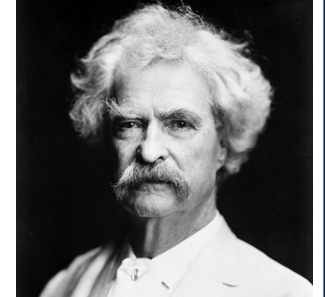


## Writing Workshop #2: Keeping Your Sentences Short

“If I had more time, I would have written a shorter letter”  
– Mark Twain



Concise sentences - ideally with one idea per sentence - should be a key goal for technical writers.

### **Concise sentences (and paragraphs):**

Distill your message down to the most compelling logical argument

Are easier for readers to understand

Save the readers' time

Will help you comply with page limits

Make it a habit to check the number of words per sentence you write when revising your manuscripts. If your sentences exceed 25 words, consider rewriting.

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** Our MD simulations reveal that the tripolar vortices persist over several turn over times and hence may be observed in strongly coupled liquids such as complex plasma, liquid metals and astrophysical systems such as white dwarfs and giant planetary interiors, thereby making the phenomenon universal.

**My Solution:** Molecular dynamics simulations reveal that tripolar vortices persist over several turn over times. **Consequently**, these vortices may be a universal phenomenon, observable in complex plasmas, liquid metals, and astrophysical systems such as white dwarfs and giant planetary interiors

**Things to watch for:** Put the general statement of an idea and the specific examples of that statement in separate sentences.

**Also:** Avoid acronyms and if you use them, define them on first usage

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** Our MD simulations reveal that the tripolar vortices persist over several turn over times and hence may be observed in strongly coupled liquids such as complex plasma, liquid metals and astrophysical systems such as white dwarfs and giant planetary interiors, **thereby making the phenomenon universal.**

**My Solution:** Molecular dynamics simulations reveal that tripolar vortices persist over several turn over times. Consequently, these vortices **may be a universal phenomenon**, observable in complex plasmas, liquid metals, and astrophysical systems such as white dwarfs and giant planetary interiors

**Things to watch for:** **Write as concisely as possible**

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** Although the signal-to-noise is small for a single line of sight and peaks at somewhat smaller redshifts than those probed by the Lyman- $\alpha$  forest, we estimate a total signal-to-noise of 9 for cross correlating quasar spectra of SDSS-III with Planck and 20 for cross correlating with a future polarization based cosmic microwave background experiment.

**My Solution:** The signal-to-noise ratio (SNR) is small for a single line of sight and peaks at somewhat smaller redshifts than those probed by the Lyman- $\alpha$  forest. **We estimate** a total SNR of 9 when cross correlating SDSS-III with Planck data. We also estimate an SNR of 20 when cross correlating these quasar spectra with a future polarization-based cosmic-microwave-background experiment.

**Things to watch for:** Avoid starting sentences with “conditional clauses” (e.g., “Although”, “When”, “Whatever”, “though”, “As much as”, “while”, etc.), as these will often lead to lengthy, awkward sentences.

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** Although the signal-to-noise is small for a single line of sight and peaks at somewhat smaller redshifts than those probed by the Lyman- $\alpha$  forest, we estimate a total signal-to-noise of 9 for cross correlating quasar spectra of SDSS-III with Planck and 20 for cross correlating with a future polarization based cosmic microwave background experiment.

**My Solution:** The signal-to-noise ratio (SNR) is small for a single line of sight and peaks at somewhat smaller redshifts than those probed by the Lyman- $\alpha$  forest. We estimate a total SNR of 9 when cross correlating SDSS-III with Planck data. We also estimate an SNR of 20 when cross correlating these quasar spectra with a future polarization-based cosmic-microwave-background experiment.

**Things to watch for:** Keep separate statements of fact in separate sentences.

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** When electrons relax (on a fs time scale) to the bottom of the conduction band (CB) after they have been photoexcited (vertically) into unoccupied states, they will not be able to recombine directly with holes, thus increasing the  $e-h$  lifetime relative to a situation with a direct band gap.

**My Solution:** Electrons photoexcited into unoccupied states will relax to the bottom of the conduction band on a femtosecond time scale. These electrons will not recombine directly with holes, and thus the  $e-h$  lifetime will be greater than that measured in direct band gap processes.

**Things to watch for:** Avoid starting sentences with “conditional clauses” (e.g., “Although”, “When”, “Whatever”, “though”, “As much as”, “while”, etc.), as these will often lead to lengthy, awkward sentences.

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** When electrons relax (on a fs time scale) to the bottom of the conduction band (CB) after they have been photoexcited (vertically) into unoccupied states, they will not be able to recombine directly with holes, thus increasing the  $e-h$  lifetime relative to a situation with a direct band gap.

**My Solution:** Electrons photoexcited into unoccupied states will relax to the bottom of the conduction band on a femtosecond time scale. **These electrons will not recombine directly with holes, and thus the  $e-h$  lifetime will be greater than that measured in direct band gap processes.**

**Things to watch for:** **Keep separate statements of fact in separate sentences.**

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** When electrons relax (**on a fs time scale**) to the bottom of the conduction band (CB) after they have been photoexcited (vertically) into unoccupied states, they will not be able to recombine directly with holes, thus increasing the  $e-h$  lifetime relative to a situation with a direct band gap.

**My Solution:** Electrons photoexcited into unoccupied states will relax to the bottom of the **conduction band on a femtosecond time scale**. These electrons will not recombine directly with holes, and thus the  $e-h$  lifetime will be greater than that measured in direct band gap processes

**Things to watch for:** **Avoid acronyms and don't put important information in parenthetical statements.**



## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** While the above studies focus on the destruction of some long-range ordered state (or at least the associated gap in the electronic spectrum) by a strong excitation, and emphasize the fast time-scale on which this process happens, there have also been recent experiments on photo-stimulated cuprates, which indicate the emergence of a nonthermal superconducting state which appears to be remarkably stable.

**My Solution:** These studies focus on the destruction of some long-range ordered state by a strong excitation and emphasize the fast time-scale of the process. However, recent experiments on photo-stimulated cuprates also indicate the emergence of a nonthermal superconducting state that appears to be remarkably stable.

**Things to watch for:** Avoid starting sentences with “conditional clauses”

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** While the above studies focus on the destruction of some long-range ordered state (or at least the associated gap in the electronic spectrum) by a strong excitation, and emphasize the fast time-scale on which this process happens, there have also been recent experiments on photo-stimulated cuprates, which indicate the emergence of a nonthermal superconducting state which appears to be remarkably stable.

**My Solution:** These studies focus on the destruction of some long-range ordered state by a strong excitation and emphasize the fast time-scale of the process. However, recent experiments on photo-stimulated cuprates also indicate the emergence of a nonthermal superconducting state that appears to be remarkably stable.

**Things to watch for:** Avoid unnecessary parenthetical comments that don't add key information.

## Writing Workshop #2: Some Guidelines for Shortening Sentences

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**Original:** While the above studies focus on the destruction of some long-range ordered state (or at least the associated gap in the electronic spectrum) by a strong excitation, and emphasize the fast time-scale on which this process happens, **there have also been recent experiments** on photo-stimulated cuprates, which indicate the emergence of a nonthermal superconducting state which appears to be remarkably stable.

**My Solution:** These studies focus on the destruction of some long-range ordered state by a strong excitation and emphasize the fast time-scale of the process. **However, recent experiments** on photo-stimulated cuprates also indicate the emergence of a nonthermal superconducting state that appears to be remarkably stable.

**Things to watch for:** **Avoid wordy phrasing that doesn't add important information.**