

Reduce, Remove, Reveal

Subtract: The Untapped Science of Less

Leidy Klotz (Flatiron Books 2021), 304 pages

Jennifer Murphy Romig, rev'r*

Online pandemic teaching started out as an emergency lesson in teaching with less. When the classroom had been stripped of its whiteboard, chairs, and podium—indeed, its entire physical space—faculty were forced to ponder what exactly was left for teaching and learning. Since the start of the pandemic, some of those subtractions have turned out to be beneficial, fostering new channels for student participation, encouraging empathetic attendance policies, and opening up new possibilities for flexible online course content. Why did it take a global pandemic for these innovations to emerge? The creative promise of subtraction and the difficulty of seeing and implementing it are at the heart of the book *Subtract: The Untapped Science of Less*, by University of Virginia design and architecture professor Leidy Klotz. With insights and examples that should resonate with legal writers and legal writing professors, Klotz makes a fresh and well-developed case that “getting to less often means doing, or at least thinking, more.”¹

Klotz’s book is titled *Subtract*, but the subtitle’s focus on “less” does important work. This concept of “less” is a framework for subtracting both as an action and a state.² The action is subtracting, whether it be from a first draft or initial proposal or any other interim effort. The state is the superior result of a creative process that values both adding and subtracting. This concept of “less” encompasses personal efforts like the KonMari Method portrayed by Marie Kondo’s sweetly delivered

* Professor of Practice, Emory University School of Law. Professor Romig is grateful to Emmett Griner, Kay Murphy, Laura Romig, Matthew Sag, and Nantiya Ruan for feedback on this book review.

¹ LEIDY KLOTZ, *SUBTRACT: THE UNTAPPED SCIENCE OF LESS* 16 (2021).

² *Id.*

and utterly ruthless home edits in her book and Netflix series.³ Beyond the personal realm, Klotz draws from a wide range of interdisciplinary examples from engineering, architecture, and business, to make his argument for processes, ideas, and products valuing “less.” An urban waterway removes 70s-era concrete building cover in favor of greenspace, diminishing downstream flooding risk. A toddler bike without gears and pedals helps kids intuitively learn to balance and coast (instead of adding training wheels). A concrete block fabricated with hollow pockets of air turns out to be better construction material than a heavy, solid brick. (Every concrete block you’ve ever seen is fabricated based on this idea, originated by Pennsylvania’s first female architect, Anna Keichline.) With the power of storytelling about these and other examples, Klotz touts the creative promise of “less” as an innovative solution to various professional and societal challenges.

But just as “less” is valuable across contexts, it is also overlooked, unrecognized, and undervalued across contexts. Study participants asked to improve a piece of writing were three times more likely to make it longer than to cut it down. In a follow-up study, participants asked to improve their own writing were even less likely to reduce its length. When given a complicated draft itinerary for a day of sightseeing in Washington, D.C., and asked to improve it, “[o]nly one in four participants removed activities from the packed original.”⁴ The human mind’s tendency to find solutions with “more” rather than “less” is further supported by studies in visual and spatial contexts (such as working with patterns and Lego-like blocks).

Klotz takes pains to show that the tendency to think of “more” as a solution is not just a preference but rather a cognitive tendency. It’s not that people can’t or won’t subtract, but they just don’t think of it as much; Klotz calls this “mental accessibility.”⁵ To prime a wider variety of solutions that include subtracting, removing, and streamlining, experiment designers add explicit cues such as, “[k]eep in mind that you could potentially add things . . . as well as take them away.”⁶ When their instructions included this reminder, participants were much more likely to think of subtractive improvements. If it’s that simple to bring subtraction to mind, why is subtraction such an unusual strategy? Cognitive overload is part of the problem. When participants were given more cognitive tasks layered

3 See MARIE KONDO, *THE LIFE-CHANGING MAGIC OF TIDYING UP: THE JAPANESE ART OF DECLUTTERING AND ORGANIZING* (2014); *Tidying Up with Marie Kondo* (Netflix 2019).

4 KLOTZ, *supra* note 1, at 29.

5 *Id.* at 35.

6 *Id.* at 41.

onto the real test condition of solving a problem, those cognitive stresses made “less” even harder to see. Basically, “stress correlates with adding objects.”⁷

These experimental studies test cognition in artificial lab settings, but their findings resonate in the real world. Evolutionary and economic forces such as the drive for acquisition and the need to show competence push individuals and groups towards “more” and away from “less.” The bias toward more certainly coheres with basic tenets of capitalist accumulation, but studies finding the brain’s bias toward more are also “robust across groups and situations.”⁸ “[O]ur subtraction neglect has deep and tangled roots in our nature and nurture,” Klotz writes, roots which can’t really be pulled up and discarded, but which can be studied and confronted so we can become better at “finding the delight of less.”⁹

After making the case for why “less” is so difficult to see, Klotz explores practical approaches to prompt subtraction-related ideas and solutions. As noted earlier, explicit cues about adding and subtracting can help. Simply telling someone—or yourself—“you can improve this by either adding or subtracting” helps bring subtraction to mind. Because multitasking is the enemy of recognizing “less” as a promising solution, preserving mental bandwidth can help designers and writers set themselves up to think of subtraction. And sharing one’s work with a neutral audience can certainly help, because the writing studies show that writers are even less likely to subtract from their own drafts compared to editing other people’s work.¹⁰ It turns out that the tried-and-true approach of asking someone to look at your work is another way to seek “less.”

Sometimes having fresh eyes isn’t an option, and Klotz also recommends that individuals try to think creatively by using different ways of looking at problems—literally. When viewing a shape, some eyes and brains focus more on the shape itself (the object), whereas others focus more on the field behind the shape (the background). This is a simple articulation of the cognitive and, arguably, cultural¹¹ concept of “field dependence.”¹² The more focus on the foreground object, the less likely one is to notice movement in the background field, a way of perception that is relatively “field independent.” More alertness to the background,

⁷ *Id.* at 55 (citing Brian D. Vickers and Stephanie D. Preston, *The Economics of Hoarding*, in OXFORD HANDBOOK OF HOARDING AND ACQUIRING 221–32 (Randy O. Frost & Gail Steketee eds., 2014)).

⁸ *Id.* at 100.

⁹ *Id.* at 45.

¹⁰ *Id.* at 158 (citing Gabrielle S. Adams et al., *People Systemically Overlook Subtractive Changes*, 592 NATURE 258 (2021)).

¹¹ *Id.* at 89–90.

¹² *Id.* at 87.

such as noticing when the entire perspective has altered slightly, means “field dependence.” This spatial concept could correlate to the balance of text and white space on a document. Thinkers who are field independent may focus on what the text says, whereas those more attuned to the field may notice that a paragraph is incredibly long (leaving no white space) or another paragraph is noticeably shorter (leaving more white space around it and thereby perhaps suggesting less support for the content).¹³

White space on a page is just one example of seeing what’s not there—the negative space. Just as design students are taught to work with those negative spaces, legal skills include listening for what is *not* said, researching for gaps in the law, and noticing missing facts and omitted legal authorities in an otherwise lengthy and detailed legal analysis. Thus, the background or “field” of law offers strategic possibilities such as asserting that the opponent’s argument is discordant with the “field” of legal precedent behind it, or that a case of first impression should be decided a certain way in harmony with the “field” of precedent. Conversely, a legal argument might utilize “field independence” to assert that one single fact out of a complex situation is the sole dispositive fact. These are not new legal tactics, but the vocabulary of field dependence explored in *Subtract* provides another way of understanding, teaching, and using such tactics.

One challenge with implementing “less” is the legitimate worry that readers such as senior lawyers and judges won’t appreciate the work, and will in fact see it as small or incomplete. Just as the most readily accessible solution is to add more, audiences may use “more” as a readily accessible mental proxy for “better.” To address this concern, it first bears repeating that Klotz is absolutely *not* advocating for turning in first drafts or underdeveloped work with the rationalization that revising and editing won’t really improve it. Work that is sufficient but not great has a name in the literature—what economist Herbert Simon called “satisficed,” a portmanteau of “satisfied” and “sufficed.” Klotz acknowledges that some work should be satisficed because of time or resource limitations. But *Subtract’s* aspirations reach for solutions beyond what is merely good enough.

Because of our brains’ attraction to more as well as experiences with work that is “satisficed” rather than superb, the concept of subtraction needs good marketing. It’s a big challenge because even the word “subtraction” has a negative “psychological valence.”¹⁴ But subtraction

¹³ See generally Ruth Anne Robbins, *Painting with Print: Incorporating Concepts of Typographic and Layout Design into the Text of Legal Writing Documents*, 2 J. ALWD 108, 124 (2004) (“Effective use of white space . . . affects legibility”).

¹⁴ Psychological valence means the inherent attractiveness or averseness of an event, object, or idea, as well as the word or words used to describe it. KLOTZ, *supra* note 1, at 165.

and “less” can be reframed with positive valence. Marie Kondo markets the fun of decluttering one’s house in her famous question, “Does it spark joy?”¹⁵ Promotional material for an award-winning urban design project touted four key verbs: “reveal,” “clean,” “carve,” and “connect.”¹⁶ Librarians refer to removal of unnecessary information from the library as “weeding.”¹⁷ Most grandly, Klotz argues that skillful subtraction can bring one to the “flow state” made famous by Mihaly Csikszentmihalyi: “Taking away words to transform what’s already there may not be our first instinct. But editing is a challenge that matches our ability. That kind of challenge can be divine.”¹⁸

Some of Klotz’s own phrasings are clunky and do not roll off the tongue, like “post-satisfied less” and “more-ality.” Klotz connects subtraction to seemingly every situation from cleaning one’s house to ending apartheid. Yet he does succeed in showing the breadth of his argument. The economic, cognitive, and design-based principles and anecdotes throughout the book make it a fairly easy and certainly a richly cross-disciplinary read.

Subtract offers a number of possibilities for legal writing. The book reinforces numerous lessons already being taught in legal writing classrooms: A first draft is just a start. Great work has to be edited and streamlined. Say more with fewer words. Don’t use a big word when a small word does the job. Don’t take readers on a journey of discovery tracking your research; rather, give them only what is important for understanding your ultimate answer. Klotz of course invokes the concept attributed to various writers such as Blaise Pascal, Ernest Hemingway, and Mark Twain: “I had to write you a long letter because I didn’t have time to write a short one.” The one pop-culture anecdote conspicuously absent from this book is Coco Chanel’s famous advice about subtraction: “Before you leave the house, look in the mirror and take one thing off.”¹⁹

This difference between “satisfied” (good enough) work and what Klotz refers to as “post-satisfied” (truly great) work is a distinction legal writing professors should acknowledge. The truth is that due to time pressure and client-resource limitations, most lawyers need to know how to produce “satisfied” legal writing. This is not to say satisfied writing is bad or sloppy, because basic attention to conciseness and clarity

15 *Id.* at 161.

16 *Id.* at 166.

17 *Id.* at 232.

18 *Id.* at 164.

19 *The Most Inspiring Coco Chanel Quotes to Live By*, VOGUE AUSTRALIA (Aug. 16, 2018), <https://www.vogue.com.au/fashion/news/the-most-inspiring-coco-chanel-quotes-to-live-by/image-gallery/b1cb17be7e20734d0b255fbd5a478ed4>.

is required for all projects. But not every client or project calls for the “divine.”²⁰ Professors can connect the classroom to the realities of practice by acknowledging that professionally effective work ranges from good enough to nothing-but-the-best. Law students will, ideally be prepared to produce either type with efficiency and equanimity.

Subtract also reinforces personal and professional habits for surviving an information-rich and distracting digital world. Klotz notes that writers may do better by slowing down their fluency at adding words, citing John McPhee’s use of a mechanical typewriter.²¹ Information producers—for example, legal writers—should be guided to consider not only the cost to the producer of making the information, but also the total cost of using the information, including time spent reading it. This advice is not novel, but restates the case for concise, efficient writing for internal (lawyer) and external (client and public) audiences. Especially relevant to public legal writing, Klotz cites a wonderful study on how fancy vocabulary often backfires, Daniel Oppenheimer’s *Consequences of Erudite Vernacular Utilized Irrespective of Necessity: Problems with Using Long Words Needlessly*.²²

Subtract’s treatment of analogies is brief but reinforces legal writing scholarship on persuasion theory as well as the nuts and bolts of well-constructed legal analysis and argument. The “pinnacle of mental subtraction is when we remove ideas that are no longer correct, or that never were in the first place,” Klotz writes.²³ Yet wrong ideas are extremely difficult to dislodge for various cognitive reasons. People learn best not by erasing what they already know, but by building connections between new material and prior knowledge—even if that knowledge is somewhat wrong.²⁴ Thus “accommodation, not removal, is how we construct new knowledge.”²⁵ Legal writing professors will be pleased to have another argument for the power of analogies, which Klotz points out as one way to help audiences learn new ideas. What’s more, in “very special cases,” they can actually “help us subtract wrong ideas.”²⁶ This is because analogies “feel like accommodation, in that they allow us to keep one foot in what we know while we seek new ground with the other.”²⁷

²⁰ KLOTZ, *supra* note 1, at 164.

²¹ *Id.* at 228.

²² *Id.* at 152.

²³ *Id.* at 239.

²⁴ *Id.* at 241–242.

²⁵ *Id.* at 242.

²⁶ *Id.* at 245.

²⁷ *Id.*

Subtract is also relevant to law professors' work in academic institutions, with their attendant policies, functions, and dysfunctions. Klotz mentions the proliferation of administrative rules and regulations in U.S. law, lauding efforts to streamline them by removing rules that don't work or no longer serve their purpose.²⁸ His brief treatment of law brings up a good point about overburdened syllabi. If a syllabus has become a "syllabus tyrannus"²⁹ overloaded with policies and tangential content, its primary purpose of framing the course may be compromised. The lessons from *Subtract* are consistent with what others already suggest regarding syllabus reform—for example, preparing a very concise syllabus as a cover sheet for a longer version posted to the course's learning management system.³⁰

Toward the end of the book, Klotz argues for the ethical dimensions of "less" in the workplace and classroom. One study showed that U.S. Army officers had to contend with more days of mandatory activities than available work days, causing both "corner-cutting" and "mental anguish."³¹ Students overwhelmed by information may impair and distort their decision-making: "In extreme cases, too much information doesn't just tax students' bandwidth, it can make them believe cheating is their only option to meet the demands upon them."³² The implication is: Giving impossible or impossibly numerous tasks to a class or team can lead to compromised ethics. The reference to officers' mental anguish called to mind a recent debate over experiential education. One law professor suggested that growing experiential educational practices may actually add stress and diminish students' already poor mental health and work-life balance.³³ Responding, a group of professors argued that the problem lies not with experiential education but with classroom doctrinal teaching and mandatory curved grades. They acknowledged experiential education does add, but what it adds is something deficient from the traditional

²⁸ *Id.* at 124–26.

²⁹ Rebecca Schuman, *Syllabus Tyrannus: The Decline and Fall of the American University Is Written in 25-Page Syllabi*, SLATE (Aug. 26, 2014), <https://slate.com/human-interest/2014/08/college-course-syllabi-theyre-too-long-and-theyre-a-symbol-of-the-decline-and-fall-of-american-higher-ed.html>.

³⁰ Tom Deans, *Yes, Your Syllabus Is Way Too Long*, CHRON. HIGHER EDUC. (Jan. 20, 2019), <https://www.chronicle.com/article/yes-your-syllabus-is-way-too-long/>.

³¹ KLOTZ, *supra* note 1, at 123–24.

³² *Id.* at 230.

³³ Jonathan Todres, *A Healthier Legal Profession Starts with Law Schools*, BLOOMBERG LAW (Mar. 15, 2022), <https://news.bloomberglaw.com/us-law-week/a-healthier-legal-profession-starts-with-law-schools> ("Many faculty now have students complete experiential exercises throughout the semester instead of relying solely on a final exam. These changes have value. . . . But their costs include further taxing students. When multiplied across the curriculum, at some point, it can be too much.").

doctrinal classroom.³⁴ This is an age-old and perhaps intractable debate; in light of *Subtract*, the important point is that additions to student task lists should be done deliberately and collaboratively among faculty. Likewise, legal writing faculty asked to take on additional tasks might cite Professor Klotz in seeking corresponding subtractions from their expected functions and roles.

Subtract is, overall, a good read and an excellent challenge to writers, designers, and creators of all types—including lawyers and law professors. One of the many pandemic lessons is this opportune moment for academics and professionals to evaluate what to reveal, carve out, streamline, edit, weed, clean, and otherwise subtract, so as to find “the delight of less.”³⁵

³⁴ Claudia Angelos et al., *Experiential Education: An Antidote to Law Student Stress*, BLOOMBERG LAW (Apr.11, 2022), <https://news.bloomberglaw.com/us-law-week/experiential-legal-education-an-antidote-to-law-student-stress> (“Quite literally getting up on one’s feet and taking some action in the world provides a break from the inactivity unfortunately associated with the usual regime of classroom-based study.”).

³⁵ KLOTZ, *supra* note 1, at 45.