



Research Methods in CS

More on Cutting Clutter and
Writing with Strong Verbs

Acknowledgements

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See <http://www.coursera.org>

William Zinsser

"But the secret of good writing is to strip every sentence to its cleanest components. Every word that serves no function, every long word that could be a short word, every adverb that carries the same meaning that's already in the verb, every passive construction that leaves the reader unsure of who is doing what—these are the thousand and one adulterants that weaken the strength of a sentence. And they usually occur in proportion to the education and rank."

--William Zinsser in *On Writing Well*, 30th Anniversary Edition, 2006.

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Blaise Pascal

"I have only made this letter rather long because I have not had time to make it shorter." (In the original French: "Je n'aifait celle-ciplus longue queparcequeje n'aipas eule loisirde la faire plus courte.")

-- Blaise Pascal in *Lettres provinciales*, 16, Dec. 14, 1656

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Cut the Clutter

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Small Tricks to Cut Clutter

1. **Eliminate negatives**
2. **Eliminate superfluous uses of "there are" and "there is"**
3. **Omit needless prepositions**

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Trick 1: Eliminate negatives

- He was not often right
→ He was usually wrong
- She did not want to code the algorithm incorrectly
→ She wanted to code the algorithm correctly
- They did not remember to test the database access procedure
→ They forgot to test the database access procedure

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Eliminate negatives

Instead of	Consider
not right	wrong
does not want	want
does not remember	forgot
not honest	dishonest
not harmful	safe
not important	unimportant
not complete	incomplete
does not have	lacks
did not pay attention to	ignored
did not succeed	failed

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Trick 2: Eliminate there are/is

- There are many different data structures we can use.
→ We can use many different data structures.
- There was a long line of students in the hall outside the professor's office on the day the assignment was due.
→ Students lined the hall outside the professor's office on the day the assignment was due.

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Eliminate there are/is

- There are many computer scientists who like to write.
→ Many computer scientists like to write.
- The data confirm that there is an association between network load and operating system crashes.
→ The data confirm an association between network load and operating systems crashes.

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Trick 3: Omit needless prepositions

Example: "that" and "on" are often superfluous

- The design meeting happened on Friday.
→ The design meeting happened Friday.
- The developers agreed that it was true.
→ The developers agreed it was true.

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Practice: Cutting the Clutter

Original:

- Anti-inflammatory drugs may be protective for the occurrence of Alzheimer's Disease.

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Practice: Cutting the Clutter

Original:

- Anti-inflammatory drugs may be protective for the occurrence of Alzheimer's Disease.

Rewrite:

- Anti-inflammatory drugs may protect against Alzheimer's Disease

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Practice: Cutting the Clutter

Original:

- Clinical seizures have been estimated to occur in 0.5% to 2.3% of the neonatal population.

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Practice: Cutting the Clutter

Original:

- Clinical seizures have been estimated to occur in 0.5% to 2.3% of the neonatal population.

Rewrite:

- Clinical seizures occur in 0.5% to 2.3% of newborns.

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Practice: Cutting the Clutter

Original:

- Injuries to the brain and spinal cord have long been known to be among the most devastating and expensive of all injuries to treat medically.

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Practice: Cutting the Clutter

Original:

- Injuries to the brain and spinal cord have long been known to be among the most devastating and expensive of all injuries to treat medically.

Rewrite:

- Injuries to the brain and spinal cord are among the most devastating and expensive.

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Practice: Cutting the Clutter

Original:

- An IQ test measures an individual's abilities to perform functions that usually fall in the domains of verbal communication, reasoning, and performance on tasks that represent motor and spatial capabilities.

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Practice: Cutting the Clutter

Original:

- An IQ test measures an individual's abilities to perform functions that usually fall in the domains of verbal communication, reasoning, and performance on tasks that represent motor and spatial capabilities.

Rewrite:

- An IQ test measures an individual's verbal, reasoning, or motor and spatial abilities.

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Writing with Strong, Precise Verbs

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Writing with Strong, Precise Verbs

Verbs make sentences go!

Consider:

Loud music came from speakers embedded in the walls, and the entire arena moved as the hungry crowd got to its feet.

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Writing with Strong, Precise Verbs

Verbs make sentences go!

Compare:

Loud music came from speakers embedded in the walls, and the entire arena moved as the hungry crowd got to its feet.

With:

Loud music exploded from speakers embedded in the walls, and the entire arena shook as the hungry crowd leaped to its feet.

Latter from the novel *Bringing Down the House* by Ben Mezrich.

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Writing with Strong Verbs

Pick the right verb!

Consider:

The WHO reports that approximately two-third of the world's diabetics are found in developing countries, and estimates that the number of diabetics will double in the next 25 years.

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Writing with Strong, Precise Verbs

Pick the right verb!

Compare:

The WHO reports that approximately two-third of the world's diabetics are found in developing countries, and estimates that the number of diabetics will double in the next 25 years.

With:

The WHO estimates that two-thirds of the world's diabetics are found in developing countries, and projects that the number of diabetics will double in the next 25 years.

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Writing with Strong, Precise Verbs

Use "to be" verbs purposely and sparingly

Is, are, was, were, be, been, am, become, became

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Writing with Strong, Precise Verbs

Replace "to be" verbs with stronger verbs

Consider:

Whether you are competing for a job, a client, or the attention of a busy audience, one of the best ways of grabbing and keeping a reader is to use strong, descriptive verbs.

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Writing with Strong, Precise Verbs

Replace "to be" verbs with stronger verbs

Compare:

Whether you are competing for a job, a client, or the attention of a busy audience, one of the best ways of grabbing and keeping a reader is to use strong, descriptive verbs.

With:

To compete for a job, client, or any busy audience, use active verbs to grab and keep the readers' attention.

Adapted from University of Houston-Clear Lake Writing Center Tip Sheet on *Using Strong Verbs* (<http://prtl.uhcl.edu/portal/page/portal/WC/TIPSHEETS>)

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Writing with Strong, Precise Verbs

- He was a strong team leader.
→ He emerged as a strong team leader.

- Edsger Dijkstra's "Go To Statement Consider Harmful" is recognized as one of the most influential essays on programming.
→ Computer scientists recognize Edsger Dijkstra's "Go To Statement Considered Harmful" as one of the most influential essays on programming.

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Writing with Strong, Precise Verbs

- She was the teacher for two sections of an Office Applications course.
 - She taught two sections of an Office Applications class.
- He was responsible for managing the testing team for a one-million line software development project.
 - He managed the testing team for a one-million line software development project.

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Writing with Strong, Precise Verbs

- A modified version of the conference paper became Chapter 3 of his dissertation.
 - He modified the conference paper and incorporated it into Chapter 3 of his dissertation.
- The common aspects of the set of programs were identified and stored in the software reuse library.
 - The software reuse team extracted the common aspects from the set of programs and archived them for use in later projects.

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Writing with Strong, Precise Verbs

Choose Active, Precise Verbs at Rice University:

<http://www.owlnet.rice.edu/~cainproj/writingtips/preciseverbs.html>

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Practice

Choose Active, Precise Verbs at Rice University:

<http://www.owlnet.rice.edu/~cainproj/writingtips/preciseverbs.html>

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