The CSE Manual, Ninth Edition: 10 Years in the Making

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It may be hard to believe, but it's been a decade since the release of the eighth edition of *Scientific Style and Format*, CSE's longstanding and indispensable reference manual for a wide range of scientific publishing organizations and professionals. Now, on the eve of the 2024 Annual Meeting, CSE is poised to release the ninth edition of the manual—and to say that this accomplishment "took a village" would be quite the understatement.

Four dozen chapter editors, almost as many peer reviewers, and a core advisory group—all of whom, in aggregate, represent an astonishing breadth of scholarly publishing experience and expertise—devoted an immeasurable number of collective hours over the past several years to painstakingly review, revisit, and revise the manual's content to ensure that it is as up-to-date as possible. In partnership with the expert production team at The University of Chicago Press, this team of science editing specialists has made great strides in updating the manual's content to reflect the most current trends of terminology, usage, practical application, and operational guidance, both within the framework of the scientific community and the world at large.

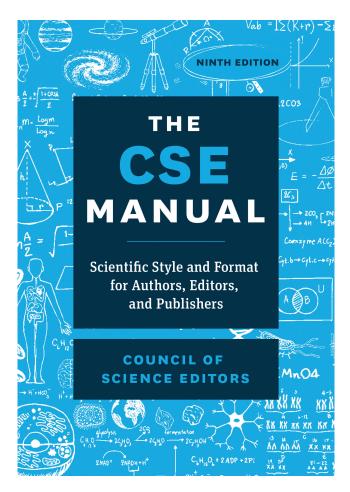
The extent to which chapters have been revised runs the gamut from minimal to considerable. Whereas some chapters required little alteration, others have undergone substantial modifications in terms of structure and content. Michael E Fitzgerald, project manager for the ninth edition, has penned a preface that provides users with a comprehensive and thorough overview of the manual's most noteworthy revisions and enhancements, and readers who purchase a print copy or an online subscription will undoubtedly reap the benefits of his eloquent summary. In the meantime, the following snapshots offer a glimpse of some of the more notable updates in this next iteration.

What's in a Name?

Perhaps the most noticeable change is to the manual's title. The previous 3 editions have sported the primary

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https://doi.org/10.36591/SE-4701-13



moniker Scientific Style and Format, with The CSE Manual relegated to the subtitle. However, as Fitzgerald notes in his preface, users of the manual rarely referred to the main title colloquially, and survey data and anecdotal attestations suggest that it is more widely known as The CSE Manual in scholarly publishing parlance. In effect, the people have spoken—thus the ninth edition will be entitled The CSE Manual: Scientific Style and Format for Authors, Editors, and Publishers.

A Matter of Policy

The Greek philosopher Heraclitus is quoted as saying that "The only constant in life is change"—and editorial policy is no exception. Chapter 2, "Publication Policies and Practices"

(edited by Jessica L Striley, Emmanuel A Ameh, and Thomas A Lang), includes several timely updates concerning (among other things) institutional review board approval, disputed authorship, peer reviewer responsibilities, and recommendations for reporting scientific misconduct. Several of these updates integrate or expand upon guidance from the Committee on Publication Ethics (COPE),² the International Committee of Medical Journal Editors (ICMJE),³ and the World Association of Medical Editors (WAME).⁴

References, Revamped

Bibliographic references are a critical component of any scientific publication, so it makes sense that the requisite chapter of *The CSE Manual* is one of its larger ones. That said, one of the primary goals identified by the editors of Chapter 29, "References" (edited by Peter J Olson, Iris Lo, Jessica LaPointe, and Kelly Newton), was to make its content more easily digestible. Much of this objective has been accomplished by removing obsolete passages, eliminating the repetition of example templates, adding intuitive cross-references between sections, and compressing verbose instructional language.

Conciseness was not only applied to the chapter's infrastructure; certain reference types themselves have also been streamlined. The most substantial update in this regard is a reduction in the number of author names listed at the beginning of a reference. As of the ninth edition, the maximum number of authors listed is 5, and references with 6 or more authors should list only the first author followed by "et al." This recommendation was made largely with an eye toward online and mobile platforms, where conciseness is key. Additionally, access dates for online sources are now required only when the date of publication, copyright, or revision cannot be determined, and publisher locations are no longer needed (partly because this information has become less relevant, but also because many book publishers have multiple locations).

One of the most important features of the "References" chapter is its many examples, which help users envision the practical implementation of specific reference types. In the ninth edition, examples have been added for reference types that were heretofore not represented—such as journal preprints, motion pictures, and YouTube videos—and distinct social media platforms are now represented in lieu of a single, generalized example. In an effort to legitimize the chapter's content, fictional examples that had been fabricated to demonstrate more esoteric or rarely used reference styles have been replaced with examples references to of actual publications from the scientific literature. Finally, several examples have been updated to more accurately represent the scientific community at large (more on that later).

Filling the Figure Void

The CSE Manual is unquestionably one of the most comprehensive reference manuals of its kind, and has been for some time. Yet something has been missing from previous editions: figure examples. In Chapter 30, "Tables, Figures, and Indexes" (edited by Thomas A Lang and Jessica S Ancker), a bevy of statistical graphs have been added to enhance CSE's guidelines for the effective visual presentation of study results. One particularly useful aspect of this expansion is that many of the examples of what to do are accompanied by examples of what not to do. The latter examples demonstrate graphing techniques that result in ambiguous formatting, misrepresentation of data, and even optical illusions that can undermine a study's findings, and their respective captions clearly explain the shortfalls of such techniques. These examples are complemented by new recommendations for the effective plotting of data lines within statistical graphs (in Section 30.2.2.3, "Plotting Symbols").

Delving Deeper into the Electronic Age

Not all chapter editors of *The CSE Manual* can profess to being chapter authors as well. This is not the case for the editor of Chapter 33, "Digital Standards of Scholarly Journal Publishing," which will make its debut in the ninth edition. Sun Huh, former president of the Korean Council of Science Editors and the Korean Association of Medical Journal of Editors, has authored this new chapter to offer guidance regarding a broad range of electronic publishing principles, practices, and tools that have recently become commonplace. A timely component of this chapter is Section 33.12 ("Artificial Intelligence Programs in Journal Publishing"), which addresses the various electronic editing and content management tools that are now available to assist with the development and preparation of scientific publications.

An Eye Toward Diversity, Equity, Inclusion, and Accessibility

The years that have passed since the publication of the eighth edition have seen an unprecedented and long-overdue shift in awareness of diversity, equity, inclusion, and accessibility in the scholarly publishing industry—or rather, the general lack thereof. To that end, the team of chapter editors and peer reviewers for the ninth edition comprised science editors from multiple countries spanning 6 continents, and several aspects of the manual have undergone revisions designed to more deeply diversify the content in terms of both its recommendations and representation.

Leonard Jack Jr and Otito Iwuchukwu, in their capacity as 2021–2023 co-chairs of CSE's Diversity, Equity, Inclusion, and Accessibility Committee, lent their collective expertise when

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peer-reviewing Section 7.4 ("Inclusive Language") and Section 8.3 ("Human Groups") to ensure that CSE's recommendations for sociodemographic group terms are both current and conscientious. For example, the ninth edition recommends capitalizing the terms "Black," "Indigenous," and "White" and using "Latinx" as a gender-neutral alternative to "Latino" and "Latina." Additionally, it now includes guidance regarding the use of "they" as a singular pronoun, particularly when discussing research study participants who identify as nonbinary or who may have withheld their gender identity.

Many of the guidelines provided in *The CSE Manual* rely on real-world examples to demonstrate the proper execution of a particular concept, style convention, or formatting principle. For those examples that include names of individuals, previous editions overwhelmingly featured the names of White male medical scientists from the United States. The editors of the ninth edition have made a concerted effort to diversify these examples via the inclusion of several international researchers and women scientists while also selecting individuals who represent a wider variety of scientific fields. More visually oriented examples—such as molecular structures, pedigree diagrams, and the aforementioned statistical graphs—will be accompanied by alt text in the online version to expand the accessibility of the manual for readers who have visual impairments,

cognitive or learning disabilities, or other circumstances that might prevent them from viewing this content.

The completion of the ninth edition of *The CSE Manual* constitutes a massive yet meticulous undertaking on the part of several committed and highly respected individuals in the scholarly publishing community. That said—and to evoke Heraclitus once again—it would be sensible to expect that certain guidelines will continue to evolve, perhaps within months or even weeks of the manual's official release. Yet one thing that has not changed (and is unlikely to change) is the fierce dedication of the purveyors of one of CSE's preeminent publications, a dedication that will most assuredly be applied to future editions for years to come.

For up-to-date information regarding the official release of the ninth edition of *The CSE Manual*, visit https://www.councilscienceeditors.org/cse-manual.

References and Links

- Council of Science Editors, Style Manual Task Force. The CSE manual: scientific style and format for authors, editors, and publishers. 9th ed. Council of Science Editors in cooperation with The University of Chicago Press; Forthcoming 2024.
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