

Lists in Legal Drafting: How Brain Science Can Help Student Drafters Produce Documents That Are Easier to Read and Comprehend

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It is no surprise that teachers encourage students more than ever to use headings and lists as they learn how to write documents that are accessible to the reader. In the age of information overload, most of us have recognized that our attention spans have decreased.¹ If a point isn't being made quickly, or if the information is difficult to wade through, our minds wander off in another direction to some other type of information that is more easily attainable. Woe to the teacher who assigns a 90-minute lecture to watch in preparation for class. There is no hope that any information would be retained from that assignment, nor even that many students would complete the viewing.

Teachers themselves are also not immune from the decreased attention span and the need to receive information quickly and with ease. There is no law professor (or boss or judge) who can turn the page on a piece of writing, see that the entirety of the page is a big block of text, and actually be able to read it without feeling physically uncomfortable and having a desire to just skip

¹ See Ranieri & Co., *Changing Attention Span and What It Means for Content* (Jan. 18, 2021), <https://www.ranieriandco.com/post/changing-attention-span-and-what-it-means-for-content-in-2021> (“A recent study by Microsoft concluded that the human attention span has dropped to eight seconds — shrinking nearly 25% in just a few years.”).

to the end. We live in a world in which ease of access to information is a necessity for us to function.

Using headings and lists has always been encouraged as a way to keep a reader's attention and focus. But there is an art to constructing a clause or document using lists under an appropriate heading. Although items may be listed under a heading, this does not guarantee that the clause or document can be easily comprehended or retained.

Examine these two clauses:

PETS

Tenant may ONLY keep EITHER one dog OR no more than two cats for an additional \$75 per pet, per month due at payment of monthly rent. Tenant agrees to disclose any and all pets residing in the apartment and the pet(s) is/are kept in the Tenant's unit at all times. Tenant must be up-to-date with proper medicines and provide all required vaccinations as per a veterinarian and according to state code for the pet(s). Tenant will share pet(s)' medical history with Landlord upon request. Tenant must promptly remove any pet waste from the property, including the courtyard and the parking lot, and Tenant agrees that upon the termination of this Agreement, any costs that are necessary to clean, deodorize, or repair any part of the property resulting from having a pet(s) may be deducted from Tenant's security deposit. The pet(s) will be allowed out of the pet owner's unit or yard only under the complete control of a responsible human companion and on a hand-held leash or in a pet carrier. Any damage to the exterior or interior of the premises, grounds, flooring, walls, trim, finish, tiles, carpeting, or any stains, etc., caused by the pet(s) will be the full financial responsibility of the resident. Pet(s) will be provided with adequate and regular veterinary care, as well as ample food and water, and Tenant will not leave the pet(s) unattended for any undue length of time. Landlord will not be responsible for any injury caused by the pet(s).

PETS

Tenant may ONLY keep EITHER one dog OR no more than two cats under the following conditions and for an additional \$75 per pet, per month due at payment of monthly rent:

- a. Tenant agrees to disclose any and all pets residing in the apartment
 - (i) AND the pet(s) is/are kept in the Tenant's unit at all times.
- b. Pet(s) must be up-to-date with proper medicines.
 - (i) AND all required vaccinations as per a veterinarian and according to state code for the pet(s).
 - (ii) AND Tenant will share pet(s)' medical history with Landlord upon request.
- c. Tenant must promptly remove any pet waste from the property, including the courtyard and the parking lot.
- d. Tenant agrees that upon the termination of this Agreement, any costs that are necessary to clean, deodorize, or repair any part of the property resulting from having a pet(s) may be deducted from Tenant's security deposit.
- e. The pet(s) will be allowed out of the pet owner's unit or yard only under the complete control of a responsible human companion and on a hand-held leash or in a pet carrier.
- f. Any damage to the exterior or interior of the premises, grounds, flooring, walls, trim, finish, tiles, carpeting, or any stains, etc., caused by the pet(s) will be the full financial responsibility of the resident.
- g. The Tenant will provide adequate and regular veterinary care, as well as ample food and water, and will not leave the pet(s) unattended for any undue length of time.
- h. Landlord will not be responsible for any injury caused by the pet(s).

Most would agree that the vertical list of information in the second version of this clause makes the material more comprehensible.

Even at first glance, the second text is much more appealing to the reader than the first. When reading the second version, however, readers can immediately sense distractions. Some of them come from the use of the Roman-numeral subheadings that appear in only two items of what is a very lengthy list. Most legal readers also recognize almost immediately that the clauses lack parallel structure, which is annoying to anyone who does a considerable amount of “list” reading. All these factors contribute to the disconnect that the brain might be experiencing while trying to process and absorb the clause’s provisions. There are organic (scientific) reasons why this is happening.

Scientists disagree about just how much information the brain can retain at one time.² Science can tell us, however, that the brain cannot perform too many complex tasks at once. This is the reason that we can likely drive while listening to music on the radio but would be unable to pass a quiz about the content of a podcast while doing that same drive. This is the reason why magic tricks are successful. As a magician focuses the audience on the content of the “patter,” while including visual distractions, the audience’s brains cannot keep up with the actual content of all that is happening.³

For the brain to function as competently as possible, processing both high-end tasks and lower-end tasks, it must take shortcuts.⁴ One of these shortcuts is to follow patterns. These patterns enable us to arrive at destinations without being conscious of how we got there, while also having sorted out our priorities

² Clara Moskovitz, *Mind’s Limit Found: 4 Things at Once*, Live Sci. (Apr. 27, 2008), <https://www.livescience.com/2493-mind-limit-4.html>.

³ Gustave Kuhn, *Mind Games: What Magic Reveals About How Our Brains Work*, Guardian, Mar. 30, 2019, <https://www.theguardian.com/lifeandstyle/2019/mar/30/mind-games-what-magic-reveals-about-how-our-brains-work>.

⁴ Judy Mandell, *Chunking: The Brain’s Shortcut to Understanding and Recalling Information*, Observer, Mar. 15, 2017, <https://observer.com/2017/03/chunking-typoglycemia-brain-consume-information/>.

for the day.⁵ These patterns allow us to perhaps make morning coffee without having to look up the instructions for making coffee while we do so.

In the law, patterns (like IRAC) or signals (like “Here”) enable attorneys and judges to swiftly process information in the voluminous documents that they must read.⁶ Once the pattern is broken (envision not finding your keys in the place that they are “supposed” to be), the brain must reboot and refocus. This then detracts from the ability to engage in the higher functions of cognition, such as truly considering the content of a position that might be written about, as opposed to essentially translating what the words are conveying.⁷ Using vertical lists to convey information is one way to make things easier for the brain. Using parallel structure in creating vertical lists is a technique that enables the brain to more fluidly process the information.⁸ When there is no parallel structure, more brainpower must be used to reassess what might be happening in what is being presented.⁹

Another shortcut for the brain to be able to process information is organizing and grouping large pieces of information. Scientifically, the brain is generally capable of processing about four to seven independent pieces of information in its “working memory.”¹⁰ That’s not to say that there aren’t more than four to

⁵ See Steve Ayan, *The Brain’s Autopilot Mechanism Steers Consciousness*, Sci. Am., Dec. 19, 2018, <https://www.scientificamerican.com/article/the-brains-autopilot-mechanism-steers-consciousness/>.

⁶ Denise Riebe, *Readers’ Expectations, Discourse Communities, and Effective Bar Exam Answers*, 41 Gonz. L. Rev. 481, 489–90 (2006).

⁷ See George D. Gopen, *The Sense of Structure: Writing from the Reader’s Perspective* 385 (2004).

⁸ See Terri LeClercq, *Expert Legal Writing* 69–70 (1995); see also Gerald Lebovits, *Proof It with Re-vision — Part I*, 64 N.Y. St. Bar Ass’n J. 50, 51–52 (2009).

⁹ Tiago Forte, *A Pattern Recognition Theory of Mind*, Forte Labs (Jan. 20, 2022), <https://fortelabs.co/blog/a-pattern-recognition-theory-of-mind/>.

¹⁰ Christopher Pappas, *Information Processing Basics: How the Brain Processes Information*, eLearning Indus. (Nov. 11, 2016), <https://elearningindustry.com/information-processing-basics-how-brain-processes-information>.

seven things happening at once — not only do we breathe and have a heartbeat without much thought, but we are also constantly (if unconsciously) surveying our surroundings.¹¹

The human brain tends to make about 35,000 decisions a day¹² and processes 11 billion bits of information per second.¹³ We could be working on writing a document or grading a paper while contemplating emails and do so concurrently with occasional reminders within our brains that a pet has a veterinarian appointment later in the afternoon and that the car will need an oil change at some point in the next few days.

The brain is able to perform all these functions seemingly seamlessly by grouping the information into more manageable pieces.¹⁴ Even for the most disorganized person, the brain is grouping various pieces of information for functionality. It's the reason why many will actually forget why they have walked from one room to another but discover once in the new room an entirely new catalogue of information about that room.¹⁵ Someone might forget why they have entered the kitchen but, once there, recall that groceries need to be purchased or that the dishes in the dishwasher need to be put away.¹⁶

This plays out when drafting lists: the writer should realize that the brain cannot aggregate too much information that is not properly organized. When the brain first sees a list, it recognizes

¹¹ *Id.*

¹² Eva M. Krockow, *How Many Decisions Do We Make Each Day?*, *Psych. Today*, Sept. 27, 2018, <https://www.psychologytoday.com/us/blog/stretching-theory/201809/how-many-decisions-do-we-make-each-day>.

¹³ David DiSalvo, *Your Brain Sees Even When You Don't*, *Forbes*, June 22, 2013, <https://www.forbes.com/sites/daviddisalvo/2013/06/22/your-brain-sees-even-when-you-dont/?sh=6251c874116a>.

¹⁴ See Mandell, *Chunking*.

¹⁵ Ashish, *The Doorway Effect: Why Do We Forget What We Were Supposed to Do After We Enter a Room?*, *ScienceABC* (Dec. 23, 2021), <https://www.scienceabc.com/humans/doorway-effect-why-we-forget-what-we-were-supposed-to-do-after-we-enter-room.html>.

¹⁶ *Id.*

the list as one item with many parts. But two things may then occur. First, even if the parts are similar in nature, if there are too many of them, the brain cannot fully absorb their content. Second, if the parts are presented as similar but they are not, the brain is initially fooled into believing that there will be a shortcut but will instead be forced to recategorize and reprocess for comprehension. Thus, all other automatic brain activities will be hindered.

This is what is occurring in the examples above. Although all the parts are related, they are not grouped together within an easy-to-follow organization. Both the main list and the list with the subparts are so long that they cause the brain to have to continually reprocess the information. This is exactly what the drafter wants to avoid and can remedy by both simplifying and recategorizing, as in the following example:

PETS

Tenant may keep *only* one dog *or* no more than two cats in the unit. Tenant must disclose the acquisition of each pet no more than a week after the pet moves into the unit. Tenant will be charged an additional \$75 per pet, per month, starting with the month immediately following the month that the pet is acquired.

Pet-ownership rules:

- a. Pets must be kept up to date with vaccinations.
- b. Pets outside the unit must be leashed or otherwise restrained at all times.
- c. Pet owners must respect the right to quiet enjoyment of other tenants and ensure that their pets are not disruptive (e.g., barking dogs).
- d. Pet owners must clean up after their pets, both inside and outside the unit.

Remedies for rule violations:

- a. Landlord may ask that Tenant relinquish a pet for multiple rule violations or if Landlord receives three Tenant complaints.

- b. Landlord may evict Tenant if Tenant has been given notice of rule violations but fails to cure them within 30 days.
- c. Landlord has sole discretion to determine the circumstances that warrant relinquishment of the pet.

Miscellaneous:

- a. Upon Tenant’s moving out, Landlord may seek reimbursement for the amount of any damages beyond the amount of Tenant’s security deposit. Landlord will inform Tenant of the amount due and give Tenant the opportunity to respond before taking any formal legal action.
- b. Landlord is not responsible for any injury that a pet may cause, including to those performing maintenance in Tenant’s unit.
- c. Landlord will promptly report any suspected animal abuse to the appropriate authorities.

In that example, the information has been recategorized so that there are not too many disparate pieces of information in the brain’s working memory. Headings have been constructed to help the reader categorize similar pieces of information, and parallel sentence structure also adds to the brain’s ability to more fluidly connect the parts.¹⁷ Even with somewhat disparate pieces of information, the heading “Miscellaneous” alerts the reader to what brain function is necessary to aggregate the information being given. Unnecessary subcategories are eliminated to avoid the distraction of outlying and anomalous information to process in the original vertical-list version.

Lists play an important role in legal drafting of every type. A list helps the reader break down larger pieces of information, and a well-constructed list’s visuals can aid in comprehension. A good list can also head off future legal disputes by making it easier for

¹⁷ For an example of similar recategorization of information, see Joseph Kimble, *Some Examples of the Proposed New Federal Rules of Bankruptcy*, 99 Mich. Bar J., Nov. 2020, at 38.

all parties to read and understand its contents. But a list, in and of itself, is not beneficial unless it is organized in such a way that the brain can easily group like items. By understanding the basics of how the brain processes information, the legal writer can better understand how to group pieces of information that will more effectively convey the information to the legal reader.