Lesson

4

Cohesion and Coherence

If he would inform, he must advance regularly from Things known to things unknown, distinctly without Confusion, and the lower he begins the better. It is a common Fault in Writers, to allow their Readers too much knowledge: They begin with that which should be the Middle, and skipping backwards and forwards, 'tis impossible for any one but he who is perfect in the Subject before, to understand their Work, and such an one has no Occasion to read it.

—BENJAMIN FRANKLIN

UNDERSTANDING CONNECTIONS

So far, I've discussed clarity as if we could achieve it just by mapping characters and actions onto subjects and verbs. But readers need more than individually clear sentences before they think a passage "hangs together." These two passages, for example, say much the same thing but feel very different:

1a. The basis of our American democracy—equal opportunity for all—is being threatened by college costs that have been rising fast for the last several years. Increases in family income have been significantly outpaced by increases in tuition at our colleges and universities during that period. Only the children of the wealthiest families in our society will be able to afford a college education if this trend continues. Knowledge and intellectual skills, in addition to wealth, will divide us as a people, when that happens. Equal opportunity and the egalitarian basis of our democratic society could be eroded by such a divide.

✓ 1b. In the last several years, college costs have been rising so fast that they are now threatening the basis of our American democracy—equal opportunity for all. During that period, tuition has significantly outpaced increases in family income. If this trend continues, a college education will soon be affordable only by the children of the wealthiest families in our society. When that happens, we will be divided as a people not only by wealth, but by knowledge and intellectual skills. Such a divide will erode equal opportunity and the egalitarian basis of our democratic society.

The first seems choppy, even disorganized; the second seems more connected.

But like the word *clarity*, the words *choppy*, *disorganized*, and *connected* refer not to the words on the page but to how they make us *feel*. What is it about the *arrangement* of words in (1a) that makes us feel we are moving through it in fits and starts? Why does (1b) seem to flow more easily? We base those judgments on two aspects of word order:

- We judge a sequence of sentences to be *cohesive* based on how each sentence ends and the next begins.
- We judge a whole passage to be *coherent* based on how all the sentences in a passage cumulatively begin. (Here I discuss the coherence of passages; in Lesson 7, I discuss the coherence of whole documents.)

COHESION

The Sense of Flow

In Lesson 3, we devoted a few pages to that familiar advice, *Avoid passives*. If we always did, we would choose the active verb in sentence (2a) over the passive in (2b):

2a. The collapse of a dead star into a point perhaps no larger than a marble **CREATES**$_{active}$ a black hole.

2b. A black hole **IS CREATED**$_{passive}$ by the collapse of a dead star into a point perhaps no larger than a marble.

But we might choose otherwise in context. Consider:

[1]Some astonishing questions about the nature of the universe have been raised by scientists studying black holes in space. **[2a]The collapse of a dead star into a point perhaps no larger than a marble creates a black hole.** [3]So much matter compressed into so little volume changes the fabric of space around it in puzzling ways.

[1]Some astonishing questions about the nature of the universe have been raised by scientists studying black holes in space. **[2b]A black hole is created by the collapse of a dead star into a point perhaps no larger than a marble.** [3]So much matter compressed into so little volume changes the fabric of space around it in puzzling ways.

In context, our sense of "flow" calls not for (2a), the sentence with the active verb, but for (2b), the one with the passive.

The reason is clear: the last four words of the first sentence introduce an important character—*black holes in space.* But with sentence (2a), the next concepts we hit are *collapsed stars* and *marbles*, information that seems to come out of nowhere:

[1]Some astonishing questions about the nature of the universe have been raised by scientists studying **black holes in space. [2a]The collapse of a dead star into a point perhaps no larger than a marble** creates . . .

If we follow sentence (1) with (2b), the sentence with the passive verb, we feel those sentences connect more smoothly, because now the first words in (2b) repeat what we just read at the end of (1):

[1]. . . studying **black holes in space**. [2b]**A black hole** is created by the collapse of a dead star . . .

Note too that the passive lets us put at the *end* of sentence (2b) words that connect it to the *beginning* of sentence (3):

[1] . . . black holes in space. [2b]A black hole is created by the collapse of a dead star into **a point perhaps no larger than a marble. [3]So much matter compressed into so little volume** changes the fabric of space around it in puzzling ways.

Here's the point: Sentences are *cohesive* when the last few words of one set up information that appears in the first few words of the next. That's what gives us our experience of flow. And in fact, that's the biggest reason the passive is in the language: to let us arrange sentences so that they flow from one to the next easily.

Diagnosis and Revision: Old Before New

In sentences, readers prefer to encounter old, familiar information before they encounter new, unfamiliar information. So:

1. **Begin sentences with information familiar to your readers.** Readers get that familiar information from two sources. First, they remember words from the sentences they just read. That's why in our example about black holes, the beginning of (2b) coheres with the end of (1), and the beginning of (3) coheres with the end of (2b). Second, readers bring to a sentence a general knowledge of its content. We would not be surprised, for example, to find the next sentence (4) begin like this:

   . . . changes the fabric of space around it in puzzling ways. [4]**Astronomers have reported** that . . .

The word *astronomers* did not appear in the preceding sentence, but since we are reading about space, we wouldn't be surprised by a reference to them.

2. **End sentences with information readers cannot predict.** Readers always prefer to read what's new and complex *after* they read what's familiar and simple.

You can more easily see when others fail to observe this old-before-new principle than when you do, because after you've worked on your own ideas for a while, they all seem familiar—to you. But hard as it is to distinguish old from new in your own writing, you have to try, because readers want to begin sentences with information that is familiar to *them*, and only then move on to information that is new.

Here's the point: So far, we have identified three main principles of clarity. Two are about sentences:

- Make main characters the subjects of sentences.
- Make important actions verbs.

The third is about sentences as well, but it also explains how sentences flow together:

- Put old information before new information.

These principles usually complement one another, but if you have to choose among them, favor the third. The way you organize old and new information determines how cohesive readers will find your writing. And for readers, a passage's overall *cohesion* trumps the *clarity* of individual sentences.

COHERENCE

A Sense of the Whole

When you create cohesive flow, you take the first step toward helping readers feel that your prose hangs together. But they will judge you to be a competent writer only when they feel that your writing has *coherence*, a quality different from cohesion. It's easy to confuse the words *cohesion* and *coherence* because they sound alike.

- Think of *cohesion* as pairs of sentences fitting together the way individual pieces of a jigsaw puzzle do (recall the black hole sentences).
- Think of *coherence* as seeing what all the sentences in a piece of writing add up to, the way all the pieces in a puzzle add up to the picture on the box.

This next passage has good cohesive flow because we move from one sentence to the next without a hitch:

> Sayner, Wisconsin, is the snowmobile capital of the world. The buzzing of snowmobile engines fills the air, and their tanklike tracks crisscross the snow. The snow reminds me of Mom's mashed potatoes, covered with furrows I would draw with my fork. Her mashed potatoes usually make me sick—that's why I play 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.

Though its individual sentences are cohesive, that passage as a whole is incoherent. (It was created by six different writers, one of whom wrote the first sentence, with the other five sequentially adding one sentence, knowing only the immediately preceding one.) It is incoherent for three reasons:

1. The subjects of the sentences are entirely unrelated.
2. The sentences share no common themes or ideas.
3. The paragraph has no one sentence that states what the whole passage is about.

I will discuss that second point in Lesson 5 and the third one in Lesson 7. The rest of this lesson focuses on the first point, shared subjects.

Subjects, Topics, and Coherence

For 500 years, English teachers have defined *subject* in two ways:

1. the "doer" of the action
2. what a sentence is "about," its main topic

In Lessons 2 and 3, we saw why that first definition doesn't work: the subjects of many sentences are not doers. Here, for example, the subject is an action: *The **explosion** was loud.* Here it is a quality: ***Correctness** is not writing's highest virtue.* Here it is just a grammatical placeholder: ***It** was a dark and stormy night.*

But also flawed is that second definition: *a subject is what a sentence is about*. It is flawed because often, the subject of a sentence doesn't state its main topic, the idea that the rest of the sentence "comments" on. That "topicalizing" function can be

performed by other parts of a sentence. For example, none of the main subjects in these sentences name their topics:

- The main subject of the next sentence (italicized) is *it*, but the topic of the sentence (boldfaced) is *your claim*, the object of the preposition *for*:

  It is impossible for **your claim** to be proved.

- The subject of this sentence is *I*, but its topic is *this question*, the object of *to*:

  In regard to **this question**, *I* believe more research is needed.

- The subject of this sentence is *it*, but its topic is *our proposal*, the subject of a verb in a subordinate clause:

  It is likely that **our proposal** will be accepted.

- The subject of this sentence is *no one*, but its topic is *such results*, a direct object shifted to the front for emphasis:

  Such results *no one* could have predicted.

Diagnosis and Revision: Topics

As with issues of clarity, you can't predict how readers will judge the flow of your writing just by reading it, because you know it too well. You must analyze it more objectively. This passage feels choppy, out of focus, even disorganized:

> Consistent ideas toward the beginnings of sentences help readers understand what a passage is generally about. A sense of coherence arises when a sequence of topics comprises a narrow set of related ideas. But the context of each sentence is lost by seemingly random shifts of topics. Unfocused paragraphs result when that happens.

Here's how to diagnose and revise such passages:

1. **Diagnose**
   a. Underline the first seven or eight words of every sentence in a passage, stopping if you hit the main verb.
   b. If you can, underline the first five or six words of every clause in those sentences.

> Consistent ideas toward the beginnings of sentences, especially in their subjects, help readers understand what a passage is generally about. A sense of coherence arises when a sequence of topics comprises a narrow set of related ideas. But the context of each sentence is lost by seemingly random shifts of topics. Unfocused, even disorganized paragraphs result when that happens.

2. **Analyze**
   a. Do the underlined words constitute a relatively small set of related ideas? Even if *you* see how they are related, will your readers? For that passage, the answer is no.
   b. Do the underlined words name the most important characters, real or abstract? Again, the answer is no.
3. **Rewrite**
   a. In most (not necessarily all) of your sentences, use subjects to name their topics.
   b. Be sure that those topics are, in context, familiar to your readers.

Here is that passage revised, with the new subjects boldfaced.

> **Readers** understand what a passage is generally about when **they** see consistent ideas toward the beginnings of sentences, especially in their subjects. **They** feel a passage is coherent when **they** read a sequence of topics that focuses on a narrow set of related ideas. But when topics seem to shift randomly, **readers** lose the context of each sentence. When **that** happens, **they** feel they are reading paragraphs **that** are unfocused and even disorganized.

Now the subjects form a strong topic string: *readers, they, they, they, topics, readers, that, they [readers].*

Avoiding Distractions at the Beginning of a Sentence

It's hard to begin a sentence well. Readers want to get to a subject/topic quickly, but too often we begin sentences in ways that keep readers from getting there. It's called *throat-clearing*. Throat-clearing typically begins with metadiscourse (review pp. 30–32)

that connects a sentence to the previous one, with transitions such as *and*, *but*, or *therefore*:

> And therefore . . .

We then add a second kind of metadiscourse that expresses our attitude toward what is coming, words such as *fortunately*, *perhaps*, *allegedly*, *it is important to note*, *for the most part*, or *politically speaking*:

> And therefore, it is important to note . . .

Then we indicate time, place, or manner:

> And therefore, it is important to note that, in Eastern states since 1980 . . .

Only then do we get to the subject/topic:

> And, therefore, it is important to note that, in Eastern states since 1980, **acid rain** has become a serious problem.

When you open several sentences with distractions like that, your readers have a hard time seeing not just what each sentence is about, but the focus of a whole passage. When you find a sentence with lots of words before its subject/topic, revise:

✓ Since 1980, therefore, **acid rain** has become a political problem in the Eastern states.

Here's the point: In most of your sentences (not necessarily all), start with the subject and make that subject the topic of the sentence.

Learning to write clear sentences is hard enough. Even more demanding is assembling those sentences into a passage that is both cohesive and coherent. We can bring together these

principles about old and new and strings of consistent topics with the principles about characters as subjects and actions as verbs (I'll fill in that empty box in Lesson 5):

Fixed	Topic		
Variable	Familiar		New
Fixed	Subject	Verb	_____
Variable	Character	Action	_____