legal sense is not the same a “law” in the scientific sense [8]; the law of gravity will function as it should regardless of its cultural context, but a speed limit is only effective to the extent that it is enforced by the state. In addition to any particular communicative aims, then, one of the primary semiotic functions of a legal object is to index its connection to authority; just as the presence of smoke likely presages the existence of fire, so too does the presence of a legal signifier point towards an instance of legitimate socially derived authority.

### 2.3 The Nature of Pseudolaw

Pseudolaw, for the purposes of this study, is defined as anything which is “legal-seeming but ungrounded in actual law” [9]. Though this definition is not unusual (see, e.g., Hobbs et al.’s functionally identical definition in [10]), in practice, the terms “pseudolaw” and “pseudolegal” are generally used to refer to a particular class of conspiracy-theory-based practices. The following section will discuss pseudolaw in the context of the Sovereign Citizen movement. First, however, this section will examine the relationship between the concepts of law and pseudolaw more generally.

The mistaken idea that the legal system possesses some sort of externally verifiable authority is so widespread that it has been described as the “necessary myth [without which] the modern state would collapse” [11, see also 12]. Derrida notes that this has always been the case, claiming that “since the origin of authority... the position of the law can’t by definition rest on anything but [itself]” [13]. Putting to the side some of the more complex ontological issues which arise when attempting to define a self-regulating field such as law [14], this much is clear: despite their critical role in regulating social relationships, all legal systems are ultimately ephemeral and primed to evanesce in the first moment that their societies decide they are no longer needed. It is worth noting that this conclusion is not actionable in any practical sense; a judge, for example, is unlikely to look kindly upon an argument that insists the law only exists because they pretend that it does. Nevertheless, it is exactly this existential legal ambiguity which gives rise to the existence of pseudolaw. After all, if there is no way to tell in isolation whether something is truly an exercise of socially sanctioned authority, then there is nothing to stop an individual from surrounding a legally meritless argument with legitimate-seeming legal signifiers in the hopes of imbuing that argument with the appearance of authority.

Because it needs to simultaneously serve the specific technical needs of a range of professions while theoretically remaining entirely accessible to laypeople, legal writing in particular is vulnerable to this sort of attempted authoritative appropriation. Especially in complex texts like statutes or wills, it is much easier for non-lawyers to recognize texts as legal in character than it is for them to parse their particular semantic content; Goodrich describes a person recognizing something as “legal”

in this way as being akin to their identifying the use of a foreign language they do not speak [15]. In this way, as long as a given pseudolegal text “sounds” sufficiently legal, a layperson may well interpret it as such. Elsewhere, one of the authors of this study has described the operation of pseudolaw as “parasitic” in the sense that its success depends upon the pre-existence of a “host” (in this case, legitimate legal language) with whose intended functioning it actively interferes [16]. Regardless of the underlying metaphor, what is clear is that pseudolaw cannot exist on its own but is instead dependent upon the established signs of the legitimate legal system. It is not a system of “anti-law”, but instead a derivative pretender that relies upon people’s possessing limited but extant familiarity with real signs of legal authority.

It is worth briefly distinguishing pseudolegal arguments that are conspiratorial (i.e. grounded in conspiracy theories) from those that are not. A landlord fallaciously claiming that a lease allows them to keep a tenant’s security deposit without cause is making a pseudolegal argument because they are pointing to a legitimate legal sign (in this case, a tenancy agreement) to lend the appearance of authority to a claim that the sign does not support. A landlord who additionally suggests that they are allowed to keep that security deposit because their supposed status as a “Freeman” grants them unlimited authority over the use of their property is making an argument which is both pseudolegal and conspiratorial. Not every meritless legal argument is necessarily pseudolegal; it is entirely possible for a person to make an argument which is grounded in actual law and yet still be wrong from the perspective of the legal system (e.g. because of a superseding statute or precedent of which the person was unaware). Pragmatically speaking, the answers to very few legal questions are ever fully black and white and, in that sense, an argument’s merely being plausible is likely sufficient to elevate it above pseudolegal status. With that said, the development of a full taxonomy of legal wrongness is beyond the scope of this study; it is enough for now to note that the Sovereign Citizen documents examined below can be properly deemed both pseudolegal and grounded in conspiracy theories.

## 2.4 “Lexomancy” and the Sovereign Citizen Movement

The Sovereign Citizen movement is a collection of loosely organized anti-government conspiracy theorists with an increasingly global membership [9]. Despite the movement’s origins in an American far-right white nationalist group in the 1960s [17, 18], Sovereign Citizens can now be found in “at least” 26 different countries [19] and come from a wide range of racial and political backgrounds, resulting in a plethora of distinct subgroups with varying degrees of internal organization and frequently incompatible specific beliefs [10, 20]. Conspiracy theorists believe that “a secret, omnipotent individual or group covertly controls the political and social order or some part thereof” [18] and, broadly speaking, Sovereign Citizens believe that by harnessing the methods purportedly used by those secretive omnipotent individuals, they can force the government and its representatives to do (or not do) anything they desire, including give them access to secret government funds or dismiss criminal charges against them [9]. For the purposes of this study, the most notable quality of the

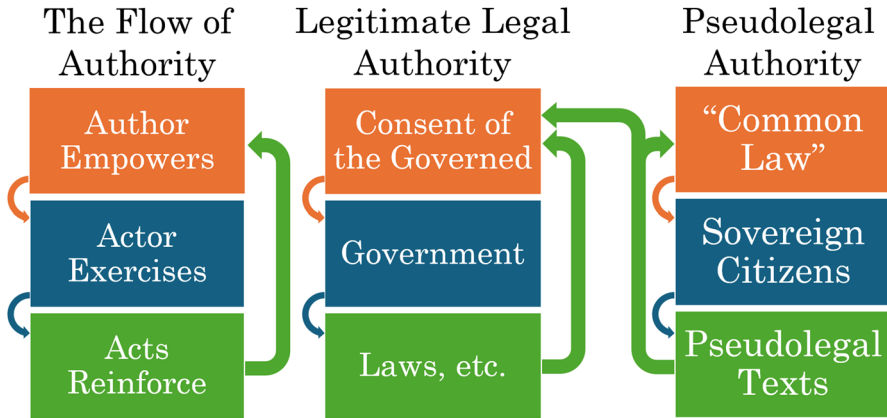


Fig. 2 The pseudolegal appropriation of authority

Sovereign Citizens is their tendency to “[submit] verbose legal filings to various state and federal courts, dressed up in ‘pseudo-scholarly terms and meaningless Latin phrases,’ typically claiming for various reasons [that] courts have no jurisdiction over them” [1].

The pseudolegal documents created by members of the Sovereign Citizen movement have been described as an example of “lexomancy” in which legitimate legal signs are used in an effort to talismanically imbue texts with real authority [16]. Law is a highly ritualized field [21] and has been metaphorically described as a form of “social magic” [22]. That metaphor becomes literal, however, once an individual begins to view a legal ritual as having a “special kind of efficacy” [23] and there is broad agreement that this is the best lens through which to view Sovereign Citizen pseudolegal activities [e.g. 24, 25]. More specifically, Wessinger describes the production of Sovereign Citizen pseudolegal documents as a magical practice in which the Sovereign Citizens “‘imitate the behavior’... [of the government] in order to gain power over that government and its agents” [26]. Essentially, even though Sovereign Citizen pseudolegal theories claim that their authority stems from a distinct and decidedly superior Hobbesian “author” (often, if nebulously, referred to as the “Common Law”) as compared to that of the legitimate legal system, the form taken by their “acts” still indexes the presence of legitimate legal authority. This relationship is summarized in Fig. 2:

This process of indexical authoritative appropriation is the focus point of this study. Not only does it offer the opportunity to examine the metaphorical spatial and cultural dynamics of the movement of signifiers of legal authority between legitimate legal texts and their pseudolegal counterparts, but it also offers the chance to consider their literal spatial dynamics by analyzing the typical placement of those features on the page and the ways in which they contribute to a text’s overall authoritative character.

**Table 1** LLD and SCD corpus contents

Corpus	Texts	Tokens	Pages	Cases	Parties
LLD	138	302,857	1169	24	38
SCD	250	359,428	1167	42	52

### 3 Methodology

This study compares the layout and design features present in a corpus of documents written by actual attorneys (the “legitimate legal document” or “LLD” corpus) to those present in a corpus of documents written by members of the Sovereign Citizen movement (the “Sovereign Citizen document” or “SCD” corpus). The semantic content of these corpora (i.e. the literal words they contain) has been analyzed elsewhere [9, 16, 27] and so will be left unaddressed here. Instead, this analysis considers the contents of these corpora as composed visual artefacts, with a focus on how the presence of established legal signs contributes to their overall authoritative character, regardless of whether such authority is legitimately claimed. While reading a legal text in this way is not a novel approach [e.g. 28, 29], its combination with corpus linguistic methods is less common. Using the analysis in Griffin [16] as a starting point, then, it is hoped that this study will contribute to both the fields of legal semiotics and of corpus assisted multimodal discourse analysis [3], as studies of both legal and pseudolegal texts would both benefit from additional empirical grounding [27].

Subject to very few exceptions, none of which are relevant here, all documents filed in American courts are part of the public record, meaning that there are no legal or ethical impediments to the dissemination of the contents of the LLD or SCD corpus.<sup>1</sup> Nevertheless, out of an abundance of caution, personally identifying information contained in the excerpts presented below has been anonymized. The remainder of this section outlines the composition of the LLD and SCD corpora, the method of annotation used, and the process by which the frequency-based heatmaps analyzed in the following section have been generated.

#### 3.1 Corpus Composition

All texts in both the LLD and SCD corpora were filed in chancery court in the Circuit Court of Cook County, Illinois, a state level trial jurisdiction which contains the city of Chicago and some of its surrounding suburbs. Corpus construction occurred between 2016 and 2019 with the help of a courthouse-based informant. The contents of the two corpora are shown in Table 1.

<sup>1</sup> The relevant portion of the Illinois Clerk of Courts Act states that:

All records [kept by a clerk of court] shall be deemed public records, and shall at all times be open to inspection without fee or reward, and all persons shall have free access for inspection and examination to such records... and also to all papers on file in the different clerks’ offices and shall have the right to take memoranda and abstracts thereto (705 ILCS 105/16(6)).

The two corpora were designed to be roughly similar in size in terms of both total token count and total page count, and cases were taken from only one division of Circuit Court of Cook County to enhance their comparability; for more on the corpus construction process and the specific contents of each corpus, see Griffin [16].

One demographic study of Sovereign Citizens charged with federal criminal offences found that they tend to be white males without college degrees [30], but such characteristics should not be presumed about the authors of the texts in the SCD corpus; while it was not possible to obtain comparable demographic information, both the distinct legal context (i.e. state level civil proceedings rather than federal criminal proceedings) and personal conversations with court staff involved in the text collection process make it seem likely that SCD authors are more heterogeneous along both racial and gender lines. Though there is no evidence as to the level of education of the SCD authors, given that extreme distrust of both lawyers and the legal system is fundamental to Sovereign Citizen conspiracy beliefs, it is assumed that Sovereign Citizens lack formal legal training.

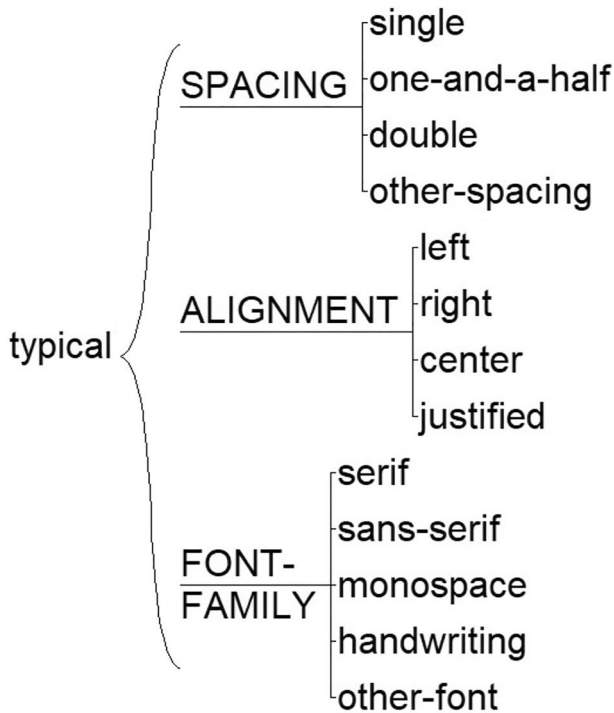
There is one additional limitation of both the LLD and SCD corpora which merits brief discussion here: because the texts which comprise the two corpora were generally received as greyscale .pdf files, it has not been possible to consider the degree to which the use of color plays a role in either LLD or SCD texts. Though this is not expected to have had a notable effect on the analysis of the LLD corpus, Sovereign Citizens have been previously described as making strategic use of red ink (or sometimes even human blood) in their texts [31, 32]; this findings of this study are not able to speak to the frequency of such practices.

### 3.2 Corpus Annotation

The contents of the LLD and SCD corpora were manually annotated according to a markup scheme adapted from Bateman's [33] Genre and Multimodality ("GeM") model. The GeM model was designed to enable "an account of document parts that is sufficiently well-defined to support reproducible analyses" [33] and is not only the best-developed framework for performing such an analysis [34], but also appears to be the only one; neither Malamatidou nor the authors of this study have been able to identify another framework which "support[s] thorough quantitative analyses" of static texts in this way [35]. Full implementation of the GeM framework, however, is incredibly time consuming; Hiippala reports taking roughly three years to complete the full markup of a corpus of 58 double pages of tourist brochures [36]. Given that the combined LLD and SCD corpora contain over 2300 pages, such an implementation was not a practical possibility. Instead, a simpler form of annotation was used, grounded in GeM's principle of treating a text as a "multi-layered semiotic artefact" [33]. Individual features were selected for consideration in this modified GeM markup through a combination of bottom-up analysis of the LLD and SCD corpora and with reference to features generally noted in descriptions of the two text types.

Using UAM Image Tool [37], each individual page of the texts in the LLD and SCD corpora was annotated at two levels: the first (the "typical" layer) noted the layout and design choices which characterized each text as a whole while the second





**Fig. 3** Layout and design features noted in the "Typical" layer of annotation

(the "features" level) noted the instances in which deviations occurred from a text's "typical" characteristics at the individual page level by labeling, for example, sections of italicization in a text which was generally written in plain type. The specific features noted in each layer of markup are shown below in Figs. 3 and 4.

Forward slashes in Fig. 4 indicate that a labeled feature contains multiple simultaneous forms of textual emphasis; "b/u/c/centered", for example, indicates that the relevant text has been bolded, underlined, capitalized, and centered. Further meanings of specific labels assigned as part of the "Typical" and "Features" annotation will be discussed below where relevant. For more information on the annotation process, see [16].

### 3.3 Heatmap Generation

Heatmaps are powerful tools for data visualization that have long been used in genomics research [e.g. 38, 39]. More recently, the use of heatmaps has become increasingly prominent in quantitative linguistic work, particularly when analyzing data with clear spatial elements [e.g. 40, 41]. Summarizing data in heatmap form allows for the two-dimensional simultaneous representation of both the frequency of a variable and its position in XY space. For some datasets, it is necessary to either simplify or project the relevant variables to fit into two dimensions. In this

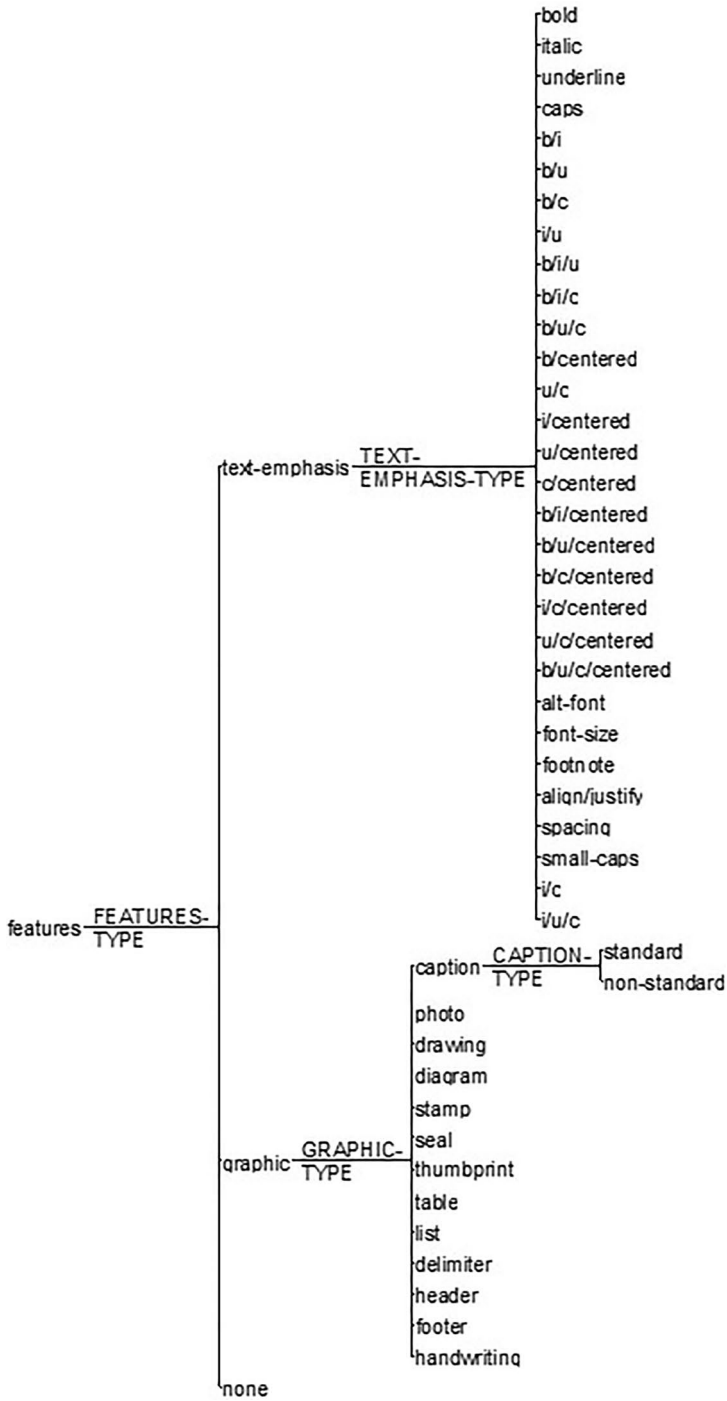


Fig. 4 Layout and design features noted in the "Features" layer of annotation

study, however, no such adjustments were necessary; heatmaps were used to directly examine trends in the distribution of the features listed in Fig. 4 across the pages of the LLD and SCD corpora. The heatmaps examined in this study were generated in RStudio [42] using the `ggplot2` library [43] and all work remained within the `tidyverse` system [44].

To generate the heatmaps examined below, start- and end-point XY coordinates were obtained for each occurrence of a given feature. These coordinates were extracted from the XML files generated by UAM Image Tool after manual annotation of each individual page in the two corpora. To account for variations in page size and image resolution, all extracted coordinates were then normalized to fit a standard US letter sized page (8.5 by 11 inches, or 1700 by 2200 pixels). To avoid potential distortions resulting from the examination of low frequency features, heatmaps were only generated for features occurring at least 10 times in a given corpus. Figure 5 shows a page from the SCD corpus with a single feature annotation highlighted:

It should be noted that, for simplicity's sake, the above figure shows just one of many annotations made on that page; every other occurrence of a relevant feature was similarly marked.

The first step in the heatmap generation process was the production of a series of histograms showing at which points on the page each feature occurred. These histograms retain the spatial information from the relevant feature's coordinates, so instead of creating bar plots displaying raw counts, which is the typical presentation of histograms, the histograms here show the number of occurrences in a given position as colored hexagons on an XY plane with the same relative dimensions as the pages in the LLD and SCD corpora. To do so, the top left and bottom right XY coordinates for each occurrence of a feature were reduced to a center point by adding the coordinates of one axis and dividing by 2. The higher the frequency of a given feature in a particular area, the darker the color of the hexagon used to represent that frequency in the corresponding area of the histogram. To make the visualization more intuitive, the orientation of the histograms was changed to match the top-to-bottom and left-to-right layout of a standard English-language page, meaning that a darker hexagon in the top left section of a histogram corresponds to a high number of occurrences in the top left section of a page. A histogram showing the distribution of the "drawing" feature in the SCD corpus can be seen below as Fig. 6:

All non-photographic images in the LLD and SCD corpora, such as the American flag highlighted in Fig. 5, were labelled "Drawing". As can be seen in Fig. 6, "Drawing" features occur most frequently in the top left corner of the page in the SCD corpus, slightly less frequently in the top center portion of the page, and only rarely in the bottom left corner.

Using the underlying spatial distributions revealed in the feature-based histograms, the final heatmaps were then generated via a kernel density estimation ("KDE") on a square grid. KDE is a non-parametric estimation of the probability density function of a population based on a sample of points [45]. The KDE performed in this study used the center points of the annotated features to produce smoothed density plots (i.e. heatmaps) [46]. Smoothing the data in this way reduces noise, making it easier to intuitively appreciate the distribution of the data [47]. The

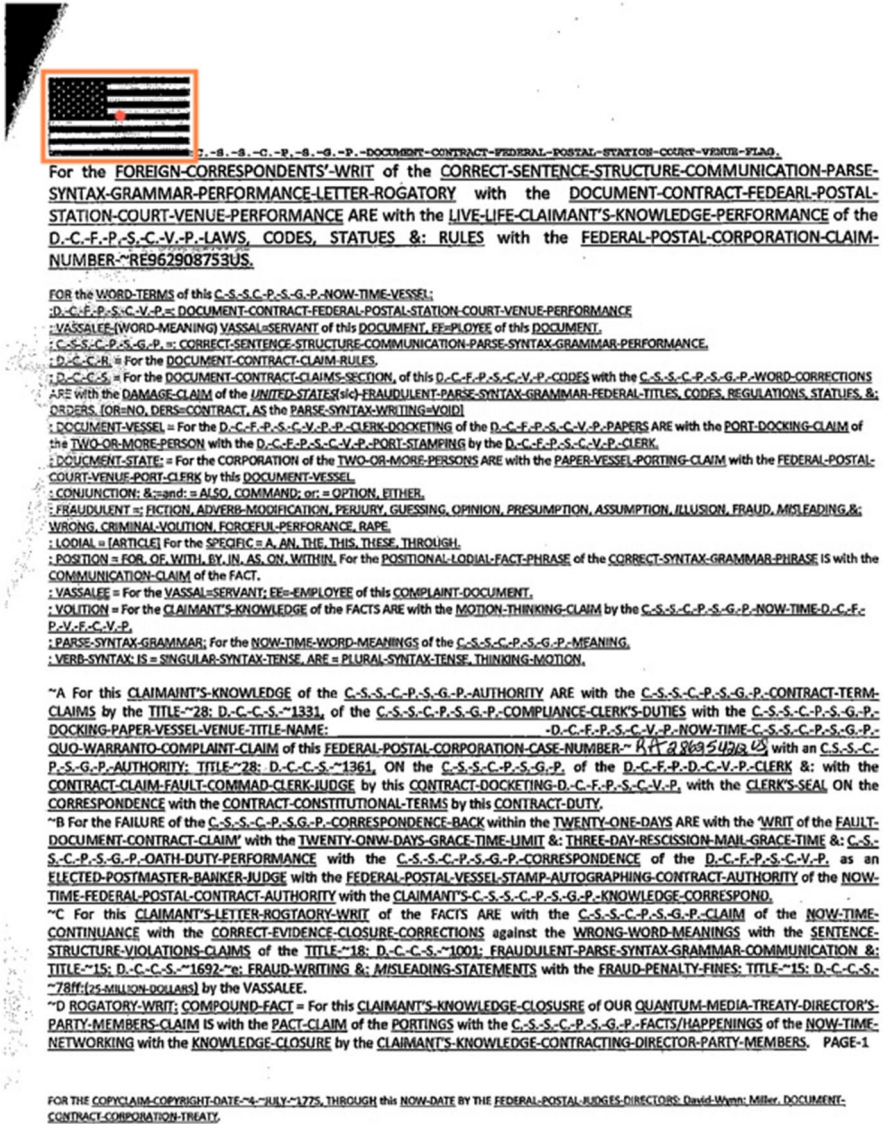
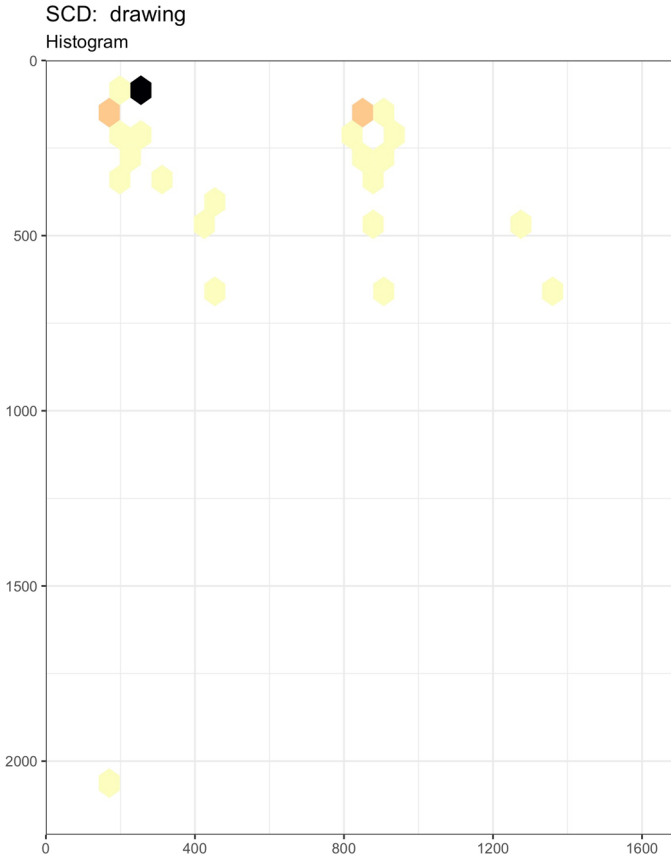


Fig. 5 Page from the SCD corpus with a single feature annotation highlighted

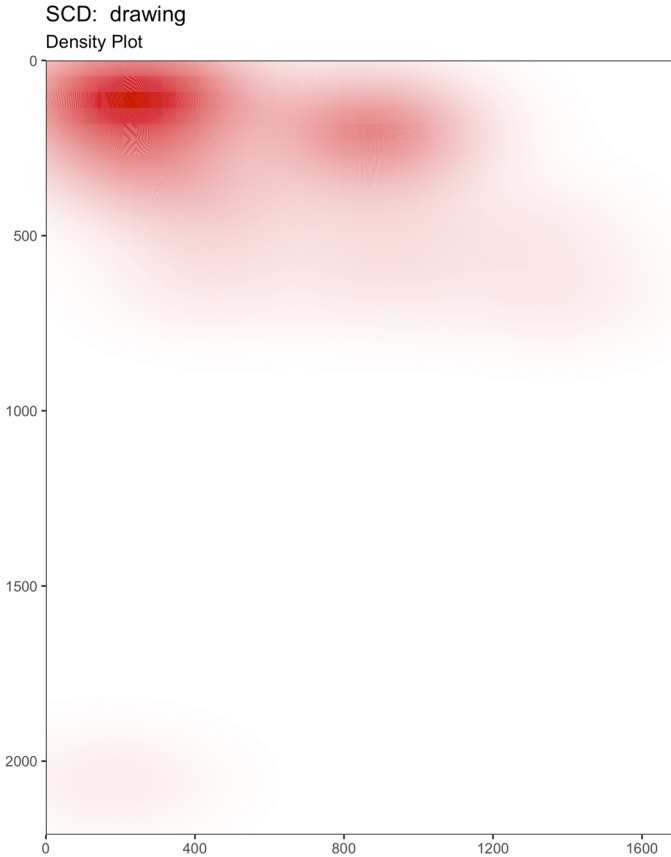
ggplot2 library provides the `geom_density` family of functions to calculate and display the results of a KDE; `stat_density_2d_filled()` was used for the heatmaps in this study. The heatmap displaying the distribution of the “Drawing” feature in the SCD corpus follows as Fig. 7:

While the data represented in Fig. 7 is the same as that in Fig. 6, it is now easier to both recognize the various “hotspots” and to visually compare their intensity.



**Fig. 6** Histogram showing the distribution of the "Drawing" feature in the SCD corpus, with darker hexagons indicating more frequent occurrences in a given position

In the hopes of encouraging the future use of heatmaps in linguistic research, the dataset and specific code used in the generation of the heatmaps and histograms for this study has been made available at <https://github.com/danaroemling/heatmaps>. Depending on the needs of future projects, there are a number of ways to adjust the visualizations produced, including the arguments `bins`, which indicates how many contour breaks are used, and `n`, which indicates how many grid points in each direction are included. Both allow for adjustments in the smoothing of the heatmaps. As a word of caution, future researchers employing this method of heatmap generation should be sure to keep the arguments consistent across graphs to ensure comparability; because this approach uses the center points of the individual features for its initial calculations, unusual shapes and, to some degree, the size of the shapes are not fully captured in the heatmaps. However, so long as all graphs are created by the same code, comparability remains intact.



**Fig. 7** Heatmap showing the distribution of the "Drawing" feature in the SCD corpus

#### 4 Signs of Authority in Contemporary Courtroom Filings

For the purposes of this study, the basic unit of analysis is the page, considered holistically [48]. All pages in the LLD and SCD corpora are vertically oriented and “linear”, meaning that they are clearly intended to be read in a certain order (in this case, from top to bottom and from left to right, without skipping any lines) [49]. The analysis of these two corpora begins with the “Typical” layer, describing the predominant layout and design choices which most commonly characterize LLD and SCD texts. Discussion then shifts to the content of the “Features” layer, examining the corpora’s use of textual emphasis and integration of graphic elements. Throughout the following sections, a bolded value in a table’s “ $\chi^2$ ” column indicates that, with a  $p$ -value  $< 0.01$ , a chi-square test found a statistically significant difference in the frequency of the relevant feature between the LLD and SCD corpora, while a dash in a “ $\chi^2$ ” column indicates that there was not a high enough overall frequency

**Table 2** Predominant interlinear spacing choices in the LLD and SCD corpora

Spacing	LLD (138 texts)		SCD (250 texts)		$\chi^2$
	Total	Percent	Total	Percent	
Single	28	20.3	145	58	<b>49.663</b>
1.5	10	7.2	33	13.2	2.6227
Double	100	72.5	72	28.8	<b>66.935</b>

**Table 3** Predominant text alignment choices in the LLD and SCD corpora

Alignment	LLD (138 texts)		SCD (250 texts)		$\chi^2$
	Total	Percent	Total	Percent	
Justified	81	58.7	96	38.4	<b>13.957</b>
Left	57	41.3	154	61.6	<b>13.957</b>

**Table 4** Predominant font family use in the LLD and SCD corpora

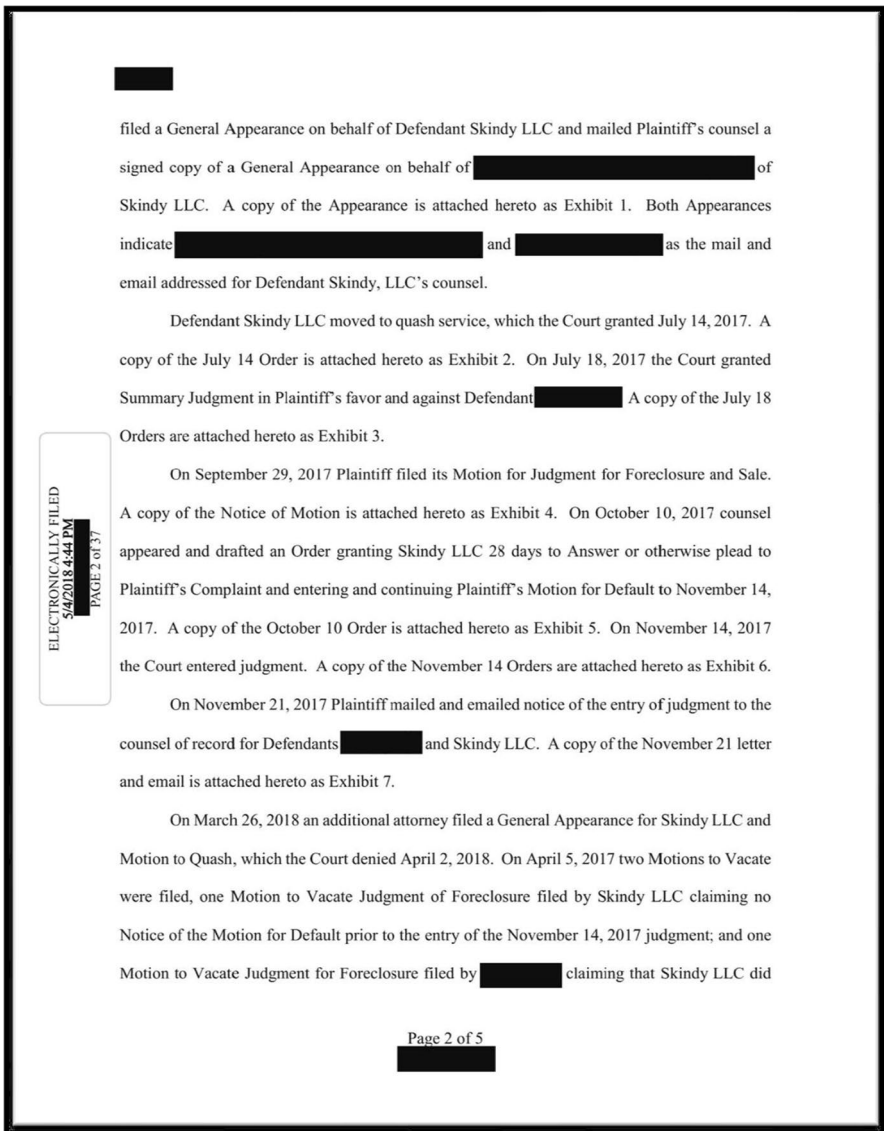
Font family	LLD (138 texts)		SCD (250 texts)		$\chi^2$
	Total	Percent	Total	Percent	
Serif	133	96.4	194	77.6	<b>22.264</b>
Sans-Serif	2	1.4	39	15.6	<b>17.373</b>
Monospace	2	1.4	7	2.8	–
Handwritten	1	0.7	10	4	–

to test for significance. In the discussion of the “Features” layer, counts have been normalized to reflect their expected occurrences per 100 pages.

#### 4.1 The “Typical” Layer

Tables 2, 3, and 4 present the predominant (i.e. most common when considering each text as a whole) choices of interlinear spacing, text alignment, and font family, respectively, used in the LLD and SCD corpora:

Based on the above tables, the average LLD text is likely to be written in a serif font that has been justified and double spaced, while the average SCD text is likely to be written in a serif font that has been left-aligned and single spaced. As compared to SCD texts, LLD texts are statistically significantly more likely to be double spaced, while SCD texts are significantly more likely to be single spaced. LLD texts are significantly more likely to be justified than SCD texts, while SCD texts are significantly more likely to be left-aligned. Though texts in both corpora are overwhelmingly written in serif fonts, a significantly higher number of SCD texts than LLD texts are written in sans-serif fonts. While there are texts which have been primarily handwritten or written in a monospace font in both corpora, in neither case are there enough instances to test for significance. Examples of pages demonstrating



**Fig. 8** Page displaying the predominant methods of interlinear spacing, font alignment, and font family choice of the LLD corpus

the predominant choices of interlinear spacing, text alignment, and font family are presented in Figs. 8 and 9:

In terms of features relevant to consideration of the “Typical” layer, Figs. 8 and 9 differ in their use of interlinear spacing and text alignment. The double spacing and justified text of the LLD page in Fig. 8 mean that there are fewer words on the page overall, giving a reader more “room to breathe” and consider what is being said



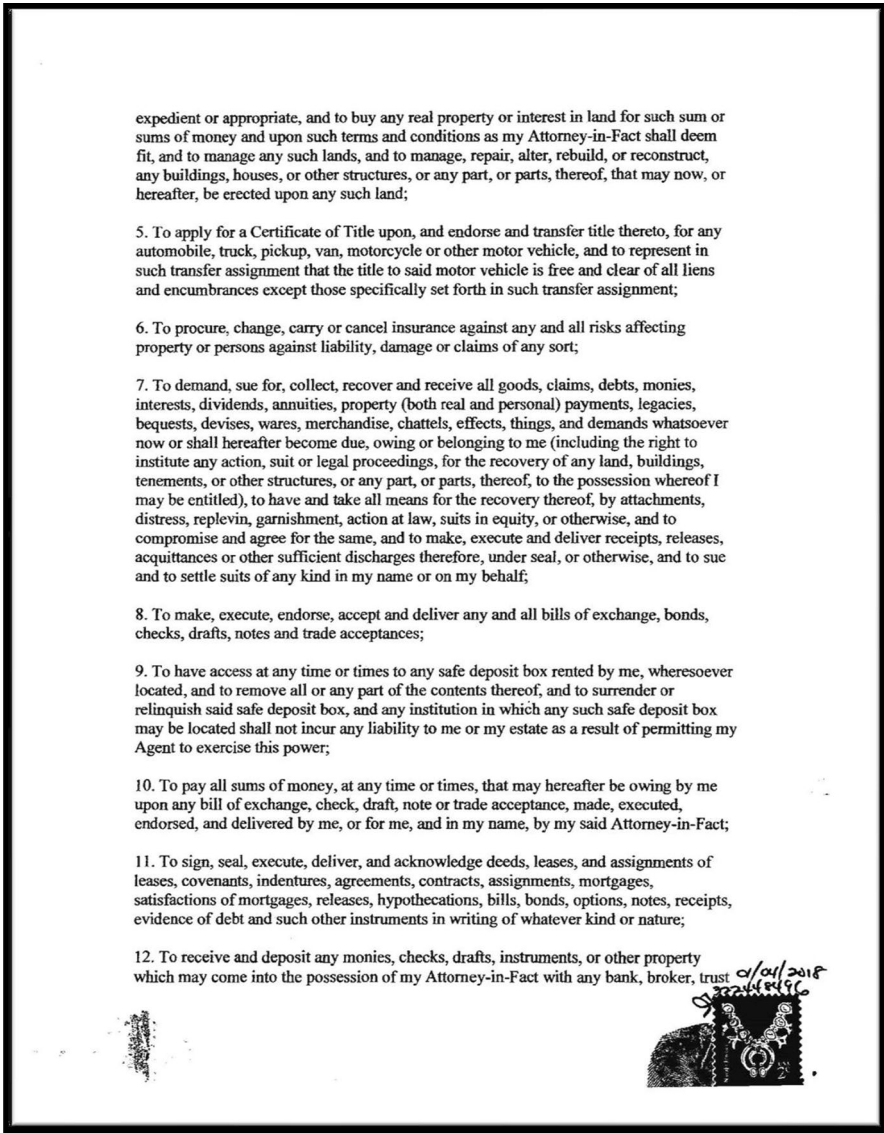


Fig. 9 Page displaying the predominant methods of interlinear spacing, font alignment, and font family choice of the SCD corpus

[50]. Conversely, the single spacing and left aligned text of the SCD page in Fig. 9 result in a sharper and more aggressive character [51] as well as more to read on the page, which a reader will have to work harder to fully process. The less white space there is on a page, the more “cramped [and] overcrowded” it can feel [50]. While that may not be desirable in a legal text meant to inform and persuade a reader, a higher density of signs of legal authority on a page is actually beneficial for the

“parasitic” purposes of Sovereign Citizen pseudolegal documents, inasmuch as they are less concerned with conveying their content than they are with their appearing authoritative.

It is important, however, not to be too quick to read intentionality into every such difference between the LLD and SCD corpora, particularly when there is a simpler and therefore, per Occam’s razor, more likely explanation. While the general tendency towards clarity and accessibility in LLD texts and the opposite trend in SCD texts is notable in that it highlights the theoretical difference in the priorities of texts in these two corpora, these differences may not have resulted from active decisions by the authors of SCD texts. For example, as shown in Table 2 through 4, the use of single spacing, left alignment, and sans serif fonts are all more common in SCD texts than in LLD texts; those three attributes are also the current default settings of both Microsoft Word and Google Docs. Given the popularity of Microsoft Office and Google’s G Suite in the United States, it is safe to assume that many, if not all, of the texts in the LLD and SCD corpora were prepared in one of these two programs and that the authors of a substantial portion of SCD texts simply did not modify the default settings. It is ultimately not possible, however, to determine the exact methods by which these texts were produced (though their frequent use of graphic elements and textual emphasis make non-computer-based methods of production such as via typewriter unlikely), or whether the elements which align with the default software settings were actively chosen or simply not considered.

With that said, even if the use of a given attribute in an SCD text was not actively considered by its author, that text’s pseudolegal nature should still be at the forefront of any analysis of its constituent parts. This is because SCD texts are ultimately more concerned with the aesthetics of authority than with cogent legal argumentation. In that sense, every signifier in a SCD text matters because it contributes to that text’s overall authoritative character; the use of single-spaced text, as mentioned above, can at once be the result of an author not changing the default settings in Microsoft Word at the same time that it also enhances the visual concentration of signs of legal authority on a page. The use of graphic elements and textual emphasis captured by the “Features” layer (see discussion in the following section) may make more immediately obvious contributions to that concentration of authority, but a text’s “Typical” layout and design factors are the background against which those “Features” are read, and in that way they are fundamental to understanding the relationship between the LLD and SCD corpora. For further discussion of the “Typical” features of LLD and SCD texts, particularly regarding the use of different font families and the structure of opening pages, see [16].

## 4.2 The “Features” Layer

As can be seen in Fig. 4, the “Features” layer looks at the use of two broad categories of LLD and SCD features: textual emphasis (i.e. the use of bolding, italicization, underlining, and capitalization in combination with changes in text size, alignment, and font style) and graphic elements, such as the use of list formatting, delimiters

**Table 5** Frequency of methods of individual emphasis in the LLD and SCD corpora

Individual emphasis	LLD (1169 pages)			SCD (1167 pages)			$\chi^2$
	Total	Per 100 pages	Percent	Total	Per 100 pages	Percent	
Bold	492	42	7.8	1199	103	15.2	<b>184.98</b>
Italic	2051	175	32.4	699	60	8.9	<b>1243.5</b>
Underline	329	28	5.2	506	43	6.4	<b>9.3127</b>
Caps	982	84	15.5	2026	174	25.7	<b>218.45</b>
Subtotal	3854	329	60.9	4430	380	46.2	<b>15.852</b>

**Table 6** Frequency of methods of combined emphasis in the LLD and SCD corpora

Combined emphasis	LLD (1169 pages)			SCD (1167 pages)			$\chi^2$
	Total	Per 100 pages	Percent	Total	Per 100 pages	Percent	
b/i	37	3	0.6	501	43	6.4	<b>319.74</b>
b/u	113	10	1.8	136	12	1.7	0.040392
b/c	272	23	4.3	449	38	5.7	<b>14.045</b>
i/u	65	6	1	108	9	1.4	3.1749
i/c	0	0	0	58	5	0.7	<b>45.003</b>
u/c	3	0	0	41	4	0.5	<b>23.932</b>
b/i/u	4	0	0.1	141	12	1.8	<b>101.89</b>
b/i/c	1	0	0	6	1	0.1	–
b/u/c	84	7	1.3	106	9	1.3	0.0004938
i/u/c	0	0	0	1	0	0	–
Subtotal	579	49	9.1	1547	133	19.6	<b>323.13</b>

(i.e. lines visually separating different parts of the page). The following sections first discuss the former category before moving on to an examination of the latter.

#### 4.2.1 Textual Emphasis in LLD and SCD Texts

The use of textual emphasis in the LLD and SCD corpora can be grouped into four subcategories: individual methods of emphasis (e.g. only bolding or capitalizing text), combined methods of emphasis (e.g. both bolding and capitalizing text), changes in alignment and emphasis (e.g. bolding, capitalizing and center-aligning text), and other methods of emphasis (e.g. the use of smallcaps or changes in font style). Tables 5, 6, 7, and 8 present the frequency of these categories of textual emphasis, respectively, in the LLD and SCD corpora. In each of the following tables, the “Percent” column reports the frequency of individual features relative to all methods of textual emphasis in the relevant corpora (i.e. compared to all features listed in Table 5 through 8 combined), and significance

**Table 7** Frequency of methods of alignment & emphasis in the LLD and SCD corpora

Alignment & emphasis	LLD (1169 pages)			SCD (1167 pages)			$\chi^2$
	Total	Per 100 pages	Percent	Total	Per 100 pages	Percent	
b/cen	55	5	0.9	59	5	0.7	0.49252
i/cen	6	1	0.1	0	0	0	–
u/cen	2	0	0	3	0	0	–
c/cen	9	1	0.1	49	4	0.6	<b>18.713</b>
b/i/cen	10	1	0.2	5	0	0.1	2.1438
b/u/cen	20	2	0.3	25	2	0.3	3.19E-27
b/c/cen	80	7	1.3	213	18	2.7	<b>35.326</b>
i/c/cen	1	0	0	3	0	0	–
u/c/cen	8	1	0.1	19	2	0.2	1.8711
b/u/c/cen	366	31	5.8	226	19	2.9	<b>73.867</b>
Subtotal	557	49	8.8	602	50	7.5	4.2615

**Table 8** Frequency of other methods of emphasis in the LLD and SCD corpora

Other emphasis	LLD (1169 Pages)			SCD (1167 Pages)			$\chi^2$
	Total	Per 100 pages	Percent	Total	Per 100 pages	Percent	
Align/justify	543	46	8.6	494	42	6.3	<b>27.279</b>
Alt font	24	2	0.4	183	16	2.3	<b>91.024</b>
Font size	3	0	0	247	21	3.1	<b>191.84</b>
Spacing	641	55	10.1	223	19	2.8	<b>325.83</b>
Footnote	110	9	1.7	134	11	1.7	0.010536
Smallcaps	12	1	0.2	9	1	0.1	0.88724
Subtotal	1333	113	21.1	1290	110	16.3	<b>41.971</b>

tests reported in the “Subtotal” lines were similarly performed with reference to the total overall use of textual emphasis in the two corpora.

The use of textual emphasis is overall more common in the SCD corpus than the LLD corpus. A statistically significant difference (indicated by a bold value in the  $\chi^2$  column in the above tables,  $p > 0.01$ ) was found in the frequency of the use of 16 of the above methods of textual emphasis, with 12 of those methods being more common in the SCD corpus than the LLD corpus. At the same time, intra-corpus trends were much stronger in the LLD corpus than in the SCD corpus; as seen in Table 5, LLD texts used italics as a method of individual emphasis more than they did bolding, underlining, and capitalization combined, and Table 7 shows that the combination of bolding, underlining, capitalization and centering was similarly the dominant LLD choice in the alignment and emphasis category. There are no similarly clear favorite methods of textual emphasis in the SCD corpus.

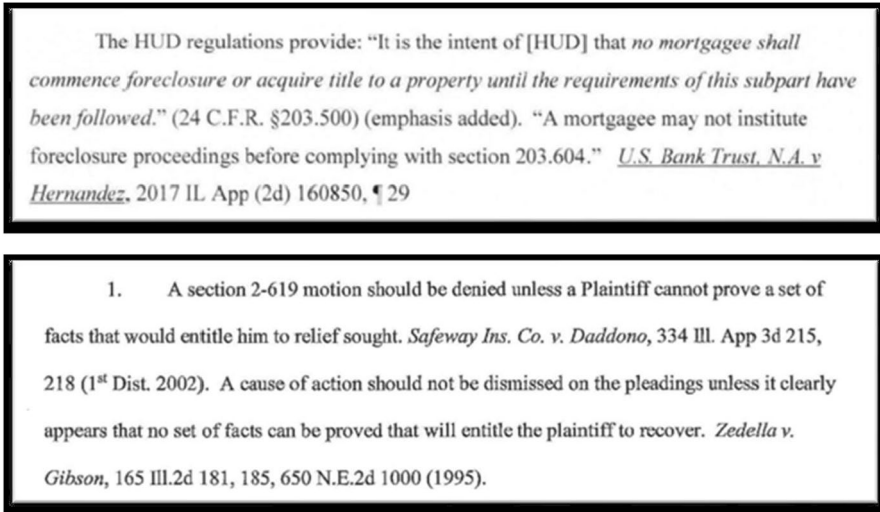


Fig. 10 Example uses of italics in the LLD corpus

Text is emphasized in a much broader array of contexts in the SCD corpus than it is in the LLD corpus. For example, LLD texts generally use italics to either indicate the particular relevance of a selection of text or as part of standard legal citation formatting, as seen in Fig. 10:

Even where an individual LLD text makes a choice that differs from the tendency of the corpus as a whole (e.g. by underlining, rather than italicizing, text to indicate relevance), that choice remains consistent within that text itself. This is not necessarily the case with SCD texts, where, as Fig. 11 shows, methods of textual emphasis can vary significantly even within the same page:

Citations are not underlined in paragraph B of Fig. 11 but they are in paragraph C(2). Quotations are bolded and/or underlined and/or italicized with no apparent logic behind the use of one method over another. Rather than the clear, systematic approach that appears to characterize LLD texts, this more chaotic style of emphasis again gives the impression that the concentration of legal signifiers matters more to the authors of SCD texts than clarity of content.

This “more is more” ethos means that emphasis is often applied in places in SCD texts which would be completely inappropriate in the LLD corpus. Capitalization, for example, is used to emphasize portions of text in both corpora. In the LLD corpus, capitalized as a method of individual textual emphasis is used almost exclusively with the names of parties to the relevant instances of litigation (e.g. “Plaintiff SMITH has filed suit against defendant MILLER as a result of...”). In the SCD corpus, however, a substantial portion of the capitalization used as a method of individual textual emphasis appears intended to stress the importance of particular concepts, as in Fig. 12.

Emphatic capitalization such as that seen in Fig. 12 can come across to readers as shouting; particularly when combined with the dense and “jagged” overall

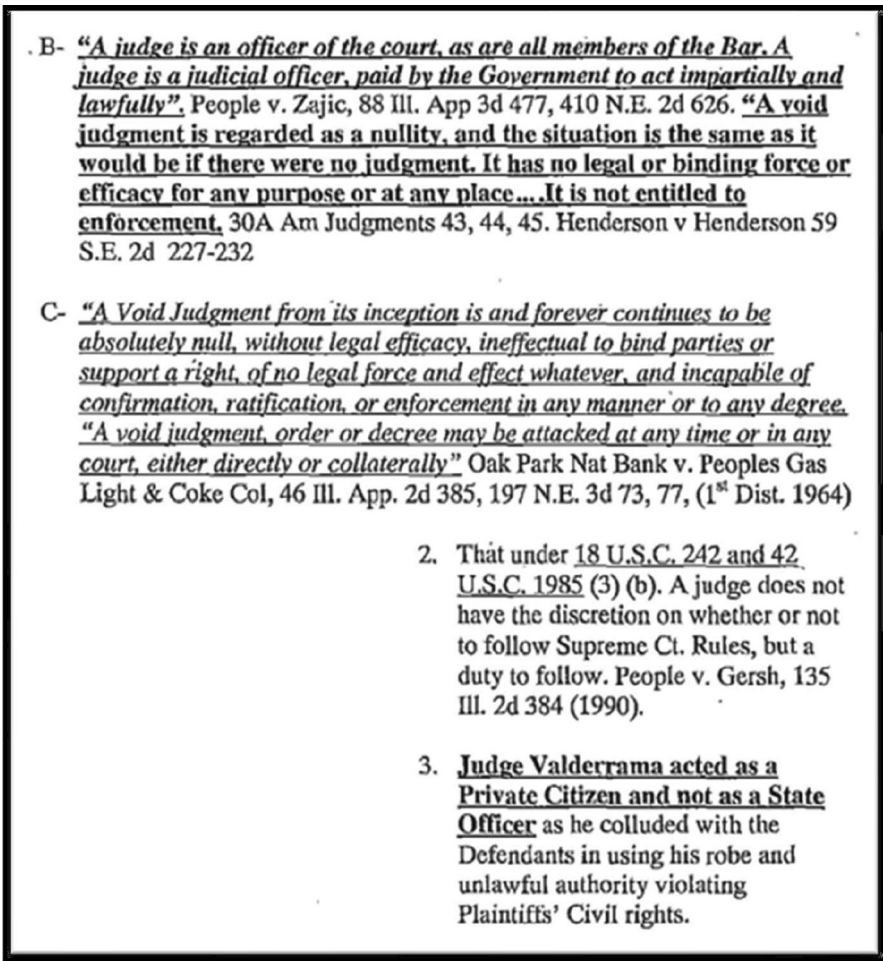


Fig. 11 Inconsistent textual emphasis in an SCD text

appearance of many SCD texts (see previous section), this gives the impression that SCD texts are intended to overwhelm their readers rather than convince them of the merits of a particular legal theory. For more on the use of emphatic capitalization in SCD texts, see [9].

#### 4.2.2 Shared Graphic Elements in LLD and SCD Texts

This section compares both the frequency and spatial distribution of graphic elements in the LLD and SCD corpora. The presence of graphic elements is perhaps the most popularly commented upon aspect of SCD texts [e.g. 31, 32], with thumbprints and postage stamps regularly singled out as their most visually distinctive features. A quantitative comparison of the use of graphic elements in the LLD and SCD

and complete registration statement with the State Attorney General as a foreign principle. It's a VIOLATION of the 11th Amendment for a FOREIGN CITIZEN to INVOKE the JUDICIAL POWER of the State.

Fig. 12 Examples of emphatic capitalization in the SCD corpus

Table 9 Frequency of graphic elements in the LLD and SCD corpora

Graphic feature	LLD (1169 pages)			SCD (1167 pages)			$\chi^2$
	Total	Per 100 pages	Percent	Total	Per 100 pages	Percent	
Caption	136	12	5.4	195	17	5.1	0.18462
Photo	3	0	0.1	4	0	0.1	–
Drawing	0	0	0	34	3	0.9	<b>20.97</b>
Stamp	0	0	0	18	2	0.5	<b>10.332</b>
Seal	41	4	1.6	105	9	2.7	<b>8.0855</b>
Thumbprint	0	0	0	52	4	1.4	<b>33.024</b>
Table	17	1	0.7	0	0	0	<b>23.314</b>
List	782	67	30.9	925	79	24.2	<b>34.737</b>
Delimiter	356	30	14.1	814	70	21.3	<b>52.226</b>
Header	19	2	0.8	90	8	2.4	<b>22.241</b>
Footer	1045	89	41.3	684	59	17.9	<b>231.53</b>
Handwriting	129	11	5.1	901	77	23.6	<b>420.76</b>
Total	2528	216	–	3822	328	–	

corpora, however, reveals they are not the only features which merit closer examination. Table 9 lists the frequency of graphic elements in the LLD and SCD corpora:

As in the previous section, a bolded value in the  $\chi^2$  column in Table 9 indicates that there is a statistically significant difference ( $p > 0.01$ ) in the frequency of a given feature between the two corpora. Ten of the 12 features in the above Table appear significantly more in one corpus than the other, with only the use of tables and footers being more frequent in the LLD corpus than in the SCD corpus.

the District. This Court, however, “owes no deference to the PAC’s nonbinding resolution of [a FOIA] request.” *Garlick v. Office of Public Access Counselor*, 2013 IL App (1<sup>st</sup>) 122444, ¶11; see also 5 ILCS 140/11(f) (review of non-binding PAC opinions is *de novo*).

Fig. 13 Footer from an LLD text with a centered page number

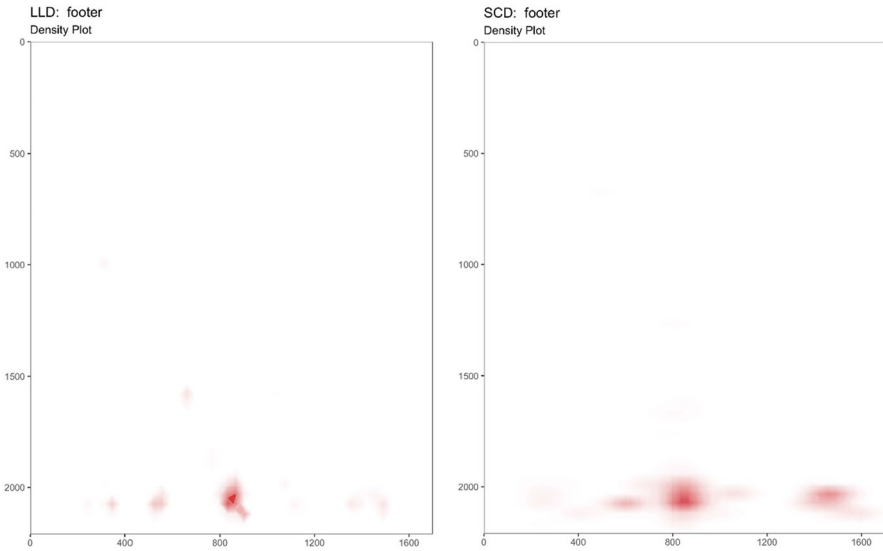


Fig. 14 Heatmaps showing the distribution of footers in the LLD and SCD corpora

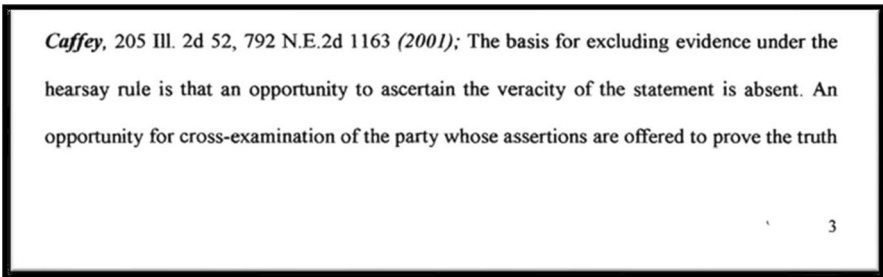


Fig. 15 Footer from an SCD text with a right-aligned page number

Footers, defined here as text present at the bottom of page which is clearly separate from that page's main body text, are present throughout both LLD and SCD texts, though they appear approximately one and a half times as frequently in the LLD corpus as they do in the SCD corpus. Page numbers are the most common, and frequently the only, content of footers in either corpus. In the LLD corpus, they typically appear centered at the bottom of the page, as in Fig. 13:

LLD footers may also contain limited additional information, such as a reference to either a court-assigned case number or internal filing numbers used by law firms, but this is relatively uncommon. As seen in the heatmaps below in Fig. 14, LLD footers appear so overwhelmingly in the bottom center of the page that other positions barely register. SCD footers, by way of contrast, have a notable secondary hot-spot in the bottom right corner:



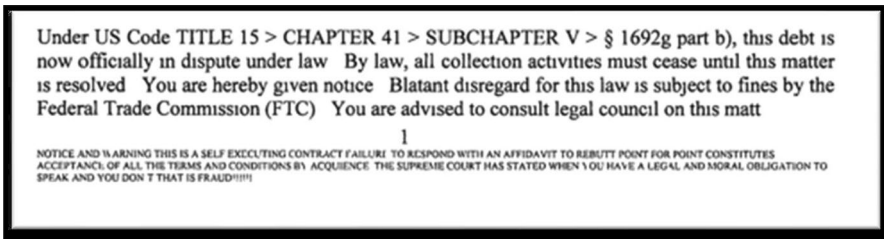


Fig. 16 Footer from an SCD text with accompanying text

As with some of the differences in the prevalence of “Typical” features between the LLD and SCD corpora discussed above, this secondary hotspot more likely stems from a lack of active consideration than it does from purposeful placement. Not only does this position for footnotes once again match up with the default placement in many versions of Microsoft Word, but also the SCD texts which have page numbers in their bottom right corner rarely have any additional content in that location. Figure 15 shows one a typical example from an SCD text:

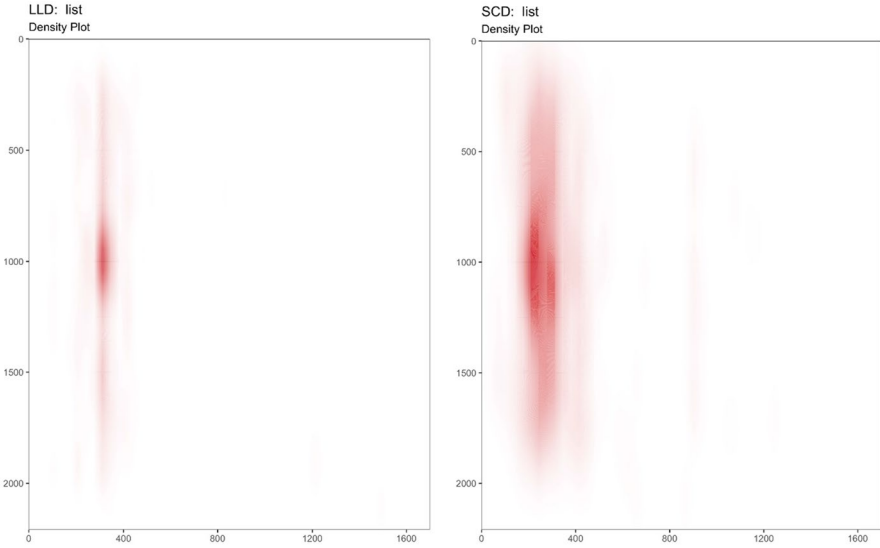
Where the features of SCD texts do not align with either what would be expected of LLD texts or with default word processor settings, there is generally a clear intent behind such deviations. Figure 16 presents a footer from an SCD text which contains both a centered page number (as is typical of LLD texts) and a “NOTICE AND WARNING”:

The text below the page number in Fig. 16 reads:

NOTICE AND WARNING THIS IS A SELF EXECUTING CONTRACT FAILURE TO RESPOND WITH AN AFFIDAVIT TO REBUTT POINT FOR POINT CONSTITUTES ACCEPTANCE OF ALL THE TERMS AND CONDITIONS BY ACQUIENCE THE SUPREME COURT HAS STATED WHEN YOU HAVE A LEGAL AND MORAL OBLIGATION TO SPEAK AND YOU DON'T THAT IS FRAUD!!!!!!

No footer in the LLD corpus contains comparable accompanying text. This “NOTICE AND WARNING”, which is repeated on the bottom of every page of the SCD text in which it appears, contains both multiple typos (“REBUTT” and “ACQUIENCE”) and an impressive array of distinctly Sovereign Citizen pseudolegal stylistic features, including emphatic capitalization (accompanied by no fewer than six consecutive exclamation marks), misstatements of principles of contract law, the use of second person in reference to the reader, and a contraction. While this quantity of text in a footer is on the higher end of that found in the SCD corpus, it goes to show that when the authors of SCD text actively choose to deviate from the features which characterize LLD texts, they are rarely subtle in doing so, and they often do so with a flurry of legal signifiers.

The use of list formatting in the two corpora provides another example of the Sovereign Citizen heightening of a feature present in LLD texts. As seen in Table 9, lists occur significantly more frequently in the SCD corpus than they do in the LLD corpus (at a normalized rate of 79 times per 100 pages as compared to



**Fig. 17** Heatmaps showing the distribution of lists in the LLD and SCD corpora

67 time per hundred pages). The heatmaps in Fig. 17 display the spatial distribution of lists in both corpora:

As mentioned above, hotspots in the heatmaps in this study are concentrated on the center points of the occurrences of the relevant features. Accordingly, the LLD heatmap indicates that the typical center point of the lists in that corpus were roughly halfway up the page, with relatively little variation in either height or indentation, not that lists in the LLD corpus were frequently very short. Lists in the SCD corpus, by way of contrast, display a higher degree of both vertical and horizontal variation in their center points, indicating that they frequently varied in length and that they often contained multiple levels. Figures 18 and 19 provide examples of list formatting in the LLD and SCD corpora, respectively.

LLD texts tend to favor single level lists while SCD texts are more likely to employ multi-level lists. The list in Fig. 19, for example, contains five distinct sub-levels, leading to unwieldy potential citations to document sections such as “7.1(c)(2)(A)”. While this depth of list would not be out of place in a contract or statute (two legal genres which have clearly influenced its design), it is markedly out of place in a courtroom filing. In this way, it seems to be another example of the “heightening” of legitimate legal features present in SCD texts.

### 4.2.3 Graphic Elements Unique to the SCD Corpus

Three graphic elements noted in the “Features” layer are unique to SCD texts: drawings, postage stamps, and thumbprints. Given that uniqueness and the fact that their presence cannot be accounted for by any default word processor settings, it is likely that their inclusion is the result of active consideration by the authors of the texts in

- E. Defendant admits the allegation of Paragraph 3, Section E of Plaintiff's Complaint.
- F. Defendant admits the allegation of Paragraph 3, Section F of Plaintiff's Complaint.
- G. Defendant admits the allegation of Paragraph 3, Section G of Plaintiff's Complaint.
- H. Defendant lacks sufficient knowledge to either admit or deny the allegation of Paragraph 3, Section H of Plaintiff's Complaint, and accordingly demands strict proof thereof.
- I. Defendant lacks sufficient knowledge to either admit or deny the allegations of Paragraph 3, Section I of Plaintiff's Complaint and accordingly demands strict proof thereof.
- J. Defendants deny the allegations of Paragraph 3, Section J of Plaintiff's Complaint and accordingly demands strict proof thereof, including, but not limited to, production of the original Mortgage and the original Note.
- K. Defendant admits the allegations of Paragraph 3, Section K of Plaintiff's Complaint.
- L. Paragraph 3, Section L of the Complaint is a statement of Plaintiff's intent and therefore requires no response from Defendant.
- M. Paragraph 3, Section M of the Complaint is a statement of Plaintiff's intent and therefore requires no response from Defendant.
- N. Paragraph 3, Section N of the Complaint is a statement of Plaintiff's intent and therefore requires no response from Defendant.
- O. Paragraph 3, Section O of the Complaint is a statement of Plaintiff's intent and therefore requires no response from Defendant.
- P. Paragraph 3, Section P of the Complaint is a statement of Plaintiff's intent and therefore requires no response from Defendant.
- Q. Paragraph 3, Section Q of the Complaint is a statement of Plaintiff's intent and therefore requires no response from Defendant.
- R. Paragraph 3, Section R of the Complaint is a statement of Plaintiff's intent and therefore requires no response from Defendant.
- S. Paragraph 3, Section S of the Complaint is a statement of Plaintiff's intent and therefore requires no response from Defendant.

Fig. 18 List formatting in an LLD text

which they appear. The heatmaps in Fig. 20 reveal that these three features appear in complementary distribution, suggesting that each has a unique intended function:

Though there is some variation (particularly in the placement of thumbprints) a clear hotspot is visible in each of the above heatmaps: drawings are most likely to occur in the top left corner of a page, postage stamps in the bottom right, and thumbprints in the bottom left.

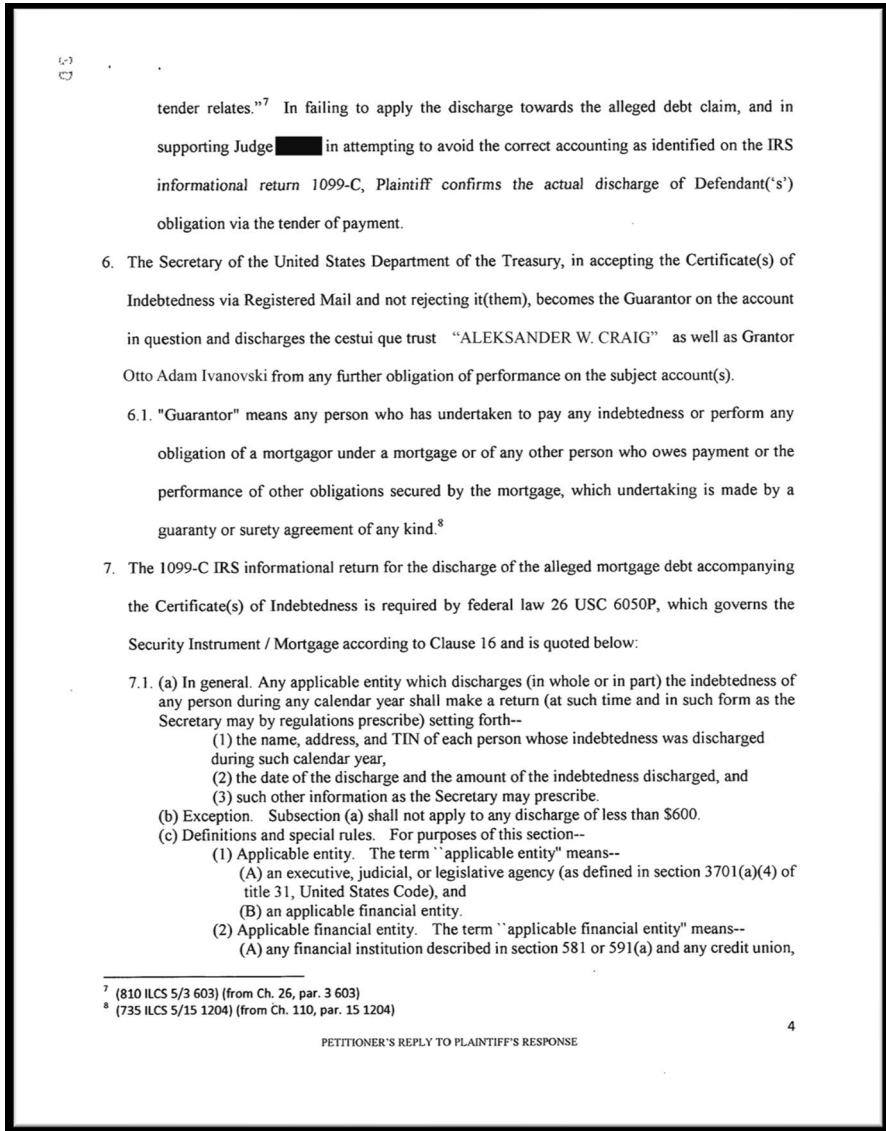
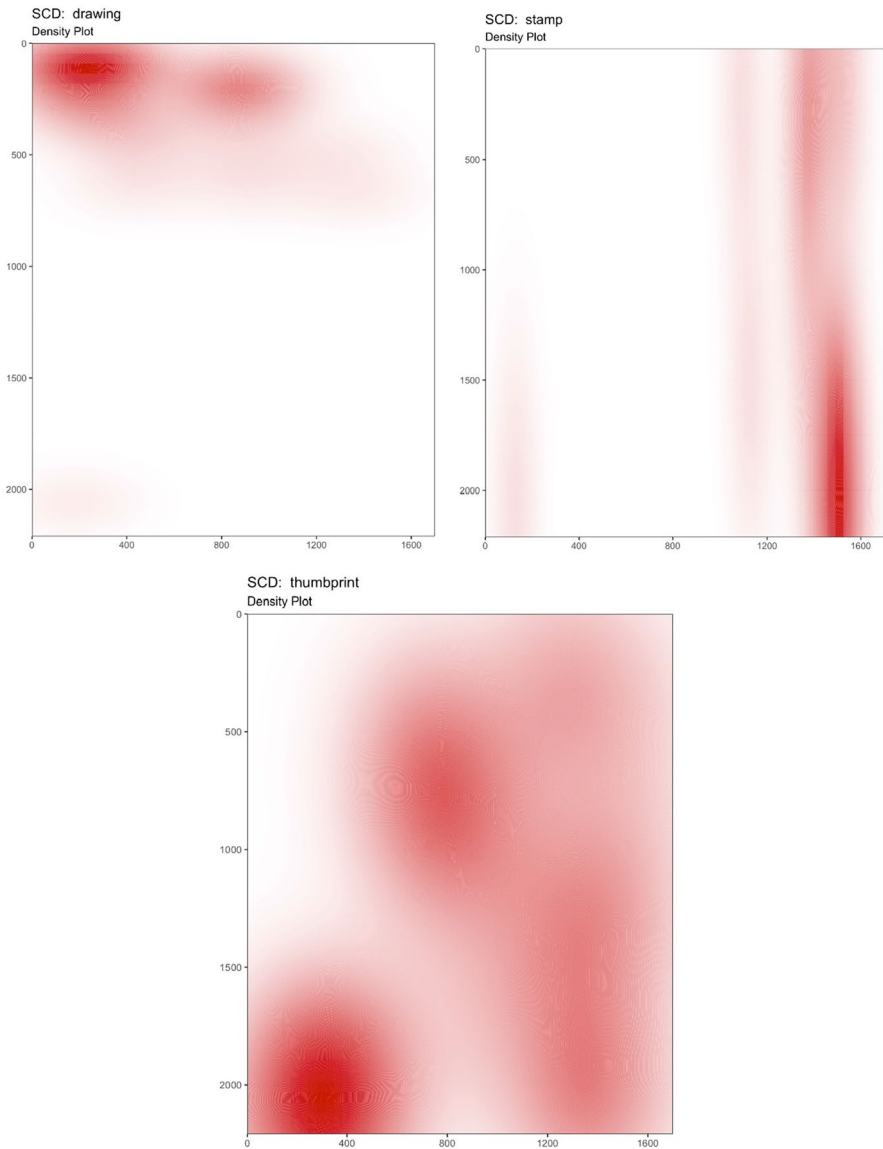


Fig. 19 List formatting in an SCD text

Approximately 60% of the drawings that appear in SCD texts do so on the first page, generally as part of a larger formation approximating the “caption” found in LLD texts, which is “the introductory part of a court paper stating the names of the parties, the name of the court, the docket or file number, and a description of the paper” [52]. The majority of drawings in the SCD corpus are clearly related to the US federal government, as seen in Fig. 21.



**Fig. 20** Heatmaps showing the distribution of drawings, stamps, and thumbprints in the SCD corpus

Notably, there are no drawings of Illinois- or Chicago-specific images in the SCD corpus, despite all texts in that corpus having been filed in state level trial court in Chicago, not in a federal court. Therefore, these drawings are evidence of a different sort of heightening based on an appeal to a higher (jurisdictional) power, rather than on an increase in the concentration of a given graphic element.

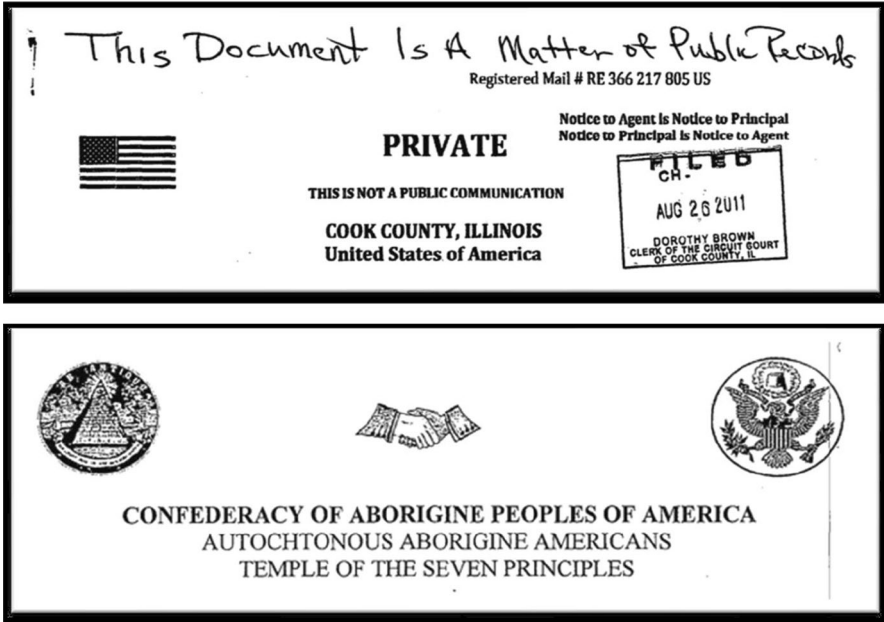


Fig. 21 Drawings in the SCD corpus

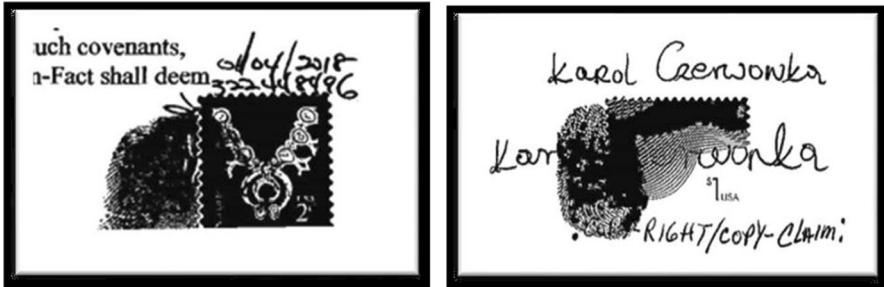


Fig. 22 Postage stamps accompanied by other distinctive Sovereign Citizen features in the SCD corpus

In the SCD corpus, graphic elements are often used in combination; every occurrence of a postage stamp in an SCD text is accompanied by a handwritten signature, and half are also accompanied by a thumbprint, as in the examples is Fig. 22.

When used in courtroom filings, Sovereign Citizens believe that postage stamps transform them into the “Postmaster” of their own personal nation state, while thumbprints, particularly when made in one’s own blood and used in combination with a signature, prove that a Sovereign Citizen is a “natural person” rather than a “strawman” [25, 32]. Without engaging further with these pseudolegal theories, it is clear that both features are intended to reinforce the apparent authority of the authors of the texts in which they appear.

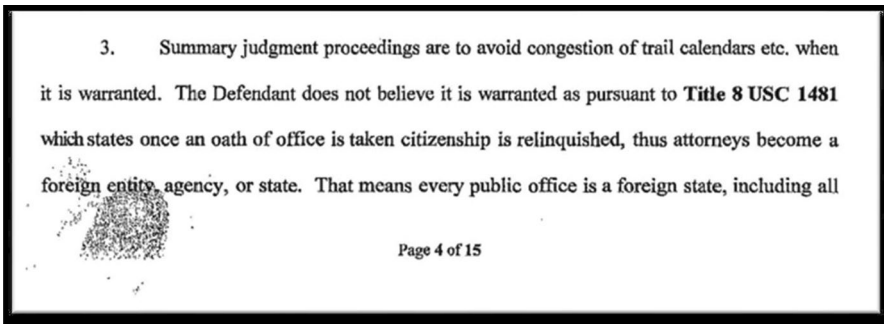


Fig. 23 Thumbprint appearing without other graphic elements in the SCD corpus

Unlike postage stamps, thumbprints often appear on their own, and always do so when they are located in the bottom left corner of a page, as in Fig. 23.

SCD texts that use thumbprints in this way do so across multiple pages, in many cases on every page. On several occasions, thumbprints were placed in a similar position on the reverse side of a page, where they were the only feature of any kind present.

Though thumbprints do not appear in the LLD corpus, they still have a role in the legitimate legal system; Illinois state law, for example, requires notaries to record a signer's right thumbprint when notarizing certain documents related to the transfer of property [53] and both the American Association of Notaries and the National Notary Association recommend recording a signers' thumbprint whenever possible [54, 55]. Given the Sovereign Citizens' apparent preference for visually impactful legal signifiers, it seems plausible that the use of thumbprints in SCD texts either has its origins in or has been significantly bolstered by this practice. That does not mean, however, that the heightening process stops with the use of thumbprints; as seen in Fig. 24, even such a distinctively Sovereign Citizen feature can be further "heightened".

The above page includes a number of elements which clearly distinguish SCD texts from LLD texts, but its most notable feature is doubtless the full footprint running diagonally across the page. This is not the only reported instance of a Sovereign Citizen-produced text being "stamped" in this way [56], but it is the only footprint present in either the LLD or SCD corpora. While this study is therefore not able to point to any broader trend in the use of footprints in SCD texts, Fig. 24 is nevertheless useful as an example of how even the most distinctive features of SCD texts can themselves be heightened while still retaining a connection to the legitimate legal system. Just as the use of thumbprints in SCD texts may have its roots in notary forms, the use of footprints may plausibly have sprung from a different legitimate legal document: birth certificates. Hospitals in the United States have recorded a baby's footprints as part of official birth certificates since the 1960s [57], meaning that their integration into SCD texts easily parallels the rationale for the inclusion of thumbprints (i.e. to prove one's status as a "flesh and blood" person). Assuming the heightening trend of SCD texts relative to LLD texts continues, it would not be surprising to see an increasing number of footprints or other visually impactful features.

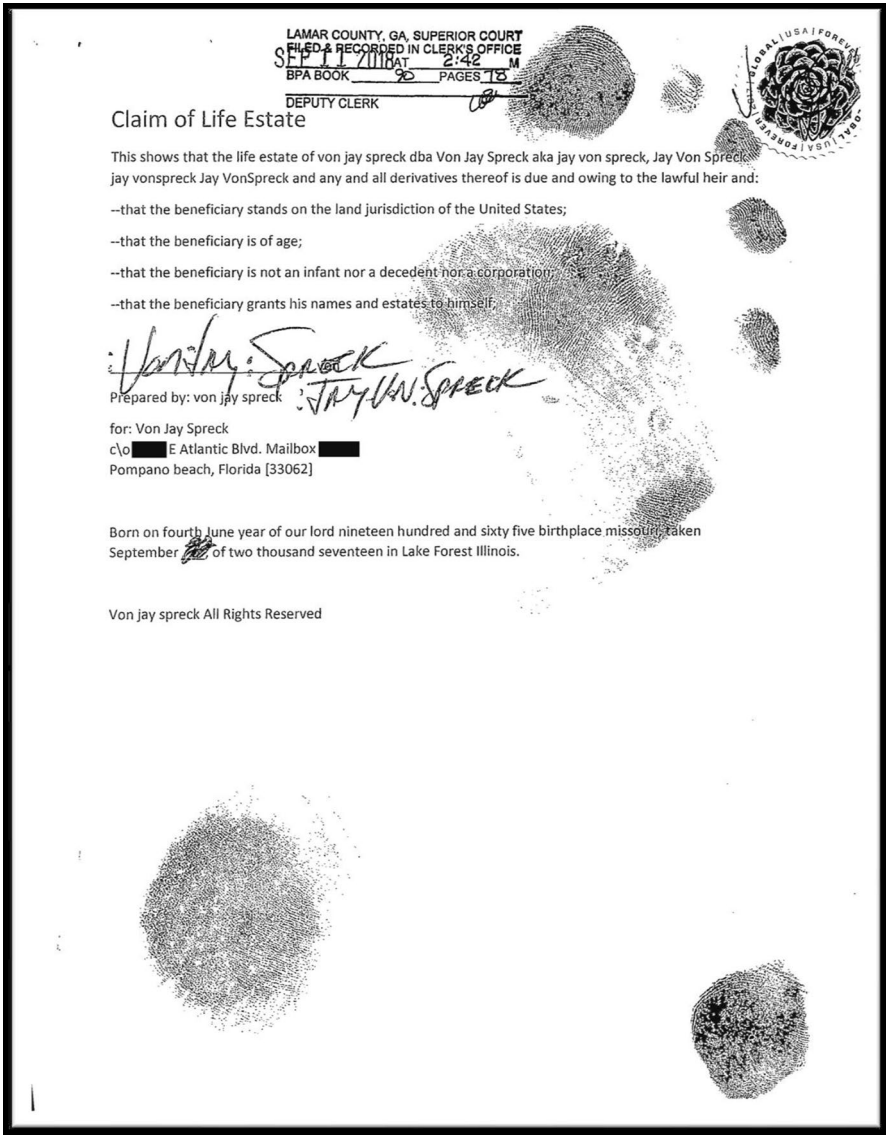


Fig. 24 SCD text featuring both a thumbprint and a footprint

## 5 Conclusion

In line with the theme of this special issue, this article has examined the spatial dynamics at play in the movement of signs of legal authority between legal and pseudolegal texts. This examination has been both literal, via the examination of their positioning on the page, and metaphorical, via the consideration of the changes of apparent purpose resulting from the movement of these signs from legitimate



legal texts to Sovereign Citizen pseudolegal texts. Both dimensions of this discussion have made clear the degree to which the layout and design features of SCD texts are inspired, but not necessarily restricted, by the layout and design features of LLD texts.

Signifiers culturally associated with the legal system often index the presence of legal authority more effectively than they communicate specific legal content. Pseudolaw takes advantage of this gap between such signifiers' authoritative indexicality and their actual legal functions in its attempts to appropriate the authority of the legitimate legal system. When used in Sovereign Citizen pseudolegal texts these legal signifiers are often "heightened", appearing in greater numbers, in more positions, and in a wider variety of discursive contexts than they do in legitimate legal texts. Though the specific claims made in Sovereign Citizens' pseudolegal writings may seem nonsensical to those outside that conspiracy movement, there nevertheless appears to be a connection between even their more outlandish elements and legitimate legal signifiers (e.g. thumbprints made in blood and thumbprints in notarized documents). Sovereign Citizen texts can be read as instances of "lexomancy", or imitative magic in which legal signifiers are copied in an effort to appropriate the appearance (if not the fact) of legitimate legal authority. Given the above, the study of the relationship between legal and pseudolegal texts, particularly the ways in which they employ methods of textual emphasis and graphic elements, reveals much about the way legal signifiers operate both inside and outside of their original context.

In addition to comparing the frequency of legal signifiers in the LLD and SCD corpora, this study has also compared their spatial distribution via the generation of a series of heatmaps. Though relatively uncommon in contemporary linguistic studies, the use of heatmaps allows for the straightforward quantitative analysis of datasets with clear spatial dimensions and is ideally suited for the examination of static texts. To encourage the wider use of heatmaps in linguistic research, the R code used in this study has been made available at <https://github.com/danaroemling/heatmaps>. This code is based on the `ggplot2` library and is therefore highly customizable. It is also agnostic as to the source of the data used to generate the heatmaps; while UAM Image Tool was used here, other programs will likely be better suited for the needs of future studies.

This study is presented as a jumping off point both for the greater integration of heatmaps into linguistic research and for future research into the semiotics of legal authority. In the former case, more frequent quantitative consideration of texts' spatial aspects will help to better capture their full discursive context. In the latter, the examination of a wider array of data will help identify even more fundamental aspects of legitimate legal authority and the ways in which it is appropriated for pseudolegal use. The practice of pseudolaw goes far beyond what was examined in this study, but before it can be properly addressed, its mechanisms must be more fully understood.

## Declarations

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