

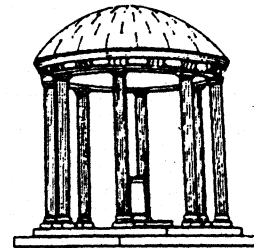
Organize First or Write First? A Comparison
of Alternative Writing Strategies

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Abstract

Many adults were trained as students to write from an outline and continue to see the "organize-first" strategy as an ideal. They believe that they ought to organize their thoughts before they begin to write. The "write-first" strategy, as recommended by Elbow (1981) and others, provides an alternative. Using the write-first strategy, writers freewrite to discover what they want to say and then extract the organizational structure for their texts from their freewriting. They decide what they want to say *by saying it*. Drawing on cognitive psychology and common sense, I offer a number of arguments that support the write-first strategy as a way for adult writers to transform their ideas into written text, and I urge psychologists to try it.

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Psychologists treat writing as a private matter. We talk about research, and we talk about publications. But we carry out that intermediate step - writing up the results of the research - in the solitude of our own offices and studies. Writing strategies, like sexual techniques, are something we feel we must work out for ourselves, with little help from teachers or colleagues. Perhaps it's time we brought this private activity out into the open. We may find that we are harboring some unquestioned assumptions that make writing more frustrating and anxiety-ridden than it needs to be.

During the past couple of years, I've spent much of my time reading about writing. Since the study of writing is multidisciplinary, my reading has taken me beyond the traditional boundaries of my own field, cognitive psychology. I have been struck by the contrast among three sources of information on writing: conventional guidebooks, such as the *Publication Manual of the American Psychological Association* (APA, 1983), empirical research on how people write (e.g., Bridwell-Bowles, Johnson, & Brehe, 1987; Hayes, 1989; Rymer, 1988), and recommendations from writers who speak from personal experience (e.g., Elbow, 1973, 1981; Wason, 1980; Becker, 1986).

The conventional guidebooks echo our high school teachers in recommending a three-stage outline-write-revise strategy. They emphasize that writers should plan before they write; that only by planning ahead can they achieve a coherently organized document. Consider, for example, what the *Publication Manual of the APA* (APA, 1983) has to say about outlines:

Writing from an outline helps preserve the logic of the research itself. It identifies main ideas, defines subordinate ideas, disciplines your writing, maintains the continuity and pacing, discourages tangential excursions, and points out omissions. (p. 35)

Composition theorists and cognitive psychologists who study writing have rejected a strict stage theory as a description of the way people actually write. Hayes and Flower (1980, 1986; Flower & Hayes, 1981), for example, argue that writers use three basic

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processes - planning, writing, and revising - recursively rather than sequentially. For instance, a person may interrupt writing to modify the plan for the current section or interrupt editing to add a new paragraph. Interesting as their observations may be, empirical researchers tend to focus on description rather than recommendation. They are reluctant to offer advice to their writing colleagues. What advice they do give has more to do with teaching writing than actually doing it.

In contrast to researchers, writers who speak from personal experience are not at all shy about giving advice. They are almost evangelical in their message, and what they are saying is something like this: "The old outline-write-revise routine simply doesn't work for me. I only began to enjoy writing when I broke out of that mold." These writers recommend that we write first and organize later; that we write to discover what our ideas are, and then later cut, rearrange, and rewrite what we have written until it forms a readable product. They advocate what I will call a "write-first" strategy.

As scientists, we tend to be suspicious of personal testimonials. We want hard evidence that a new method actually works better than the old one before we try it, and such evidence is certainly not available concerning the write-first strategy. But I, personally, am a convert, and I believe that there are some good arguments in favor of the write-first strategy.

During the remainder of this paper, I analyze that strategy and compare it to the more conventional organize-first strategy. I claim that the write-first strategy has something to offer writers like ourselves - adults who are writing expository text on topics they have thought and read about extensively. This paper is not primarily a review of research, since very little research has been done on writers like us. Rather, it is a comparison of the write-first and organize-first strategies using mostly common sense and a few concepts from cognitive psychology.

The Two Writing Strategies

I will begin by describing, briefly and informally, the two strategies: the conventional organize-first strategy and the more radical write-first strategy. Later on I will describe and compare them more formally.

The Organize-First Strategy

The organize-first strategy will probably seem quite familiar. According to this method, the first step is to gather information by reading background literature, doing experiments, talking to colleagues, carrying out mathematical derivations, pondering the issues, etc. When you are ready to start the paper itself, you begin by creating an outline. Outlining is often broken down into two phases: generating a list of ideas to include in the text and working the list into standard outline format. Writing the text involves fleshing out the outline - creating sentences that expand the topic headings. Thus the outline structures the writing process as well as the final text. When you are finished writing, you review what you've written, reorganize it if necessary, and edit for style.

People who have spent any time writing and talking to others about writing know that this highly idealized account of the writing process applies to almost no one, and writing research confirms these observations. But many writers continue to see the organize-first strategy as a standard, a standard that everyone deviates from to some extent, but one they aspire to and pass down to their students. I'm not sure how the strategy gained such a foothold, but I do know that use of an outline as a blueprint is a practice still strongly recommended in many quarters (Jolley, Murray, & Keller, 1984; Staley, 1985; Sternberg, 1988). And the organize-first strategy is now being further institutionalized by commercially available computer programs like Microsoft *Word* (Microsoft Corporation, 1989) that help the writer outline as a preliminary step in writing.

The Write-First Strategy

Using the write-first strategy, you write before creating an organizational scheme. As with the more conventional strategy, you begin by gathering information. (Methods for gathering information are the same under the write-first and organize-first strategies.) Having gathered your information, you may jot down your thoughts on it, talk about it, and otherwise mull it over. But when you are ready to begin the paper, you *simply write*. You postpone the preliminary step of creating an outline. You write without editing as you go and without looking back, and you continue writing until you

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have a sense of what you want to say. Then you use what you have written to identify the points you want to make. You decide which is your main point, and you order the other points so that they support the main point. You use text you have already written and/or write new text to expand the points you have listed, and finally, you edit your text into a final draft.

In describing the write-first strategy, I am drawing heavily on *Writing with Power* by Peter Elbow (1981). I highly recommend this and Elbow's other book, *Writing Without Teachers* (1973), to anyone who would like to read more about the write-first strategy. Social scientists who describe similar strategies are Howard Becker (1986), a sociologist, in a book called *Writing for Social Scientists*, and P. C. Wason (1980), a cognitive psychologist.

Upon reading about the write-first strategy for the first time, your first response may be, "Fine for people who have unlimited time and unlimited tolerance for chaos. But I've got deadlines. I can't allow myself the luxury of wallowing around in my own ideas forever." Elbow (1981) has a clear answer to these reservations. He offers detailed advice on how to tailor the strategy to fit your time constraints and your fear of chaos. And my own personal experience confirms that the method can be used even by those writing on a tight schedule.

A Basic Model of the Writing Process

Before going any farther in comparing these two strategies, let's step back a little and consider a more general view of writing. The starting point is your knowledge of the topic, and the ending point is the final text. In between is an infinitely variable series of activities during which you distill, shape, organize, and elaborate on your knowledge, leaving a trail of tangible written products, such as notes, lists, outlines, drafts, etc.

The Starting Point: Your Knowledge of the Topic

When you begin writing a paper, you know a lot about your topic: information you have read or gathered through your own research, hypotheses you have formulated, doubts you have entertained, inferences you have drawn. But it's hard to get an overall sense of what you know. You can keep only a few ideas in mind at a time. Consciousness provides a very small window on your

knowledge. (To use the language of cognitive psychology, only a small portion of the information in long-term memory can be active in short-term memory at one time [Baddeley, 1976; Hunt & Lansman, 1986].)

The way memory generally operates is by association (Anderson & Bower, 1973). Thinking about one thing reminds you of related things. When I look at that flower pot outside my window, I think about the plant that used to be in it. And the fact that my sons gave me that plant for Mother's Day and that it died in a frost and they were very upset. But thinking about one thing doesn't always remind you of the *same* thing. The next time I look at the flower pot, I think that I really should put it away, that the deck it's on is really looking pretty bleak and that I should get some planters and spruce it up.

The fact that memory operates by association and that each idea is associated to many related ideas has inspired cognitive psychologists to think of long-term memory as a network, a network in which each node represents an idea and the links between nodes represent associations between ideas (Anderson, 1985). The network that represents your knowledge of your topic is a very complicated network indeed, a network in which there are many densely interrelated nodes. In fact, each node is linked to every other node, at least indirectly.

What's difficult, given the associative structure of memory, is to get an overview of this network. Following the links around from node to node, it's hard to get a view of the whole. There is no way to stand back and look at the totality of what you know.

Furthermore, there are no clear-cut boundaries between one area and another. In writing a text, writers are forced to organize their knowledge in some way. Each writer must draw a line somewhere and discuss material on one side of the line in one section and material on the other side of the line in another section. But that line does not necessarily exist before the writer begins the text. Imagine, for example that I am planning a paper reviewing the research on writing. Some research concerns children, and some concerns adults. At first glance, that might seem to be a natural boundary line. But then again some research of both kinds is observational, and some is experimental. So studies on both sides of the line are linked to common methodologies. The network representing my knowledge of the topic is not divided into neat

content areas. Whatever lines I draw will be determined by the purposes of the particular paper I am writing.

One final characteristic of memory is that as you work with it, you alter it. Once I have drawn the lines that organize my knowledge into content areas, those lines shape my knowledge. If I decide to categorize writing research as experimental or observational, that distinction will become more salient to me (and to my readers). I will begin to see my knowledge of writing research as partitioned into these two categories. Eventually, I may forget there was a time when I didn't see that distinction as central.

Although the information in memory is in some sense structured, no simple search of memory will reveal the appropriate organization for a text. When you read a well structured article or book, the particular organizational scheme that the author used often seems obvious. The same may be true when you look back over a text you have written yourself. The structure you chose seems to follow naturally from the material. It's easy to forget how much work it took to arrive at that structure.

Organization of the Final Text

By convention, expository text is organized by content, ideally according to a hierarchical structure. Until recently, I felt alone in failing to achieve this ideal. I was convinced that the prototypical organizational structure for a text was like one I thought you might find in an elementary biology textbook:

Living things

I. Animals

- A. Fish
- B. Reptiles
- C. Birds
- D. Mammals

II. Plants

- A. Fungi
- B. Mosses
- C. Ferns
- D. Conifers
- E. Flowering Plants

But when I tried to organize my own thoughts on a complex topic, things never worked out so neatly. I was forced to settle for something less clear-cut.

It was reassuring for me to find out that I am not the only one that strays from the conventional hierarchical format. I realized this a couple of years ago when my colleagues and I were doing a study to find out whether readers would comprehend an article better if they studied a hierarchical diagram of the article before they read it. We chose eight articles from *Psychology Today* that we thought were interesting and well-organized and then set about outlining them. This proved to be an impossible task; for none of the articles did we agree on even the top level headings. "*Psychology Today*," you chuckle. "What did you expect?" But Braddock (1974) attempted the same thing with a corpus of 25 articles selected from *Atlantic*, *Harpers*, *New Yorker*, *The Saturday Review* and *The Reporter* with the same result. It was extremely difficult for him to extract from these articles a hierarchical structure. Although hierarchical organization has been touted for years by teachers as the correct way to organize expository writing, in fact very few expository articles, even among those we would agree were well written, actually have a clear hierarchical scheme.

All this tells us something about how expository texts *are* (or rather are *not*) organized. It doesn't tell us much about how they *should be* organized. And in fact research on reading comprehension indicates that people comprehend organized text better than unorganized text, and that signalling the structure also helps (Kieras, 1980; Meyer, Brandt, & Bluth, 1980; Schwartz & Flammer, 1981; Williams, Taylor & Ganger, 1981). So there is still plenty of reason to strive toward a clear organizational structure. But it is also useful to recognize that falling short of the ideal is common even among skilled writers.

One reason hierarchical structure is so hard to achieve may be that structure of content is only one of many types of structure that are present in mature text. A content outline says that material about X will be in Part 1 and material about Y will be in Part 2, etc. But analysis of expository text indicates that many types of organization are not captured in such an outline. For example, consider the previous three paragraphs. They might be represented in an outline as follows:

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- A. Strict hierarchical organization is seen as an ideal
- B. This ideal is often violated in published texts.
- C. Organized text in which the structure is signalled improves comprehension.

What is not captured by this outline segment is a certain back and forth flow of argumentation:

Forward: Yes, hierarchical organization may be an ideal.

Backward: But it's an ideal that's rarely achieved in published articles

Forward: Nevertheless, since it aids comprehension, we should strive for it.

Most of the texts that we write have this kind of argument structure as well as a content structure. We often choose to ignore the argument structure, since we like to see ourselves as scientists revealing the state of the world in our scientific articles. But the argument structure is undeniably there. The review of the literature at the beginning of an experimental article reports the research that has been done in the past, but it reports that research in such a way as to reveal the shortcomings and make clear why our own research was necessary and perhaps superior. The argument structure is closely related but not identical to the content structure. And the fact that the two structures (and many others) must coexist makes it hard to devise a strictly hierarchical content structure.

To summarize, expository text is clearly not a series of randomly organized sentences. Nor is it a series of sentences ordered by free association. It is organized according to content, so that sentences on the same topic are grouped together. But it rarely conforms to a strictly hierarchical content structure, perhaps because it must meet the constraints imposed by argument development and other types of structure.

Between Topic Knowledge and Final Draft

Children use a very simple strategy for moving from knowledge to text. They simply write down their ideas in the order they occur, just as they would if they were talking. They don't plan, and they don't revise. They pick a starting point, then free associate until they can't think of anything more to say. Bereiter and Scardamalia (1987) have called this the "knowledge telling" strategy.

The problem with this strategy is that the resulting text, while it may have a certain charming spontaneity, is incomplete, unstructured and unpolished. Most people who continue to write as they grow up discover that it's virtually impossible to produce a text that's ready for public consumption in a single shot. They learn to organize writing into a series of subtasks, each requiring a different type of thinking.

Smith and Lansman (1989) have referred to these types of thinking as "modes," and claimed that different modes involve different processes, products, goals, and constraints. For example, many writers employ a mode of thinking that we might call "idea generation" as the first step in the organize-first strategy. The goal of idea generation is to retrieve from memory ideas that are appropriate for the text. Hence the main cognitive process involved is search of long-term memory, and the product is a list of ideas. The constraints that govern idea generation require that ideas be stated briefly, usually as single words or phrases, that the pace be relatively fast, and that the order of the ideas is arbitrary.

One way to look at a writing strategy is as a sequence of modes of thinking. In Table 1 the organize-first strategy is presented as a sequence of modes, each with its associated written product. This particular strategy seems to be the one most often taught in school, at least it was while I was growing up. Teaching the organize-first strategy has the good result that it shows students that writing can be broken into a series of subtasks. But it has the bad result that students wind up thinking that it is the only legitimate approach to writing.

Mode	Idea Generation	Organiza-tion	Text Generation	Global Editing	Local Editing
Product	List of ideas	Outline	First Draft	Reorgan-ized Draft	Edited Draft

Table 1. Modes and products for the organize-first strategy.

Even writing researchers often treat the organize-first strategy as a sacred cow. While they have repeatedly noted that students do not actually use the strategy, they often implicitly accept it as a standard. For example, many studies have shown that students

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through high school age neither plan before they write nor revise after (Emig, 1971; Pianko, 1979; Stallard, 1974). But this result is commonly seen as a failure to use the accepted plan-write-revise strategy. Hayes and Flower (1980; Flower & Hayes, 1981) have pointed out that among more experienced writers three writing processes - planning, writing, and revising - are used not serially but recursively. Again, however, recursion is often seen as a *deviation* from the standard organize-first strategy.

The write-first strategy is shown as a sequence of modes in Table 2. This strategy is only one of many alternatives to the organize-first strategy. The reason I focus on it here is that I see it as an antidote to problems faced by writers who have been trained in the organize-first strategy. I find, in particular, that freewriting is a liberating alternative to writing from an outline.

Mode	Freewriting	Idea Extraction	Elaboration	Revision
Product	Draft	Main and Supporting Points	New Draft	Edited Draft

Table 2. Modes and products for the write-first strategy.

In the following four sections, I analyze the organize-first and the write-first strategies in more detail and point out why, considering what we know about language and memory, the write-first strategy may be more enjoyable and productive.

Two final notes, though, before I move on: 1) I don't mean to imply by Table 1 and 2 that writers who use one strategy or the other actually proceed through the modes in exactly the order they are listed. The sequences in the two tables are prototypes. Infinite variation is possible around each prototype. Even writers who follow one strategy or the other probably vary their procedure significantly from one occasion to another. 2) I suspect that the ultimate lesson to be learned from the analysis of the writing process into modes is that there are many possible modes and many possible strategies for combining them. Writers should not feel bound by any particular strategy, but should experiment with the various modes, perhaps even invent their own, and finally adopt a strategy that suits them.

Generating Content

Using the organize-first strategy, you decide what you want to say *before* you say it. Using the the write-first strategy, you decide what you want to say *by saying it*. Proponents of both the write-first and the organize-first strategies agree that you should feel free and unconstrained during the initial stages of writing, when you are generating ideas. They disagree on how to achieve that goal.

The first step in the organize-first strategy is to generate a list of topics or ideas, a list that's usually composed of words or phrases. The listing process is supposed to be uninhibiting; the term "brainstorming" is often used. The first step in the write-first strategy is to write text as quickly as possible without stopping to ponder or to edit, without censoring what you write. The text is composed of sentences, of course, but the sentences need not be grammatically correct or organized coherently. I will use the term "freewriting" to refer to this process although "freewriting" more typically refers to a situation where there are no restrictions at all on what you write about. During the type of freewriting I'm talking about, you do focus on your topic, but within that general area you let your mind roam freely without prejudging relevance.

Proponents of listing claim that creativity is stifled when writers generate ideas in the form of complete sentences. Kellogg (1989), for example, has argued that the combined demand of generating ideas and composing sentences strains our limited attentional capacity. On the face of it, this seems to be a reasonable argument. Composing sentences that conform to rigorous standards of written style is hard work. In freewriting, however, you are doing something much easier. You are simulating as closely as possible the process of speaking. By writing continuously, you release yourself from your over-developed rhetorical censor and devote your energy to expressing your ideas.

Keep in mind that we've been speaking in more or less grammatical sentences ever since we were four or five years old. We're very good at it. One of the most impressive findings of modern psycholinguistics is the ease with which human beings use the very complex rules that govern the construction of sentences (Dale, 1976; Pinker, 1989; Slobin, 1971). We may have trouble with a

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few of the fine points - who vs. whom, that vs. which - but these are inconsequential compared to the rules that we use so automatically that we don't think of them as rules. Freewriting is a way of tapping into this language facility without becoming bogged down in the attention-consuming matters of style that make writing seem hard.

In return, you gain the communicative power that is built into language. After all, the grammatical structure of language has evolved for the purpose of expressing complex ideas. If you settle for the disjointed words and phrases that make up a list, then you give up that power.

The difference between starting with a list and starting with a freely written draft has other broad implications. The organize-first strategy is basically a process of expansion, while the write-first strategy is one of condensation. In the organize-first strategy, you organize and expand a relatively short list into a much longer text. In the write-first strategy, you hone down a long, often disorganized and redundant text into a shorter, more organized and more concise final draft.

In the organize-first strategy, the list of ideas can be short because it is written in a kind of shorthand that only the writer needs to understand. Each item will be expanded into a paragraph or more of text in the first draft. Meanwhile, the items can be used as handles to carry clumps of information around as you organize the paper. But in order to use this technique, your knowledge must be divided into clumps, and that is not always the case. More often, especially if you are writing on a new topic, your knowledge consists of a seamless network of interrelated ideas with no obvious divisions between topics. A major part of the job of writing a text - one that is not generally acknowledged by proponents of the organize-first strategy - is to establish natural-feeling boundaries between one topic (or argument or example) and another.

When there are no ready-made boundaries between topic areas, freewriting can be especially useful. You can arbitrarily pick one idea as a starting place and compose a sentence expressing that idea. That sentence leads to the next and the next and the next. Your associations lead you from one idea to another. Once your ideas are displayed on the page, it's much easier to organize them into content areas.

A final difference between a list and a freely written text is the extent to which you are aiming for breadth as opposed to depth. In generating the list, you hop around all over the topic. The purpose is to be wide ranging in your thinking. You are trying to bring to mind everything you might want to cover in the text; you don't want to forget anything; you are freeing yourself from restrictive assumptions that may blind you to content that could be included. The goal of brainstorming is breadth. In freewriting, the emphasis is on following an idea anywhere it leads. You are allowing yourself to examine all the implications and associations of that idea. You don't worry that you will go off on a tangent, since you can cut out the irrelevant parts later. You do worry about cutting off a productive line of reasoning. In freewriting, the goal is depth, rather than breadth. You can use it when you want to be sure that you've followed each idea to its logical conclusion.

From this discussion, it should be clear that for some purposes producing a list may be a useful technique. But for others, freewriting may be a more fertile way of generating ideas.

Organization

Proponents of both the the organize-first and the write-first strategies acknowledge the importance of structure. They differ in the method they use to achieve it and in their beliefs concerning its source.

Under the organize-first strategy, you structure the text you are about to write by organizing your list of ideas. You decide which should be kept and which thrown away, which are central and which subordinate. In other words, you work the list into a standard outline format.

Recommendations on outlining often imply that the structure for a text lies within the material itself. For example, the *Publication Manual of the APA* (1973) claims that "an outline reveals the logic in your research" (p. 35, see quote on p. 2 of this paper). The author seems to be saying that if you were to look closely enough at your research you would find the logic in it and that you could then organize your paper around that logic. My view is that the logic of your research, if it is anywhere, is in your head.

More generally, it's easy to make the mistake of believing that your topic has a hierarchical structure hidden within it. Laboring under that misconception, you may spend fruitless hours struggling after that perfect organization (Becker, 1986). Better to acknowledge that there is no organization "out there" for the you to discover. The structure you create is your own invention, not a characteristic of the world.

Advocates of the write-first method acknowledge explicitly that the writer creates rather than finds an organization for the text. Elbow (1981) recommends the following process: During the first phase of writing, you have created a long, often disorganized text containing the ideas that are to be included in the final paper. The next step is to read through the text marking the sections that contain good ideas and to summarize each of those ideas in a sentence. On the basis of these "good bits," you must decide what the main point of the paper will be. Elbow stresses the importance of establishing a main point. He warns against trying to polish the text further without knowing what the main point will be. If necessary, he says, you may have to go back and do some more unstructured writing until the main point emerges.

Once the main point is established, then the other points can be put in an order that will support the main point. Elbow clearly does not see the writer as finding the single inherent organization in the material. Rather, he sees the writer as formulating a main point (among the many she might choose) and building the organization of the paper around that main point.

Composing Text

It is in composing text that the write-first and the organize-first strategies differ most dramatically. In the organize-first strategy, writing is several steps removed from generating ideas: first you decide what you want to say, and then you say it. In the write-first strategy, there are no preparatory steps: you simply write. Interposing organization between having an idea and writing it down completely changes the feel of writing.

If you compose from an outline, you know quite precisely what the topic of each sentence will be. The outline provides a series of cubbyholes. As you write, you fill the cubbyholes one by one. The process goes something like this: Focusing on a particular cubbyhole,

you generate an idea for a sentence. You then ask whether the idea is relevant to the topic heading you are working on. If so, you translate it into a sentence. If the idea belongs under another heading, or straddles the boundary between headings, or doesn't fit under any heading at all, you reject it. If it seems important enough, you jot it down. Or perhaps you may simply hope to recreate it at a more appropriate time. Often it is lost forever and the text suffers from its loss.

Having decided an idea is appropriate, you try to translate it into a sentence. Often you make false starts - generate fragments that don't lead anywhere, erase them, and start again. Sometimes it seems impossible to capture your idea in a sentence. If you set a high standard of style, you add further hurdles. You read each sentence when it's finally complete and check it for grammar, style, clarity etc. If the sentence passes the test, you move on. If not, you rewrite it.

The combined effect of tests for relevance and style is to slow writing down and, in the case of writer's block, to halt it entirely (Rose, 1984).

Advocates of the write-first strategy advise you *not* to reject ideas for inappropriateness to the topic, not to erase awkward fragments, and *not* to read your sentences after you compose them - at least not during freewriting. They advise you to write one sentence after another without stopping. As a result, your full attention is focused on the translation of one idea after another into sentences. You don't take time to consider whether a sentence sounds disjointed or whether the text is going off on a tangent. Most important, you don't take time to plan your route through your ideas. Since you must write fast, you are forced to write down the next thing that comes into your mind.

What may not be obvious from this analysis is the huge difference in intensity between the two composing styles. When I write to fill a cubbyhole, I am forever stopping to ask myself questions like these: "Is that quite what I want to say here?" "Maybe this belongs in another section." One diversion leads to another, and soon I am scolding myself, "There I go, using another 'to be' verb. Experts say verbs should carry their share of the meaning. Should I deal with that now or change it when I edit?" The general effect is to take my mind off the topic itself and focus my attention on myself as

a writer. During freewriting, my mind is glued to the topic itself, and ideas occur to me that I've never thought of before.

Revision

There is no escaping the fact that revision is the hard part of the write-first strategy. When you use the organize-first strategy, your first draft is organized by your outline. Granted, you may decide that the organization has flaws. You may decide that you have to move sections around. You most certainly will decide to polish your language. But the draft has a structure, and that's a consolation to those of us who like to be tidy.

If you use the write-first strategy, you end up with a first draft that may be lively and interesting, but is anything but tidy. Following Elbow's (1981) advice, you then identify your main point and order your subsidiary points so that they support the main point. Now, during revision, you have to come up with a text that is structured by this new organizational scheme. If you're lucky, large pieces of the first draft can be used in the revised draft. If not, then you have to start again, composing text to fit the new structure.

But that means you have to do just what you were supposed to avoid by using the write-first strategy: compose text to fill slots. Skeptical colleagues have argued that freewriting is simply a preliminary stage tacked onto the beginning of the conventional organize-first strategy. They claim that freewriting helps get you to the place where you can organize your thoughts, but from there on it's just like the old organize-first strategy - you're writing from an outline.

My own solution is to use freewriting recursively. You freewrite. You create an organizational scheme. You need new text to fill the slots in the scheme. When you try to write that text, you find yourself getting bogged down in the same way you did when you used the organize-first strategy. You hem and haw and scratch out and rewrite each sentence. The only way out of the bind is to go back to freewriting. This time you are freewriting on a narrower topic. You are constraining yourself a little bit more than you were when you wrote that first draft. But you are not allowing yourself to test for relevance and style as you go.

Once you've finished a structured draft, you follow much the same procedure that you would have followed if you'd written from

an outline in the first place. You edit what you've written. Now's the time to worry about the things you didn't let yourself worry about while you were freewriting: accuracy, wording, redundancy. Now's the time to use those wonderful books on style that tell you so much about what your finished text should look like but so little about how to generate it (e.g., Strunk & White, 1979; Zinsser, 1980). The difference between the two strategies is that now, if the write-first strategy worked for you, you'll be editing a text that says something you really want to say instead of a desiccated thing you hardly recognize.

Conclusion

It's obvious which strategy I like better. But how can you decide which would be better for you? You won't find the answer in the research literature on writing. Imagine the appropriate randomized controlled experiment. You bring 20 psychologists into the lab and assign 10 to the organize-first strategy and 10 to the write-first strategy. Each group is instructed in their assigned strategy and sent off to practice it for a couple of years. When they come back, they use the strategy on the next paper they write.

Even in the unlikely event you got this far, how would you evaluate the results? What's the dependent variable? Do you want to evaluate the papers themselves or the writers' experience writing them? I would ask the writers themselves questions like these: Are you pleased with the paper? Do you think it presents some good ideas? Do you think it will be valuable to the field? Did you enjoy writing it? Were you satisfied with the amount of time it took?

For obvious reasons, this experiment is not likely to be done. I hope that I or someone else will think up a feasible way to investigate the two strategies empirically. But meanwhile, all you have to go on is armchair analyses and testimonials like Elbow's and Becker's, and Wason's and my own.

You will have to make up your mind whether it would be worthwhile to try the write-first strategy. The answer will probably depend, in part, on what kind of writing you're doing. The more unstructured your writing task is, the more leeway you have for creative synthesis of ideas, the more useful the write-first strategy will probably be. If you're writing a chapter that requires you to speculate as to the most likely developments in your field over the

next decade, then freewriting would be a very useful technique for discovering and structuring your ideas. If you're writing the methods section for your tenth experiment in a series, then freewriting probably won't help much.

I have found, though, that freewriting helps even in situations that seem, on the face of it, to leave little room for imagination. It's surprising what can turn up when freewriting even on seemingly cut-and-dried writing assignments. Think how delightful it is, for example, to find an imaginative image in a computer manual or the instructions for installing a smoke detector.

Whether you choose to try the write-first strategy will also depend on how much you enjoy using your present strategy. Perhaps the organize-first strategy works fine for you. Or you have developed your own hybrid technique. Writing is, on the whole, a positive experience for you, you are reasonably productive, and you like the results. Then it seems unlikely that you will want to experiment with a new strategy. On the other hand if you experience some of the difficulties that I have mentioned here, difficulties associated with the organize-first strategy, then you are a more likely candidate for change. Suppose, for example that you believe you really should use an outline, but you have trouble arriving at one. You spend fruitless hours looking for the right way to organize your thoughts. As you write, you can't resist striving for perfection with each sentence. Consequently, writing is a halting process filled with long periods of looking out the window. It's a process you dread. And the final result seems lifeless compared to the ideas you started with. Somehow in the process of writing down your ideas, you sucked the blood out of them. In that case, the write-first strategy may be the perfect medicine for your maladies. I hope that this paper will convince you to give it a try.

As I revised the paper, I was meeting with a small writing group, reading a short section aloud each week. One day the group was scheduled to meet, but I had nothing more to read. I had not written a conclusion yet. That morning I sat down at the computer and freewrote for 45 minutes. Quite apprehensive, I read what I had written to the group without any editing at all. The raw stuff. Just as it had come out of my head. They were delighted. "Oh, so that's what you meant by freewriting. I never understood it until now. You're actually working it out and commenting on it as you go." I was amazed at their response. They had heard the whole paper by

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then and been subjected to many descriptions of freewriting. They appreciated what I had written, but they had never tried freewriting outside their journals. They had never used it on their "real" writing. When they actually heard what my freewriting sounded like, they tried it.

In the hopes that I may have the same effect on you, I quote, typos and all, a portion of the section I read to them.

Draft of Conclusion

So now I've discuss the two methods, which do you choose? Do you want to go to the organize-first strategy or the write-first strategy. If you've been writing for long, you probably have develop your own hybrid scheme. You may be perfectly satisfied with it. So why would you want to change? Writing may be very satisfying for you, and in that case don't fix it if it ain't broke. That may be more true of people who have been around the field for a long time and are very productive.

But it seems like a fairly universal probalem that people don't get as much writing done as they feel they should. And that writing is fairly random. Sometimes they write and things work out fairly well. sometimes they just can't seem to get something down that they're pleased with. Look at accounts like Annie Dillard's *The Writing Life*. It gives an idea of how frustrating the process can be. So I have a feeling that people won't mind me interfering. And my guess is that the interference should take the form of encouraging people to move more toward freewriting. It may very well be that the organize-first strategy encourages people to use the professional psychological rhetoric. The rhetoric where you hide what you actually did and make up a story that conforms more to our schema of how science should be done. We started out with a hypothesis. Then we planned a series of 3 experiments to test that hypothesis. And they all went off according to plan.

Anyway, it may be the case that using the write-first strategy people will be more inclined to tell the truth. And that would be a good thing. For one thing it would

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be more more interesting to read the truth than to read some controved story about how the research was done.

Going back - I was saying that some people may be perfectly happy with their writing strategy and their product. In that case, they may look on this paper as a lot of hog wash. Another case of a woman tearing her hair out about something that she should just sit down and do. Stop talking about it and do it. For them I am creating a spectacle of myself bringing out into public view something that should remain a private matter.

I like that idea. Some readers will be embarrassed at the thought that I actually admitted that writing is a problem. We are supposed to act as if it's no problem. We're supposed to do the research and then tell what we did. We never actually do that. We always put a story around the research. But then we hide the fact that we're putting a story around the research. So that's why we don't talk about writing. Because writing is lying and you don't let on that you're lying. WOW! That's an interesting point. Do I really want to say that. Is it true that the write first strategy lets you write what you really think? I don't know. It might not. Is it really a way of letting what's in your mind escape onto the page? And is what's in your mind "the truth." Worth thinking about.

As I read my freewriting to my writing group, I felt exposed, like I was running around in my underwear. Imagine, letting people hear what I had written before I had cleaned it up at all! And then I thought again about what I had said in the first paragraph of this paper, about writing being a very private activity. And I thought maybe the real reason it is so private is that we have set such formal rhetorical standards for psychology papers. Writing the psychology paper is like putting on formal dress before you go out in public. Hair precisely curled, face made up, body poured into a tight fitting gown, stockings, high heeled shoes. Your body completely camouflaged. No wonder writing is a private activity. What we are doing is carefully hiding ourselves.

Does it have to be like that? Do we have to try so hard to hide? Can't we occasionally go outside in our jeans? A colleague once said

that he didn't want to know the history of the research, only the method, results, and conclusions. I disagree. I'm not asking for a complete account of all the false starts that preceded the real experiments. I don't need to know all the twists and turns of the experimenters' reasoning as they analyzed the results. But I would love to know what really got them interested, instead of (or in addition to) the previous research that they dug up for the literature review. I would love to know what they tried that didn't work, so I can avoid that same pitfalls. In essence, I would like to have contact with the authors themselves, not the professional personas that their formal rhetoric reveals.

The write-first strategy provides a way of letting the real you escape from your head onto the page. Whether you agree with my comments on psychological rhetoric or not, I recommend that you try it. Even if you choose to edit your text into the conventional, formal style of the psychology paper, you will benefit from the experience of opening up a more direct channel between your mind and the page for at least a little while.

Pick something that you'd like to write about, or something you've been trying to write about but having trouble. Unplug the phone, and put a "Do not disturb" sign on your door. Sit down at your computer (or with your yellow legal pad and #2 pencil) and write. Write for 15 minutes without stopping for anything. Don't worry about how it sounds. Don't correct any mistakes. If your mind goes blank, just write anything. Write that your mind has gone blank. See what comes out. Maybe you'll like it!

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