Form is not something added to substance as a mere protruberant adornment. The two are fused into a unity. . . . The strength that is born of form and the feebleness that is born of lack of form are in truth qualities of substance. They are the tokens of the thing's identity. They make it what it is.

Style and structure are the essence of a book; great ideas are hogwash.

Vladimir Nabokov

I always write a good first line, but I have trouble in writing the others.

Molière

Let it not be said that I have said nothing new. The arrangement of the material is new. Blaise Pascal

Coherence I

Form Beyond Sentences

All of us have stopped in the middle of a memo, an article, or a book realizing that while we may have understood its words and sentences, we don't quite know what they should all add up to. In this chapter and the next, we will offer some principles that will help you diagnose that kind of writing and then revise it. We will illustrate these principles mostly with paragraphs, but we can generalize from paragraphs to sections of documents, even to whole documents, because the principles that make paragraphs coherent apply to prose of any length. Like our other principles, they are principles of reading that we have translated into principles of writing. No one or two of them is sufficient to make a reader feel a passage is coherent. They are a set of principles that writers have to orchestrate toward that common end.

Some cautions: some of the vocabulary in this chapter will be unfamiliar. We dislike jargon as intensely as anyone, but we have had to create terms for new concepts about coherence that we think writers must understand. These principles are also more abstract than those about subjects and characters, about nominalizations and verbs, because coherence is abstract; we cannot point to it as we can point to a noun. Finally, we do not offer these principles as rules that dictate the creation of every paragraph. They are diagnostic tools to help you anticipate when your readers may think your writing is incoherent and to suggest how you can revise it.

You have already seen the first principle.

Principle 1: A cohesive paragraph has consistent topic strings.

There are four more:

Principle 2: A cohesive paragraph has another set of strings running through it that we will call thematic strings.

matic strings in a predictable location: at the end of Principle 3: A cohesive paragraph introduces new topic and thethe sentence(s) that introduce the paragraph.

Principle 4: A coherent paragraph will usually have a single sentence that clearly articulates its point.

Principle 5: A coherent paragraph will typically locate that point sentence in one of two places. We cover the first three principles in this chapter, the last two in

What's All This About? Topic Strings Again, Briefly

Principle 1: Readers will feel that a paragraph is cohesive if it has consistent topic strings. In Chapter 3, we explained how two principles of reading shape a reader's point of view:

- 1. Readers need familiar information at the beginnings of sen-
- 2. Readers will take the main characters of the story as the most consistently familiar pieces of information.

These two principles should encourage us to use the sequence of topics—usually subjects—to focus the reader's attention on a limited set of referents, usually characters, but also central repeated concepts. By consistent topics, we do not mean identical. The topics should constitute a sequence that makes consistent sense to the reader.

since we can make abstractions act like characters, we always But since stories always have more than one character, and have to choose our topics, to design topic strings that focus the graph, the stress of the first sentence introduces evolution, a conreader's attention on a particular point of view. In this next paracept that the writer directly or indirectly topicalized thereafter:

time. Beautiful sequences of antelopes, giraffes and elephants were obtained; new species evolving out of old and appearing in younger strata. In short, evolution was taking place before the eyes of the Clark's practice of carefully mapping every fossil made it possible to follow the evolutionary development of various types through

Omo and had developed rapidly. Unsnarling the pig story was trees for pigs whose various types were so accurately dated that pigs themselves became measuring sticks that could be applied to Omo surveyors, and they could time it. The finest examples of this process were in several lines of pigs which had been common at turned over to paleontologist Basil Cooke. He produced family -Donald C. Johanson and Maitland A. Edey, Lucy: The Beginfossils of questionable age in other places that had similar pigs. nings of Humankind8 The authors could have consistently topicalized the flesh-andblood-characters:

Clark obtained. . . . The Omo surveyors could watch. . . . And they could time. . . . They found fine examples in. . . . We cannot follow any mechanical rule about what to topicalize. We have to decide on a point of view toward our material, consider what our readers will take to be old and new information, then design sentences to meet both needs.

But there is a second sense of "aboutness" that readers also

What About the Topics? A Second Kind of String

Principle 2: A reader will feel that a paragraph is cohesive if it has other strings of related words, strings that we will call thematic strings.

Read this paragraph:

bomb test. As a Democratic President, Truman concluded that Truman had many issues to factor into his decision about the Oppenheimer committee's scientific recommendation to stop the hydrogen bomb project. A Sino-Soviet bloc had been proclaimed; the Cold War was developing; Republican leaders were withdrawing support for his foreign policy; and opinion was coming down on the side of a strong response to the first Russian atom being second in developing the hydrogen bomb was an alternative he could not risk. In retrospect, some now believe that the risk was worth taking, but they did not have to consider the issues that Now do a little experiment with your memory. Don't look back; it's important to determine only what you can recall. Make two lists. In one, list the characters you remember. In the other, list just two or three words that would capture the central concepts that the writer weaves around those characters, words that constitute the conceptual center of that paragraph. Do it now.

Now do the same thing with the evolution paragraph that you read earlier. Again, don't look back; write down only what you remember: central characters and two or three central concepts.

If you are like most readers, you were able to recall more key words, conceptual words, from the evolution paragraph than from the Truman paragraph. The writers of the evolution paragraph created a consistent topic string consisting of references to evolution and to a few characters. But they also wove through that paragraph other sets of related words:

- (1) types of fossils (curly brackets): fossil, antelopes, gi-
- (2) actions of the surveyors (small capitals): map, follow,
- (3) actions of species (boldfaced): evolve, appear, die, re-
- (4) time (italics): time, new, old, younger, age, etc.

Basil Cooke. He PRODUCED family trees for {pigs} whose {various types} WERE SO ACCURATELY dated that {pigs} themselves became Clark's PRACTICE OF CAREFULLY MAPPING every {fossil} made it possible to FOLLOW the evolutionary development of various types through time. Beautiful sequences of {antelopes, giraffes and elephants} were OBTAINED; {new species} evolving out of old and appearing in younger strata. In short, evolution was taking place before the eyes of the Omo surveyors, and they could time UNSNARLING the {pig} story was turned over to paleontologist it. The finest examples of the process were in several {lines of pigs} which had been common at Omo and had developed rapidly. measuring sticks that COULD BE APPLIED to {fossils} of questionable age in other places that had {similar pigs}. Note that these sequences of words are not just repeated words. They are sets of conceptually related words. The Truman paragraph, on the other hand, has no such network of related words.

strings. In any paragraph, the words in the topic strings and the words in thematic strings are not mutually exclusive. Some words We will call these sets of conceptually related words themes and sequences of them that run through a paragraph thematic

in a topic string may turn up outside the topic position, and some words in the thematic string may turn up as topics.

velop new ideas. Topic strings focus your reader's attention on reader a sense that you are focusing on a core of ideas related to Together, topic strings and thematic strings constitute the conceptual architecture of a passage, the frame within which you dewhat a passage is globally about. The thematic strings give your

Compare the original Truman paragraph with this one:

scientific issues, but also how developing tensions between the When the Oppenheimer committee advised President Truman to stop the hydrogen bomb project, Truman had to consider not just U.S. and the USSR were influencing domestic politics. When the Russians and Chinese proclaimed a hostile Sino-Soviet bloc, the Cold War became a political issue. At the same time, Truman was losing Republican support for his foreign policy. So when Russia set off its first atomic bomb, Americans demanded that their President respond strongly. He decided that he could not risk voters' seeing him as letting the Russians be first in developing the have taken that risk, but they did not have to worry about Cold most powerful weapon yet. Some critics now believe that he should War American politics. We have done more than make this paragraph more specific. We have revised it around explicit thematic words that focus the reader's attention on two central themes: first on international tension—developing tensions between the U.S. and the USSR, a bostile Sino-Soviet bloc, the Cold War; and then on domestic politics--domestic politics, Republican support, voters, Cold War American politics.

But now here is a complicating factor: readers familiar with the history of that period would not have needed those words to make the original paragraph hang together: they would have supplied their own, as some of you may have done. Those who know a great deal about a subject can create much of their own cohesion and coherence in a text on that subject because they can read into it relationships that others less knowledgeable cannot. Those who know little need all the help they can get. The problem is to understand what your reader knows about your subject. Since we ordinarily write for readers who know much less than we do about a subject, it is always prudent to underestimate a reader's knowledge and make themes explicit.

Too Few Strings. A paragraph that feels empty of meaning will have one or two topics, much repetition, and no specifically articulated central themes that the reader can seize on as a conceptual center for the paragraph. But once diagnosed, this problem won't yield to advice about style and organization. The writer has to think harder.

Diffuse Strings. A reader may feel a passage is unfocused if a theme is only implicit or if the writer uses no single word to pull together concepts that may seem to a reader wholly unrelated. That was the problem with the original Truman paragraph. A different form of that problem is illustrated by this next paragraph:

symbols, or if the patterns cannot be easily captured in words. In many cases, such as in learning to ride a bicycle, verbal directions may be too cumbersome, since quick and intricate coordinations must be made. In mastering certain concepts, diverse subroutines must be integrated serially. If the content is difficult and un-Rule structuring supports cognition, whether the information comes from direct practice, witnessed demonstrations, or from symbolic modeling. Under what conditions is one social learning technique favored over another? Example can teach better than precept. This is most likely to be the case if the learners' language skills are not adequate for utilizing information cast in language familiar, lengthy lecture presentations can tax comprehension and satiate the discerning attention of the learner. In these case, ever, if verbal symbols can be easily stored and adeptly translated into their action referents, symbolic modeling should be much demonstration offers advantages over undiluted narration. Howmore efficient than enacting actual illustration for observers.

The writer of this paragraph wanted to contrast two kinds of teaching: explanation and demonstration. But he used so many different terms to describe them that he seems to describe a dozen ways. He expressed the theme of explanation by symbolic modeling, precept, language symbols, words, narrative modeling, instructions, lecture presentations, undiluted narration, and verbal symbols (interestingly, never the word explanation). He expressed the theme of demonstration by demonstration, example, exemplification, and actual illustration—fourteen different words and phrases for just two concepts.

We have revised this passage to focus it more explicitly (1) on a consistent topic string, organized around the characters we and teachers, and (2) on a few consistent thematic strings: learn, actions, rules, demonstration, and explanation.

onstrate them, or by listening to a teacher explain them. But do we learn better from a demonstration or from an explanation? We are likely to learn more when we watch a demonstration if our language skills are so weak that we cannot understand words easily, or if the teacher cannot verbalize the rules. We are also likely to learn more from watching a demonstration when we must quickly coordinate intricate actions such as learning to ride may also learn more quickly from a demonstration if the action a bicycle, but the explanation for them is too cumbersome. We requires us to serially integrate diverse subroutines. Finally, we may learn better from a demonstration if the information is diffiexplanation if we can adeptly translate explanations into actions We learn rules for actions better when those rules are structured, whether we learn by practicing them, by watching a teacher demcult or unfamiliar and the teacher lectures about it at length. In tion. On the other hand, we will learn an action better from an these cases, we may become satiated and not be able to pay attenand then store the information. It may be that the writer of the original paragraph was remembering that familiar advice, "Vary your word choice." More bad advice. Don't strive for "elegant variation." When you use two words for one concept, you risk making your reader think you mean two concepts.

If a paragraph or passage does not seem to hang together, if it feels vague, out of focus, look at its topic and thematic strings. Its topic strings should be consistent and appropriate. Its thematic strings should be articulated clearly and concisely. There is, however, one more principle that we must observe when we introduce new topic and thematic strings.

How Do New Strings Start? Signaling Topics and Themes

Principle 3: A reader will feel that a paragraph is cohesive if he is introduced to new topic and thematic strings in a predictable location: at the end of the sentence(s) that constitute the opening section of a paragraph, section, or whole document.

Even when your paragraphs do have specific topics and thematic strings, your readers may overlook them if you do not signal them clearly. How would you characterize the following

in boyars' regularly disputing who was to become sovereign. It primogeniture. But Paul I was strangled by conspirators, one of ter of Peter the Great, defeated Anna, and she ascended to the throne in 1741. Succession not dependent upon authority resulted Seven out of eight reigns of the Romanov line after Peter the Great the principle of heredity. He proclaimed that the sovereign could appoint a successor in order to accompany his idea of achievement by merit. This resulted in many tsars not appointing a successor before dying. Even Peter the Great failed to choose someone before he died. Ivan VI was appointed by Czarina Anna, but was only two months old at his coronation in 1740. Elizabeth, daughwas not until 1797 that Paul I codified the law of succession: male In 1722, Peter the Great passed a law of succession that terminated were plagued by some sort of palace revolt or popular revolution. whom was probably his son, Alexander I.

confused because in its opening sentence, its author set us up to To most readers, this paragraph seems unfocused, but its problem does not turn on missing topic or thematic strings. The paragraph consistently has characters as subject/topics, and it theme that we might express as turmoil. This paragraph seems has three clearly stated and important thematic strings: words related to the concepts of succession, appointment, and a general expect one set of themes, but he delivered another. He wrote

Seven out of eight reigns of the Romanov line after Peter the Great were plagued by some sort of palace revolt or popular revolution. But he drops the theme of revolt and revolution until the last part of the paragraph, and does not explicitly articulate that theme even then. It's like hearing the overture to Carmen introduce La Traviata. He should have ended that opening sentence on the concepts that were central to his discussion: succession, appointment, turmoıl.

The principle of design is this: we introduce new themes not anywhere in a sentence, but rather as close to its end as we can You'll recall that in Chapter 4 we discussed the segment at the end of a sentence—its stress position, that part of the sentence

words that we think are important in that single sentence, but to that we use to signal especially important information. We use that concluding stress position not only to emphasize important signal that we intend to develop new themes in the sentences that follow. Contrast the way the evolution paragraph opens with a revision that is virtually synonymous:

Clark's practice of carefully mapping every fossil made it possible to follow the evolutionary development of various types through

Clark made it possible to follow the evolutionary development of various types through time because he mapped every fossil

referring to the actions of the team (follow), to species (various The end of the original introductory sentence signals the topics and issues the writers will discuss: the topic string, which is introduced by evolutionary development and four thematic strings types), to their actions (development), and to time (time). Simply by introducing those issues toward the stress position of this introductory sentence, the authors tacitly promise us that those words will be thematic keys to the rest of the paragraph. As we see them deliver on that promise, we feel we are reading a paragraph that is cohesive and coherent.

fossils carefully. This next sentence would seem to introduce a On the other hand, our revised opening sentence would set up a reader to expect a paragraph about techniques for mapping paragraph about various types of pigs:

low through time the evolutionary development of several species Because Clark mapped every fossil carefully, it was possible to folAnd this next opening would set up a reader to read specifically about Clark:

opment of several species of pigs because the careful mapping of It became possible to follow through time the evolutionary develevery fossil had been done by Clark.

read the rest of it, because in our opening we tell them how to frame the conceptual space that they are about to enter. To make sure they frame it in the right way, we place key thematic terms How we open a paragraph determines how our readers will as close as we can to the end of that opening.

To revise the opening sentence of the Romanov paragraph, we would pick out the themes that in fact are important in the rest of the paragraph and then design an opening sentence that would introduce them in its stress:

manov line were plagued by turmoil over disputed succession to After Peter the Great died, seven out of eight reigns of the Rothe throne.

Complex Introductions

tence." Why not just use that familiar term? One reason is that good writers often introduce paragraphs with more than just a single sentence. In the next paragraph, where does the writer seem to finish setting up her problem, to finish introducing her paragraphs with a single sentence, typically called a "topic sen-In all the preceding examples we have seen writers introduce central issue before she begins to discuss it?

juries are likely to be hostile toward such actions. It is therefore appropriate that we re-evaluate the way these alleged violations more serious mandatory penalty of "six months in county jail." far, the fact that the violations are criminal in nature causes serious concern. Because the criminal aspects of these violations However, the troublesome provision for violating the county ordinance against dumping toxic wastes is not the \$500 fine, but the Even though no jail sentences have been rendered against Abco so combine with the growing mistrust toward large, international corporations and with California's emphasis on consumerism, At the outset this sum may not appear to be particularly onerous.

Most readers feel that the introduction consists of the first two

dinance against dumping toxic wastes is not the \$500 fine, but the more serious mandatory penalty of "six months in county jail." At the outset this sum may not appear to be particularly onerous. However, the troublesome provision for violating the county orIt is at the end of the second sentence that the writer introduces the topic string consisting of jail sentences, violations, criminal aspects of these violations, and a central thematic string consisting of onerous, troublesome, serious, penalty, mistrust, and hostile.

In this next paragraph the writer uses three sentences to set up

the main cause of the increase in prices, ensured that those who to every family in later Tudor England. One of its ironies was that in the particular economic circumstances of the time it often made a reality of what medieval people had tended to believe, that one person's good fortune was another's distress. Inflation in prices was bound to be socially divisive. The growth of population, itself suffered most were those most dependent on the earning of wages. But there were others, perhaps only a minority, at all social levels, whose income failed to keep pace with the rising cost of living, a situation not made easier for them to bear by the rise in the standard of material living which characterized the Elizabethan period. . . . Elizabeth's subjects, and not only those in the upper ranks of society, discovered expectations of material comfort previously undreamed of. Perhaps it was as well, in the interests of social harmony, that although new horizons were appearing, neither at home nor abroad were there really great fortunes to be made. By 1600, however, there were greater distinctions, in both town and countryside, between the rich and the poor, particularly between those of modest prosperity, the yeomen, farmers and major urban tradesmen, and the poor husbandmen, small crafts-Inflation, both of prices and of population, presented a challenge men and full-time labourers.

—Joyce Youings, Sixteenth-Century England"

It is at the end of that third sentence that Youings introduces two themes that she pursues through the paragraph: social classes and aspects of divisiveness.

... Inflation in prices was bound to be socially divisive. The pendent on the earning of wages. But there were others, perhaps only a minority, at all social levels, whose income failed to keep pace with the rising cost of living, a situation not made easier for them to bear by the rise in the standard of material living which characterized the Elizabethan period. . . . Elizabeth's subjects, and not only those in the upper ranks of society, discovered expectations of material comfort previously undreamed of. Perhaps new horizons were appearing, neither at home nor abroad were there really great fortunes to be made. By 1600, however, there were greater distinctions, in both town and countryside, between growth of population, itself the main cause of the increase in prices, ensured that those who suffered most were those most deit was as well, in the interests of social harmony, that although the rich and the poor, particularly between those of modest pros-

perity, the yeomen, farmers and major urban tradesmen, and the poor husbandmen, small craftsmen and full-time labourers.

tance of those new topic and thematic strings, we put them into In short, we can introduce new topic strings and thematic strings in a single sentence. But just as often, we create introductions consisting of two or three sentences, or (though rarely) more. To be certain that our readers do not overlook the importhe stress of the last sentence of the introduction.

in paragraphs a more complex introductory segment. To discuss These complex introductions are so common that it would be misleading to talk about "topic sentences." We have to recognize that segment, we need two new terms.

Paragraph = Issue + Discussion

Regardless of how many sentences we use to introduce the body of a paragraph (or a document or one of its sections), we have to grasp this central principle: Whether readers are conscious of it or not, they try to divide units of organized discourse—paragraphs, sections, or wholes—into two sections;

- 1. A short opening segment. Toward the end of this segment, in the stress position of the last sentence, readers look for the concepts the writer will discuss in the following section. Those words are often topics, but they must also include themes.
 - 2. A longer following segment—the rest of the paragraph. In this segment, the writer develops—and readers look for—new ideas against a background of repeated topics and themes.

issue, and what follows it the discussion. The issue of a paragraph is not its ideas, its concepts, or its subject. The issue of a From time to time, we have had to find new terms to name stress, topic string, etc. This complex opening segment is also ignored in most handbooks. We will call this opening segment the paragraph, of a section, or of a document is its introductory segelaborates, supports, qualifies, argues for what the writer stated matters that standard handbooks ignore: nominalization, topic, ment, its overture, if you will. The discussion typically explains, in the issue. The issue promises; the discussion delivers.

three or more paragraphs; the issue of a long report a few pages The issue of a paragraph may be one, two, three, or more sentences long; the issue of a section or short essay one, two, or

long. But however long it is, the issue of a paragraph, section, or troduces. If a writer creates a disproportionately long issue, the reader may incorrectly assume that after a sentence or two, the writer has finished her introduction and is into the body of her paragraph, when in fact she is still introducing it. In longer documents, because readers risk missing where the issue stops and the whole document should be short, much shorter than what it indiscussion begins, many writers signal the end of the issue and the beginning of the discussion with a heading.

Issue is analogous to subject and topic. These three terms sion is analogous to verb and stress. They name the positions name introductory positions that all have the same function: to put before the reader concepts or claims that the writer intends to expand on in what follows. In the same way, the term discus-And these positions all have the same function of expanding on what precedes them. In fact, we can add another level to the that follow: subject + verb, topic + stress, issue + discussion. boxes that we have been constructing.

FIXED	ISSUE	DISCUSSION
VARIABLE		

FIXED	TOPIC	STRESS
VARIABLE	OLD/FAMILIAR	NEW/UNFAMILIAR

FIXED	SUBJECT	VERB	COMPLEMENT
VARIABLE	CHARACTERS	ACTION	I

(As you can see, we have left the variable level open. We will fill it in the next chapter.)

Diagnosis and Revision

When a paragraph feels out of focus, confused, you may have one or more of four problems with its issue and discussion.

- 1. At the end of the issue, you introduce a concept that readers take to begin a theme, but you then fail to develop that concept in the discussion. The writer of the Romanov paragraph (p. 88) introduced in its issue the themes of *palace revolt* and *popular revolution*, but did not explicitly pursue them. He pursued instead the matters of appointment and disputed succession, and made implied references to revolt and revolution only later.
- 2. Conversely, you fail to anticipate in the issue important themes that you in fact develop in the discussion. The writer of the Romanov paragraph did develop some important themes in his discussion: *succession*, *dispute*, *appoint*, and a diffuse thematic string having to do with boyars' unhappiness, palace factions, and a patricidal son, a theme that we might capture in the words *trouble* or *turmoil*. But in his issue, he announced a different set of themes.
 - 3. At the end of the issue you introduce a concept that readers think promises a theme, but in the discussion, you develop that concept using terms so varied that readers cannot connect them to your announced theme. In the demonstration/explanation paragraph (p. 86), the writer assumed that readers would understand that thirteen different terms referred to only two ideas.
- 4. You mention in the issue those themes that you develop in the discussion, but you bury the references to them inside a sentence, instead of highlighting them in the stress of the final sentence of the issue.

In short, if you write a passage that does not seem to hang together, seems uncentered or out of focus, you may have made a promise but didn't deliver, or you may have delivered on promises you didn't make.

Most of these problems usually result from the way most of us write our first drafts: When we draft, we are often happy just to get an opening sentence down on paper, never mind whether it sets up what follows (particularly since at that point we probably have no clear idea what in fact will follow). Only as we go on drafting the rest of the paragraph, section, or document do we begin to discover and explore some useful themes. But by that time we may be in the middle of the paragraph or essay, long past the point where our readers expected to find them.

To revise the Romanov paragraph, or any paragraph like it, we do one or all of three things:

- 1. Look at the discussion independently of the issue and ask what themes *in fact* the paragraph develops. Then revise the end of the issue to include any thematic strings that are present in and important to that particular discussion—in the Romanov case, the concepts referring to succession, appointment, and dispute. (A small tip: in a paragraph or essay that feels out of tocus, look first at the last sentence or two. It is there that you will often find the product of your thinking and drafting. In that last sentence or two, did you use key terms that you failed to anticipate in the opening? If so, move them up to the beginning and rewrite.)
- 2. Deliberately weave into the discussion whatever important thematic strings you framed in the issue but omitted from the discussion. In the Romanov case it will be something more general than palace revolts and popular revolutions—turmoil.
- 3. Delete from the issue whatever you don't want to develop in the discussion. In the Romanov case, they would be specific references to palace revolts and popular revolutions. Here is Romanov revised:

these disputes by codifying a new law: succession on the basis of primogeniture in the male line. But turmoil continued. Paul was by the boyars and other interests. There was turmoil even when two months, but his succession was disputed by Elizabeth, daughter of Peter the Great, who defeated Anna and her forces before ascending to the throne in 1741. In 1797 Paul tried to eliminate manov line were plagued by turmoil over disputed succession to the throne. The problems began in 1722, when Peter the Great passed a law of succession that terminated the principle of heredity and required the sovereign to appoint a successor. But because many Tsars, including Peter, died before they appointed successors, those who sought to succeed to the throne had no authority by appointment, and so their succession was regularly disputed successors were appointed. In 1740, Ivan VI was adopted by Czarina Anna Ivanovna and appointed as her successor at age strangled by conspirators, one of whom was probably Alexander I, After Peter the Great died, seven out of eight reigns of the RoThis will win no Pulitzer Prize, but with a few changes guided by a few simple principles, we have turned a paragraph that felt disorganized and unfocused into something more coherent.

The last thing one discovers in writing a book is what to put

Blaise Pascal In all pointed sentences, some degree of accuracy must be sacrificed to conciseness.

Samuel Johnson

Coherence II

Intentions and Points

In the last chapter, we discussed what readers look for (whether they know it or not) when they begin a paragraph, a section of a document, or a whole document: (1) They look for a relatively short opening segment that acts like an overture to what follows—we called it the *issue*. (2) Near the end of the last sentence of every issue, readers expect to find words that announce the new topics and themes that the writer will repeat in the longer segment that follows, the segment that we called the *discussion*.

In this chapter, we are going to add two more principles that will complete the third level of organization that we began with

	DISCUSSION	
The state of the s	ISSUE	

To this we will add a second variable layer analogous to characters and action, to old and new information.

DISCUSSION	
ISSUE	

What's the Point?

Principle 4: A reader will feel that a paragraph is coherent if she can read a sentence that specifically articulates its point.

We visibly organize essays, articles, reports, memoranda into paragraphs, subsections, and major sections to signal readers

that we have finished developing one part of an idea and are moving on to another, to a new thought. But this notion of new idea or thought implies something more important than new topics and themes. When we move from one paragraph or section to another, we also imply that we intend to make some new point, to make some new claim about that new subject matter. Readers will expect to find in each paragraph and section, and also in the whole, a sentence that will be the logical, argumentative, expository center, a sentence that you could send as the telegram capturing your central idea. Here is a paragraph that was criticized for not having such a point.

As you know, Abco is contemplating the possibility, of entering into a cooperative venture with Janeway to develop an electronically controlled steering mechanism for our new line. Janeway has a long history of developing highly efficient hydraulic components including brake systems, front end systems, and various types of stabilizing systems. We have found them entirely reliable and cost-effective. So far as I know, Janeway's experience in developing electronic systems has primarily involved ignition and other engine components, not steering. The development of an electronic steering mechanism will depend on an innovative marriage of electronics and hydraulics. Edwards has recently marketed a hydraulic lift system that depends on electronic sensors to read terrain features and compensate for them. Their systems appear to have many of the features we will require in our steering mechanisms.

If we were to ask the writer of this paragraph, "So what's the point?" the writer would probably respond with something like "Well, I wanted to discuss the reasons for not committing ourselves to developing that new electronic steering system with Janeway." But when we asked about his "point," we didn't want to know what motivated him. We were asking for a sentence that we wish we had found but didn't, a sentence or two on the page that encapsulated some clear statement that we could recognize as the most important sentence in the paragraph. With this sense of "point" in mind, the writer would have responded with something like,

Abco should not cooperate with Janeway in developing a new steering system because Edwards has more technical expertise.

And we would have said, "Well, why didn't you say that." And he would probably have replied, "It's obvious." The writer was

relying on his readers to have the same set of assumptions, the same body of knowledge, the same attitudes and values that he had. Ordinarily, however, they don't.

The most common problem that writers have with points is that they fail to articulate them clearly, and so the reader doesn't get the point of a paragraph, of a section, or of the whole document. Or worse, the reader gets the wrong one.

To emphasize the difference between this general sense of what we intend and what we actually write on the page, we're going to use the word point in capital letters. By point we do not mean a general intention in the mind of the writer or the gist or summary of a passage. By point we mean the specific sentence on the page that the writer would send as a telegram if asked "What's your point?" In fact, the better question is not "What's your point," but "Where's your point?" In this chapter, we will discuss how careful writers make and signal points for readers who do not know as much as the writer.

Where's the POINT?

Principle 5: A reader will feel that a paragraph is coherent if he finds the POINT sentence in one of two predictable places in a paragraph: (1) at the end of its issue, or (2) at the end of its discussion; i.e., at the end of the paragraph (or section or whole document).

We'll discuss first those Points that appear in issues.

POINTS in Issues

Read this next paragraph, then answer the following question: if you were to pick out only one sentence *on the page* that you would send as a telegram representing the rest of the paragraph, as the POINT sentence of that paragraph, which sentence would you pick?

Though most economists believe that business decisions are guided by a simple law of maximum profits, in fact they result from a vector of influences acting from many directions. When an advertiser selects a particular layout, for example, he depends not only on sales expectations or possible profit but also on what the present fad is. He is concerned with what colleagues and competitors will think, beliefs about the actions of the FTC, concerns

about Catholics or the American Legion, whether Chicanos or talian-Americans will be offended, how the "silent majority" will react. He might even be worried about whether the wife or secretary of the decision maker will approve.

ment, the claim that the writer wants the reader to accept. The other sentences support that claim. The first sentence, then, is the The answer seems straightforward—the first sentence, because it sums up the paragraph by expressing its most significant state-POINT of this paragraph. That single POINT sentence simultaneously constitutes the entire issue of the paragraph.

Where is the POINT in this paragraph?

Our main concern was to empirically test the theory that forms the background for this work. To a great extent, we have succeeded in showing our theory is valid. Chapter Two reports a study which shows that the rate of perceiving variations in length relates directly to the number of connectives in the base structure of the text. In chapter Three, we report a study that found that subjects perceive as variable units only what the theory claims is a unit. Another series of crucial studies is the comparison and contrast experiments reported in Chapter Three, which show that we do not distinguish complex concepts of different lengths as some current theories do. Most readers take the POINT of this paragraph to be the second sentence, again the last sentence of the issue.

What sentence captures the POINT here?

American farmer and bolster the national economy by providing over one million jobs. The income from farm exports alone is the government would be subsidizing American farmers by more The United States is at present the world's largest exporter of agricultural products. Its agricultural net balance of payments in recent years has exceeded \$10 billion a year. As rising costs of imported petroleum and other goods have increased the U.S. trade deficit, this agricultural surplus has taken on great financial importance in both the domestic and international markets. First, agricultural exports maintain profitable market prices for the used to purchase about \$9 billion worth of domestic farm machinery and equipment annually. Exports of U.S. agricultural products also reduce price-depressing surpluses. Without exports, than \$10 billion a year over the current rate. Finally, agricultural exports provide an entry to foreign markets that can be exploited

Vost readers pick the third sentence,

creased the U.S. trade deficit, this agricultural surplus has taken on great financial importance in both the domestic and inter-As rising costs of imported petroleum and other goods have innational markets.

Once again, it is the last sentence of the issue.

POINTS where their readers most expect them: at the end the issue, whether the issue is the issue of a paragraph, a section, or a When writers want to be as clear as possible, they locate their whole document.

ISSUE	DISCUSSION
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that simultaneously expresses the POINT of its paragraph is by no Most handbooks on writing assert that the standard paragraph begins with a "topic sentence," a sentence that announces and simultaneously makes the "most general" statement (in our terms, the POINT). But as we have just seen, a one-sentence issue means the only kind of issue. Issues may consist of one, two, three, or in very long paragraphs, even more sentences. However long the issue, though, readers expect POINT sentences in a predictable position: in the last sentence of an issue. This is another reason why it is important to keep issues short. If you make your issue very long and do not clearly signal when you finish, your the subject of the paragraph (in our terms its topics and themes) reader may take your POINT to be an earlier sentence.

What purposes are served by the sentences preceding the graph, make a general claim that the writer will narrow in the POINT, or make a preliminary claim that the POINT sentence re-POINT? They typically provide transition from a previous paracets. In the following two-sentence issue, sentence (1) is a transiion, sentence (2) is the POINT:

poser announces the themes that he will repeat, modulate, com-Think of an issue as the overture to an opera, in which the com-(1) We can put this abstract notion of issue in simpler terms. (2) bine, and develop in a variety of interesting ways.

In this next three-sentence issue, sentences (1-2) constitute a generalization that is narrowed in POINT sentence (3):

(1) Writing well involves so many skills that it is hard to know where to begin describing what makes a good writer. (2) Among other considerations, a writer must be sensitive to words, style, organization, subject matter, logic, emotion, audience. (3) Perhaps the most crucial of these, though, is a sensibility to one's audience, to how readers read. In this next two-sentence issue, sentence (1) is a claim that Pointsentence (2) rejects:

have a single topic sentence that introduces the paragraph. (2) But (1) Most high school teachers think that good paragraphs must that is evidently not so because professional writers regularly introduce their paragraphs with two or more sentences. Writers do not always, however, locate their POINT sentences in the issue of their paragraphs, sections, and documents. Sometimes, they put POINT sentences at the end of their discussion.

POINTS at the Ends of Discussions

pearing as the last sentence of their issue. But that is only a statistical observation. We can also put a POINT at the end of a paragraph, at the end of the discussion, and still seem entirely Most paragraphs are Point-early, their Points typically apcoherent. Here is a paragraph whose Point is at the end:

ideal male became the cowboy, then the world adventurer, then function. Now one can detect a new theme: as the male image as conqueror and survivor has lost its value, men have felt free to masculinity; they were simply men surviving in a dangerous world and dressing the part. Then in the nineteenth century, our consciously dressed their part. But in this century, something happened: Hemingway's heroes, for example, seemed to feel that they and our image of them is one of a kind of Brooks Brothers ruggedness. They seemed less confident that their masculinity had a real Something has happened to the American male's need to display for survival on the frontier. For a long time, American males were Indeed, the rugged frontiersmen never even thought about their the war hero. They all were confident of themselves and unselfhad to prove that it was still important to be a man among men, the signs of stereotypical masculinity that once seemed necessary confident in their manhood, sure of their sexual roles and images.

dress in ways once thought feminine, to wear earnings, even to ual image of himself suggests something deeper than changes in appearance: he is adapting to a world in which the image of tradiwear makeup. These signs of a change in the American male's sextional masculinity is no longer necessary for survival.

discussion of the paragraph (or section or document), in its issue he must still use its issue to introduce the discussion in a way that inticipates its topics and themes. In this paragraph, the issue is its first sentence. But while the writer does not assert the POINT of the But if the writer does put the POINT sentence at the end of the paragraph in its issue, he does introduce its key topics and themes:

the signs of stereotypical masculinity that once seemed necessary Something has happened to the American male's need to display for survival on the frontier. Why put a POINT sentence last in a paragraph? Usually, the But predictably, a writer will put her POINT sentence at the end of the paragraph because she intends to develop, expand, elaborate, explore that POINT in the following series of paragraphs. In fact, if the writer uses the paragraph to introduce a whole document, then she will predictably locate her POINT at the end of that writer wants to develop her argument before making her claim. Sometimes she discovers it there (more about this in a moment). paragraph.

Introductory Paragraphs: A Special Problem

Here is a typical opening paragraph:

and control is at least as old as recorded history. In Aristotle's cords. Much later European royalties were enthralled by lifelike form tasks that are too hazardous, too onerous, too boring or Man's fascination with machines that move under their own power Greece, plays of several acts are said to have been performed entirely by automatic puppets driven by weights hung on twisted automata that could write, draw, and play musical instruments. automata has been dispelled. Today automatic machines and industrial robots are used in factories throughout the world to per-In recent years most of the magical aura surrounding mechanical simply too uneconomic for human beings to undertake. The issue of this paragraph appears to be the first sentence. It introduces the topics and themes of history, fascination, and ma-

chines that move under their own power. In the discussion, the writer wants us to give the most rhetorical weight. The rest of the article is specifically about modern uses of robots in contexts that writer develops and expands those themes and topics, offering historical examples of automatic machines, gradually narrowing down to modern robots. But it is the last sentence to which the to humans are dangerous, onerous, boring, or uneconomical.

In a single opening paragraph such as this, a paragraph that cally locates the main POINT sentence at the end of the paragraph, in the last sentence. And if the opening of an article or report consists of more than one paragraph, then the main POINT constitutes the issue to everything that follows, the writer typisentences will appear at the end of the whole opening."

POINTS in Whole Documents

We have made two generalizations about where to put POINT sentences in paragraphs:

- 1. If the paragraph is a body paragraph, if it does not introduce a tence in either or both of two places: (a) at the end of the introsection or whole document, you can make your POINT senductory issue, and (b) at the end of the paragraph; i.e., at the end of the discussion.
- 2. But if the paragraph introduces a section or even a whole document, then you should put your POINT sentence at the end of that paragraph.

How do these principles apply to documents? The translation is simple: in documents, you can make your point either

- 1. At the end of the issue (then again at the end of the document).
- 2. At the end of the document.

But as readers, we may have a problem with a document whose main Point is at the end: when we begin reading the that we find at the end of the issue are the main POINT sentences tant main POINT sentence at the end of the document. Look at document, we cannot always be certain whether the sentence(s) of the whole document, or whether we will find a more importhis paragraph about scaffolding and Abco's liability:

liability for the plaintiff's injuries claimed as a result of his climb-You have asked me to determine the matter of Abco's potential

must analyze four factors. They are (1) did Abco construct the to the instructions; and (4) did the plaintiff use the scaffolding in scaffolding negligently; (2) did Abco provide adequate assembly instructions; (3) did plaintiff assemble the scaffolding according ing Abco's scaffolding. To determine Abco's potential liability we a manner prescribed in the instructions?

he task would judge the writer to be incompetent, because he If this is the issue to the whole memo, then the last sentence listing the questions to be answered could be the main Point sentence of the whole document. If so, the person who assigned didn't answer the real question—Is Abco liable? On the other hand, the writer might go on to make the main POINT at the end of the memo; if so, he would thereby have created a POINT-last If that were the case, then the sentence about the four kinds of analyses at the end of the issue becomes an anticipatory POINT, a minor POINT intended only to launch the reader into the rest of nouncing themes and topics. Always observe this principle: if you make your POINT at the end of a document, you must still the document, to anticipate and frame the discussion by anoffer the reader an anticipatory POINT.

tions don't like that kind of organization. They want to see the POINT up front. So unless you can justify creating a POINT-last must, then you should observe two more principles of construcdocument (see below for some reasons), don't do it. But if you In general, however, most readers in most nonacademic situation. At the end of the introductory issue of your document,

- 1. offer some kind of specific anticipatory POINT sentence(s) that clearly promise a main POINT still to come; and
- 2. include toward the end of that anticipatory POINT sentence the themes and topics that you will pursue.

Whether you make your POINT early or late, you must always frame the space that your reader is about to enter.

Why Point-last Documents?

Writers usually offer one of three reasons for deliberately locating their main POINT sentences at the end of a document. There is a fourth, one to which they usually do not admit.

Timidity or Politeness. Some professionals believe that if a document delivers bad news, they should withhold the main Point until the end. The theory is that if the writer can gently walk her readers through her reasoning toward the unwelcome Point, the reader will be more willing to accept it. When a writer feels that she has to deliver a Point that is unpopular, controversial, or nasty, or when she feels that she does not have the authority simply to deliver her Point outright and make it stick, she may feel that before she delivers the bad news she has to lay down a foundation of history, evidence, and reasoning. That's not a matter of style; it's a matter of judgment, nerve, character, or standing. In fact, most professionals prefer Point-first documents, no matter how bad the news.

Discovery. Sometimes writers put their main Point sentences last because they want their readers to work through an argument or a body of data to experience a sense of discovery. They believe that the development of the Point is as important as the Point itself. In fact, that kind of organization characterizes parts of this book: we have frequently begun with some contrasting passages to develop a small-p point, in the hope that you would grasp it a moment before you read the Point sentence.

As we have emphasized, though, most readers in most professional contexts prefer documents with main Point early. Articles in many sciences—hard or soft—begin with abstracts that typically contain the Point of the article. Readers in those areas also know that, after reading the abstract, they can go directly to the conclusion if they want to see the main Point expressed in more detail. These readers employ a reading strategy that creates a Point-first form: if they don't find the Point on the first page, they flip to the conclusion, where they expect to find it.

Convention. Writers put a main POINT last when local convention encourages it, typically in the belletristic essay. In some fields outside the sciences, it is typical for a writer first to announce (some would say invent) a problem that no one suspected until the writer pointed it out. In this kind of writing, obviously enough, the writer is under no pressure to answer a question that no one except the writer has asked. But once the writer has convinced us of an unsuspected problem with, say, gender roles in the third book of Milton's *Paradise Lost*, she then sets to working through

the problem, demonstrating how inventively she is solving it, how much more complex the problem is than we might have thought even from her early account of it. Only after we have accompanied the writer through her argument do we begin to catch sight of her main POINT.

In fact, most readers of belletristic prose would find the alternative POINT-early organization too crude, too flatfooted. And we cooperate with writers in this convention by the way we read: before we decide whether to read a piece by, say, Norman Mailer in *The New York Review of Books*, we do not flip to its end to see whether we find his conclusion interesting and only then decide to read the whole piece. But those who read scientific journals do that regularly when they read articles in those journals. Habits of reading are as conventionalized as habits of writing.

But again, this kind of main POINT-last writing is distinctly disfavored in most other kinds of professional discourse in our culture. We say "in our culture" because in some cultures, it is considered discourteous to state a POINT clearly and directly at all, much less early. It is one of the problems that Americans have reading discourse written in those cultures, and that writers from those cultures often have when they try to write documents for American readers. We are trained to look for POINTS; others are trained to avoid them.

There is a fourth reason why writers make their main POINTS at the end of a discourse rather than at the beginning.

Failure to Revise. We've suggested this problem earlier. When we draft, we often have no idea where we are going, what kind of POINT sentence we are going to write, until we discover it at the culd of a paragraph, section, or even the whole document. If we do not revise that kind of document, we offer our reader only a running account of our thinking. If you look over a document and discover that your main POINT is last, not by design, but as an accident of your having discovered it there, and you are writing for an audience not interested in a narrative account of your mental life, revise. Move the main POINT to the end of your introductory issue. Then start the kind of revision that we did with the Romanov paragraph: track down topics and themes, delete misleading words and terms, weave into your issue and discussion key topics and themes.

Our best advice is this: Unless you have good reason to with-

hold your main Points until the end, get them out early—but not immediately, not before you get to the end of a reasonably concise introductory issue. Make sure that a main Point sentence encapsulates what you take to be your major claim, observation, proposition, idea, request, warning, direction, command—a sentence that you would send to your reader if you had only a post card to write it on. In those encapsulating sentence(s), be sure that you express toward the end whatever thematic or topic strings you want your readers to notice thereafter.

The Model Entire

With this discussion of POINT, we can now complete our set of boxes. In our first four chapters, we developed a simple way to represent the apparently natural connections between subjects and characters, between verbs and actions, among topics and old information and characters, and between stress and new information. We then added a half of a third level, the layer of issue and discussion and put the POINT specifically at the end of the issue, because there must always be one there.

But because we must also locate our main Points at the end of an introductory paragraph, we have to add one more variable:

ISSUE	DISCUSSION
POINT	(POINT)

As we write, we are always trying to find the best place to locate those elements that we can move: characters, actions, old and new information. We put these variable elements in parts of sentences that have a fixed order: subject + verb, topic + stress. In the same way, as we write, we always have to decide where we are going to make our point: at the end of the issue, or at the end of the discussion. Readers find writing to be clear, direct, and readable to the degree that they find central characters in subjects, old information in topics, and points at the ends of issues; when they find crucial actions in verbs, new and important information in the stress, and certain points at the ends of discussions.

We can compress a substantial amount of information about clarity and organization into a single complex figure:

ISSUE	DISCUSSION
INIO	(POINT)

NEW/UNFAMILIAR	OLD/FAMILIAR
STRESS	TOPIC

	ACTION	CHARACTERS
COMPLEMENT	VERB	SUBJECT

To this figure we add three principles:

- 1. In the issue, introduce key thematic and topical words in ts stress.
- 2. In the discussion, keep strings of topics consistent.
- 3. In the discussion, repeat those thematic words or words related to them.

We can use these principles both to predict when our readers might judge our writing to be cloudy and to achieve what we might call generic clarity. We achieve an individual style when we learn how to meet the expectations of our readers, and at the same time surprise them.

The final point is not to make every paragraph a work of art. Art may be long, but life is too short. The point is to make these principles work together well enough so that you do not confuse your readers. Readers call writing clear not when it is clear, but when they have no reason to call it unclear. Which is to say, writing usually seems clearest when readers are least conscious of it.

Headings as Test for Coherence

Headings are a familiar feature in professional writing. We usually think of them as most helpful to readers, because they give readers a general idea about the content of the section they head. They also show readers where one section stops and another starts and indicate levels of subordination.

But if headings are useful to readers, they are more useful to

writers, because writers can use them to diagnose potential problems with the perceived structure of a document.

The Location of Headings

- 1. Locate in your document where you would insert a heading sion. At this point, don't worry about what should go into the to signal the end of your issue and the beginning of your discusheading; just locate where it should be.
- 2. In the body of the discussion, locate places where you would insert at least one more equivalent level of headings.
- 3. Repeat for each section until you have a heading at least every three or four pages.

document is. A ten-page document might have only two or three How many places you find will depend on how long your headings in the discussion. A longer one will have more.

Now, if you could not quickly and confidently find those places know where the major junctures are in your own document. If where you would insert headings, you have a problem: you don't you can't identify them, neither will your readers.

The Content of Headings

cide on their specific words. The words in a heading should state mine what those topics and themes should be, simply look at the Once you have located where headings should go, you can dethe new and central topics and themes of each section. To deterends of your issues, at the stress of your POINTS. If you do that and you still don't know what should be the words in your headings, you have a problem, because if you cannot identify your own key concepts, neither will your readers.

Finally, consider the highest heading of all: your title. What should go into a useful title is straightforward: the key topics and themes that appear in the stress of your main POINT sentence. Two-part titles are fashionable,

Computer Assisted Instruction: Advantages and Disadvantages

but they are also useful. If you don't get the key themes and topics in the first part, you might get them in the second.

Not all readers like headings; some feel they give a crude vocational look to writing, that good readers don't need them.

Whatever your feelings, you ought not to underestimate how to respond to the form of your paper. If you are not certain where to locate headings, if you are not certain what words to put into those headings, you can be certain that your readers will find useful they are as a way to anticipate how your readers are likely our document confusing. If you think headings are déclassé, you can always delete them.

A Final Note on Drafting

vising it. These last two chapters on coherence, though, also Almost everything that we have discussed so far has to do with examining what you have drafted—interrogating it, looking at your answers, and then if the answers so indicate, with resuggest ways you can think about your problem even before you begin to draft. Before you begin, you know that you will eventually have to write a Point sentence that your readers will recognize and judge important; you know that your Point sentence will have key words that express central concepts that your readers must rec-Before you begin to draft, then, there are a few things you might ognize as central if they are to make sense out of what follows. do so that you can draft productively.

- 1. List your main characters, including any abstractions that most interest your audience, decide whose point of view you seem to act as sources of action. Decide which characters will want to take. The point of view defined by those characters will constitute most of the topics in your topic strings.
- and subordinate concepts will provide many of your thematic 2. List a few central concepts that you think will run through ate clusters of additional concepts. The words for those central our whole text. Then around each of those key concepts cre-
- will constitute your major topic strings and the key concepts that 3. If you think you know exactly what has to go into your POINT sentence, write it out. Specifically use the characters that tual terms will go toward the end of that POINT sentence. (If you will be the center of your clusters. Recall that the central concepdon't know your POINT go to (8).)
 - 4. Subdivide the problem into manageable segments with their particular thematic strings and characters.

- 5. Before you write the first word, decide whether the document is going to be POINT-early or POINT-last.
 - 6. If POINT-last, construct an anticipatory POINT sentence to get started. It too should have key thematic terms in it.
- 7. As you draft, occasionally remind yourself of your thematic and topic strings.
- 8. If you don't know your POINT, just start writing and hope.
- 9. Once you have produced a first draft, determine whether the POINT sentence in the draft is the same as the POINT sentence you wrote before you began to draft. Look particularly for new words in the POINT in your conclusion.
- 10. If they are different, which does the job better? It is likely that in the act of drafting you will have discovered something more interesting, more compelling, more pointed than you thought before you began.
- 11. At this stage in the process, you can begin the more detailed diagnostic work that goes into effective revision.