Style in Technical Writing

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mainly based on "Style: Ten Lessons in Clarity & Grace" by Joseph M. Williams

OUTLINE

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INTRODUCTION: MOTIVATION

Quotes from Williams:

"Most of you require no convincing about the importance of a readable style, especially those of you who daily must struggle with the prose of those who never learned to write clearly."

"The value of clear writing is increased by its scarcity. Though unclear writing does not bar writers from getting into print, a person who can write clearly and gracefully goes into the world with a rare skill."

INTRODUCTION: SCOPE

 "This book addresses only one aspect of composition: style. ... I intend it to be a short book that focuses on a problem that *mature* writers wrestle with: a wordy, tangled indirect prose style." - Williams

• Other Issues:

- Content
- Organization

Other Topics in Williams' Book:

- Correctness
- Emphasis
- Controlling Sprawl
- Punctuation
- Elegance

INTRODUCTION: AN EXAMPLE

An example of unclear writing:

Better evaluation of responses to different treatment modalities depends on the development and standardization of an index allowing accurate descriptions of learning disorder behaviors.

The revised version:

We could better evaluate how those with learning disorders respond to different treatments if we could develop and standardize an index that accurately describes how they behave.

CHARACTERS AND ACTIONS: PRINCIPLES

- Writing as story-telling
- 2 key elements in a story: characters and actions

• 2 Key Principles:

- 1. We expect to see central characters in most subjects.
- 2. We expect to see their important actions in most verbs.

CHARACTERS AND ACTIONS: EXAMPLE

First Version:

Whereas an explanation of the causes of the war is in the third paragraph of the Gettysburgh Address, a rallying cry for the continuation of the struggle appears in the fourth.

Analysis:

- Characters are omitted: Lincoln, audience
- Subjects are abstractions: *explanation, rallying cry*
- Actions are abstract nouns: *explanation, rallying cry, continuation*

Revised Version:

In the third paragraph of his Gettysburgh Address, Lincoln explains what caused the war and in the fourth he rallies his audience to continue the struggle.

CHARACTERS AND ACTIONS: EXAMPLE 2

First Version:

Our lack of pertinent data prevented evaluation of committee actions in targeting funds to areas in greatest need of assistance.

Analysis:

- The key characters are: *we, committee, areas* None of these appear in subjects!

- The key actions appear as nouns: lack, evaluation, actions, targeting, need, assistance

Revised Version:

Because we lacked pertinent data, we could not evaluate

whether the committee had targeted funds to areas that needed assistance.

NOMINALIZATIONS: INTRODUCTION

• Verb -> Noun = Nominalization

discover -> discovery resist -> resistance react -> reaction fly -> flying hope -> hope

• Adjective -> Noun

careless -> carelessness
different -> difference
elegant -> elegance
probable -> probability

NOMINALIZATIONS: AN EXAMPLE

• A clear sentence:

We request that when you return you review the data and report immediately.

• The nominalized version:

Our <u>request</u> is that on your <u>return</u> you conduct a <u>review</u> of the data and provide an immediate <u>report</u>.

• Pattern:

Nominalization following a verb with little specific meaning.

• Example:

The police *conducted* an **investigation** into the matter.

• Revision:

The police **investigated** the matter.

• Pattern:

Nominalization following there is or there are.

• Examples:

There is a need for further study of this program.

There was erosion of the land from the floods.

• Revisions:

The engineering staff must study this program further.

The floods eroded the land.

• Pattern:

Nominalization as the subject of an "empty verb."

• Examples:

The intention of the IRS is to audit the records.

Our discussion *concerned* a tax cut.

• Revisions:

The IRS intends to audit the records.

We **discussed** a tax cut.

• Pattern:

A series of nominalizations.

• Example:

There was first a review of the evolution of the dorsal fin.

• Revisions:

First, she reviewed the evolution of the dorsal fin.

First, she reviewed how the dorsal fin evolved.

CONCISION: AN EXAMPLE

First Version:

In my personal opinion, it is necessary that we all not fail to listen to

and think over in a very careful manner each and every suggestion

that anyone offers to us.

Revision:

We must consider each suggestion carefully.

CONCISION: 5 RULES

- 1. Delete words that mean little:*very* and *all*.
- 2. Delete words that repeat other words: *every* in *each and every*.
- 3. Delete words whose meaning your reader can infer from other words:
 that someone offers us is from *suggestion*.
- 4. Replace a phrase with a word: *listen to and think over -> consider*
- 5. Change unnecessary negatives to affirmatives.

CONCISION 1: DELETE USELESS WORDS

kind of	really	basically	practically
actually	virtually	generally	certain
particular	individual	given	various

First Version:

Productivity **actually** depends on **certain** factors that **basically** involve psychology more than any **particular** technology.

Revision:

Productivity depends more on psychology than on technology.

CONCISION 2: DELETE DOUBLED WORDS

full and completehopes and desireshope and trustfirst and foremostany and allvarious and sundrytrue and accurateeach and everybasic and fundamental

CONCISION 3: Delete What Readers Infer

REDUNDANT MODIFIERS

past history *various* different *future* plans

completely finish each individual personal beliefs *basic* fundamentals

final outcome sudden crisis

REDUNDANT CATEGORIES

Original: During that **period** of *time*, the *membrane* **area** became *pink* in **color** and *shiny* in **appearance**.

Revision: During that time, the membrane became pink and shiny.

GENERAL IMPLICATIONS

Original: Imagine a picture of someone engaged in the activity of trying to learn the rules for playing chess.

Revision: Imagine someone trying to learn the rules of chess.

CONCISION 4: PHRASES TO WORDS

First Version:

As you carefully read what you have written to improve your wording and catch small errors of spelling, punctuation, and so on, the thing to do before anything else is to try to see where sequences of subjects and verbs could replace the same ideas expressed in nouns rather than verbs.

Compression:

carefully read what you have written-->> editthe thing to do before anything else-->> firsttry to see where-->> findsequences of subjects and verbs-->> clausesideas expressed in nouns rather than verbs-->> nominalizationsRevision:

As you edit, first replace nominalizations with clauses.

COHESION: AN EXAMPLE

Which paragraph has better flow?

Some astonishing questions about the nature of the universe have been raised by scientists exploring black holes in space.

A black hole is created by the collapse of a dead star into a point perhaps no larger than a marble. So much matter compressed into so little volume changes the fabric of space around it in puzzling ways.

Some astonishing questions about the nature of the universe have been raised by scientists exploring black holes in space. **The collapse of a dead star into a point perhaps no larger than a marble creates a black hole.** So much matter compressed into so little volume changes the fabric of space around it in puzzling ways.

COHESION: OLD TO NEW

Goal: A sense of flow from sentence to sentence.

Observation:

- Each meaningful sentence includes *new* information and *old* information.

The Principle of Cohesion:

- 1. Begin sentences with old information:
 - ideas that you just mentioned
 - concepts that you can assume they know
- 2. End sentences with new information.

COHESION: AN EXTENDED EXAMPLE

First Version:

The Hart Queen is one of the best skis for beginning and intermediate skiers. A thin layer of tempered ash from the hardwood forests of Kentucky make up its inner core. Two innovations for strength and flexibility are built into its outer construction. Two sheets of ten-guage steel reinforce a layer of ash for increased strength.

Revision:

One of the best skis for beginning and intermediate skiers is the Hart Queen. Its inner core consists of a thin layer of tempered ash from the hardwood forests of Kentucky. Built into its outer construction are two innovations for strength and flexibility. For increased strength, the layer of ash is reinforced with two sheets of ten-guage steel.

COHESION: AN EXTENDED EXAMPLE

First Version:

A wrapping of fiberglass surrounds two steel sheets for increased flexibility. Most conventional bindings can be used with the Queen. The Salomon Double is the best binding, however. A cushion of foam and insulation firmly cradles the foot and ankle yet freedom of movement is still permitted.

Revision:

For increased flexibility, the two sheets are wrapped with fiberglass. The Queen can be used with most conventional bindings, but the best binding is the Salomon Double. The foot and ankle are firmly cradled in a cushion of foam and insulation that still permits freedom of movement.

COHERENCE: INTRODUCTION

The following passage is *cohesive*:

Saner, Wisconsin is the snow-mobile capital of the world. The buzzing of snowmobile engines fills the air, and their tank-like tracks criss-cross the snow. The snow reminds me of Mom's mashed potatoes, covered with furrows I would draw with my fork. Mom's mashed potatoes usually made me sick, that's why I was playing with them. I like to make a hole in the middle of the potatoes and fill it with melted butter. This behavior has been the subject of long chats between me and my analyst.

But the passage is not *coherent* because each sentence shifts to a new topic.

COHERENCE: THE BASIC PRINCIPLE

What is a topic?

The *topic* of a sentence is always among the first few words of a sentence, the words that say "Reader, here is the specific concept that this sentence is going to be about."

The Principle of Coherence:

To make a series of individual sentences into a coherent passage, focus your topics on a limited number of concepts.

COHERENCE: AN EXAMPLE

In this paragraph, **boldface** indicates sentence topics. The particular ideas toward the beginning of sentences define what a passage is centrally "about" for a reader, so a sense of coherence crucially depends on topics. Moving through a paragraph from a cumulatively coherent point of view is made possible by a sequence of topics that seem to constitute this coherent sequence of topicalized ideas. A seeming absence of context for each sentence is one consequence of making random shifts in topics. Feelings of dislocation, disorientation, and lack of focus will occur when that happens.

COHERENCE: AN EXAMPLE

In this paragraph, I have boldfaced topics. **Topics** are crucial for a reader because they focus attention on particular ideas toward the beginning of sentences and thereby notify readers what a whole passage is "about." If a sequence of topics seems coherent, then **readers** will feel that they are moving through a paragraph from a cumulatively coherent point of view. But if through that paragraph **topics** shift randomly, then **the reader** has to begin each sentence out of context, from no coherent point of view. When **that** happens, **the reader** will feel dislocated, disoriented, out of focus.

COHERENCE: OPENING SENTENCES

In the first few words of a sentence we often have to juggle 3 or 4 elements:

- 1. We use transitions to connect a sentence to the preceding one: *and, but, therefore, as a result*
- 2. To help readers evaluate what follows, we use expressions like: *fortunately, allegedly, for the most part*
- 3. We indicate time and place: *then, later, in May, in Europe*
- 4. Most important, we announce the TOPIC.

An example sentence:

And, therefore, it is important to note that, politically speaking, in the Eastern states in recent years, **sources of acid rain** been a matter of much concern.

Goal: reduce the first 3 elements so that you can focus on the topic.

SUMMARY

- Put characters into subjects, and actions into verbs.
- Revise nominalizations into verbs and adjectives.
- Look for opportunities to delete words and condense phrases.
- Start sentences with old information, end with new information.
- Focus on a coherent set of topics in your paragraphs.