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Causes

Three Objectives

This is a book about writing clearly. I wish it could be short and simple like some others more widely known, but I want to do more than just urge writers to “Omit Needless Words” or “Be clear.” Telling me to “Be clear” is like telling me to “Hit the ball squarely.” I know that. What I don’t know is how to do it. To explain how to write clearly, I have to go beyond platitudes.

But I want to do more than just help you write clearly. I also want you to understand this matter—to understand why some prose seems clear, other prose not, and why two readers might disagree about it; why a passive verb can be a better choice than an active verb; why so many truisms about style are either incomplete or wrong. More important, I want that understanding to consist not of anecdotal bits and pieces, but of a coherent system of principles more useful than “Write short sentences.”

Now there is a lively debate about whether action and understanding have anything to do with each other, whether those who want to write clearly ought to study principles of language at all. You may write well, yet can’t distinguish a subject from a verb, or you may understand everything from retained objects to the subjunctive pluperfect progressive, and still write badly. From this apparent contradiction many have concluded that we don’t have to understand principles of grammar to write well. Writing well, they believe, has to do with being sincere, or writing how they speak, or finding their authentic voices, or just being born with the knack. Others devoutly believe that they learned to write well only because they studied Latin and diagrammed sentences beyond number.

The truth will disconcert those of both persuasions. Nostalgic anecdotes aside, the best evidence suggests that students who

spend a lot of time studying grammar improve their writing not one bit. In fact, they seem to get worse. On the other hand, there is good evidence that mature writers can change the way they write once they grasp a principled way of thinking about language, but one that is rather different from the kind of grammar some of us may dimly remember mastering—or being mastered by. The principles of style offered here will not describe sentences in a vocabulary that fifteenth-century students of Latin would still recognize, but in terms that help you understand how readers of modern English read; in terms that will help us understand why readers might describe the first sentence below as turgid and confusing, the second as clearer, more readable. But most important, in terms that also make it clear how to revise one into the other.

- 1a. The Committee proposal would provide for biogenetic industry certification of the safety to human health for new substances in requests for exemption from Federal rules.
- 1b. The Committee proposes that when the biogenetic industry requests the Agency to exempt new substances from Federal rules, the industry will certify that the substances are safe.

So if our first objective is doing, our second objective is understanding.

But however well a writer understands principles, it is not enough for those who also want to articulate that understanding to others, who want to explain why most readers prefer the style of (1b), and if necessary to persuade (or coerce) those others into writing in the same style. Whatever else a well-educated person can do, that person should be able to write clearly and to understand what it means to do that. But we judge as liberally educated the person who can articulate that understanding in ways that go beyond the ability to define subjects and verbs and explain their disagreements, certainly beyond self-evident truisms like “Be specific.” This book provides a vocabulary that will let you explain these matters in ways that go beyond impressionism and banality.

A Very Short History of Bad Writing

Now, anyone familiar with the history of English prose might wonder whether anything we do here will substantially improve

its future. Since the earliest times, many writers have graced us with much good writing. But others have afflicted us with much that is bad. Some of the reasons for the bad writing are rooted in history, others in personal experience.

In the last seven hundred years, English writers have responded to three influences on our language. Two are historical, one is cultural. These influences have helped make English a language flexible and precise enough to use with subjects ranging from the most concrete and mundane to the most abstract and elevated. But ironically, the very influences that have created this flexibility and precision have also allowed—indeed encouraged—many writers to produce prose that is quite bad. One of the two historical influences was the Norman Conquest in 1066, an event that led us to acquire a vocabulary qualitatively different from the Anglo-Saxon wordhord we've inherited from Bede, Alfred, and Aelfric. The second influence occurred in the sixteenth century, when Renaissance scholars struggling to translate Greek and Latin texts found themselves working at a lexical disadvantage.

After the Norman Conquest, those responsible for institutional, scholarly, and religious affairs wrote in Latin and later Norman French. In the late fourteenth and early fifteenth centuries, increasing numbers of writers began using English again for matters of state, commercial, and social life. But since the native vocabulary for these matters had long since disappeared (or had never come into being), English writers were able to write about them in the only vocabulary available, in words borrowed from Latin, but particularly from French. By the sixteenth century, French and Latin had disappeared from most institutional affairs, but writers were still using their words to refer to institutional concepts. As a result, the foundations were laid for a two-tiered vocabulary: one consisting of words common to daily life, the other of words having more special application.

Conspiring with that influence on our vocabulary was a second one, the Renaissance. In the sixteenth century, as England was increasingly influenced by classical writers, scholars began translating into English large numbers of Greek and Latin texts. But as one early writer put it “there ys many wordes in Latyn that we have no propre Englysh accordynge thereto,” and so translators simply “Englished” foreign words, thereby providing us with another set of borrowings, many from Greek but most

from Latin, and almost all of them more formal than either our native English vocabulary or the Anglicized words from French.

As a consequence of these two influences, our vocabulary is the most varied of any modern European language. Of the thousand words we use most frequently, over 80 percent descend from Anglo-Saxon. But most of them are the single syllable labor-intensive words: the articles *the, this, that, a*, etc.; most of the prepositions and pronouns: *in, on, of, by, at, with, you, we, it, I*, etc.; the most common verbs and most of the common nouns: *be, have, do, make, will, go, see, hand, head, mother, father, sun, man, woman*, etc. (Many words borrowed from French have lost any sense of formality: *people, (be)cause, use, just, really, very, sort, different, number, place*.)

When we refer to specific matters of our intellectual and artistic life, however, we use almost three times as many French and Latin content words as native English. Compare how I might have been obliged to write the paragraph before last, had on Hastings Field in 1066 a Norman arrow not mortally wounded Harold, the Anglo-Saxon King:

Togetherworking with the outcome of the Norman Greatwin was the Newbirth. In the sixteenth yearhundred, as England was more shaped by the longread writers, the learned began turning into English many of the books of Athens and Rome, but as one early writer put it, "There ys many wordes in Latyn that we have no right Englysh withgoing thereto." So those who tongueturned works written in Latin and French into English only "Englished" outland words, thereby giving us yet more borrowed words, many from Greek but most from Latin, and almost all of them rather higher than the hereborn words or the words Englished from French.

Of course, if Harold had won the Battle of Hastings I wouldn't have written that at all, but he didn't, and as a result we now have a lexical resource that has endowed us with a stylistic flexibility largely unavailable to other modern languages. To express the precise shade of meaning and connotation, we can choose from among words borrowed from French—*bravery, mettle, valor, endurance, courage*; from Latin—*tenacity, fortitude*, and from words inherited from native English—*fearlessness, guts*.

But this flexibility has come with a price. Since the language of political, cultural, scientific, and economic affairs is based largely

on Romance words, those of us who aspire to participate have had to learn a vocabulary separate from that which we learned through the first five or ten years of our lives. Just as we have to spend a good deal of time in school learning the idiosyncracies of our spelling system and of “good” grammar, so must we spend time learning words not rooted in our daily experience. Five-year-olds know the meaning of *between*, *over*, *across*, and *before*, but fifteen-year-olds have to learn the meaning of *intra-*, *supra-*, *trans-*, and *ante-*. To those of us already in an educated community, that vocabulary seems natural, not the least difficult. But if it were as natural to acquire as we think, publishers would not profit from selling books and tapes promising us Word Power in Thirty Days.

And of course once we learn these words, who among us can resist using them when we want to sound learned and authoritative? Writers began to surrender to that temptation well before the middle of the sixteenth century, but it was about then that many English writers became so enamored with an erudite vocabulary that they began deliberately to lard their prose with exotic Latinisms, a kind of writing that came to be known as the “inkhorn” style and was mocked as pretentious and incomprehensible by those critics for whom English had become a special passion. This impulse toward an elevated diction has proved quite durable; it accounts for the difference today between “The adolescents who had effectuated forcible entry into the domicile were apprehended” and “We caught the kids who broke into the house.”

But while this Romance component of our vocabulary has contributed to one kind of stylistic inflation, it cannot alone account for a deeper problem we have with bad modern prose. We cannot point to the historical influence of borrowed words to explain why anyone would write (1a) rather than (1b) because (1b) has *more* borrowed words:

- 1a. The Committee proposal would provide for biogenetic industry certification of the safety to human health for new substances in requests for exemption from Federal rules.
- 1b. The Committee proposes that when the biogenetic industry requests the Agency to exempt new substances from Federal rules, the industry will certify that the substances are safe.

In addition to the influence of the Norman Conquest and the Renaissance, there has been another, more subtle historical influence on our prose style, an influence that some linguists have speculated to be a kind of stylistic destiny for literate societies. As societies become intellectually mature, it has been claimed, their writers seem increasingly to replace specific verbs with abstract nouns. It allegedly happened in Sanskrit prose, in the prose of many Western European languages, and it seems to be happening in modern English. What centrally distinguishes sentence (1a) from (1b) is not the historical source of their vocabulary, but the abstract nouns in (1a) in contrast to the shorter and more specific verbs and adjective of (1b):

- 1a. The Committee **proposal** would provide for biogenetic industry **certification** of the safety to human health for new substances requested for **exemption** from Federal rules.
- 1b. The Committee **proposes** that when the biogenetic industry **requests** the Agency to **exempt** new substances from Federal rules, the industry will **certify** that the substances are safe.

These nouns alone make a style more abstract, but they encourage more abstraction: once a writer expresses actions in nouns, she can then eliminate whatever (usually concrete) agents perform those actions along with those whom the actions affect:

The proposal would provide for certification of the safety of new substances in requests for exemption.

These abstract Romance nouns result in a prose that we variously call gummy, turgid, obtuse, prolix, complex, or unreadable. An early example:

If use and custom, having the help of so long time and continuance wherein to [re]fine our tongue, of so great learning and experience which furnish matter for the [re]fining, of so good wits and judgments which can tell how to [re]fine, have griped at nothing in all that time, with all that cunning, by all those wits which they will not let go but hold for most certain in the right of our writing, that then our tongue ha[s] no certainty to trust to, but write all at random. But the antecedent, in my opinion, is altogether impossible, wherefore the consequent is a great deal more th[a]n probable, which is that our tongue ha[s] in her own possession and writing very good evidence to prove her own right writing; which, though no man as yet by any public writing of his seem[s] to have seen, yet the tongue itself is ready to show them to any whosoever

which is able to read them and withal to judge what evidence is right in the right of writing.

—Richard Mulcaster, *The First Part of the Elementary*, 1582

Other sixteenth-century writers were able to write prose not wholly free of abstraction, but not burdened by it either, a prose that we would judge today to be clear, direct, and still readable (I have changed only the spelling and punctuation):

Among all other lessons this should first be learned, that we never affect any strange inkhorn terms, but to speak as is commonly received, neither seeking to be over-fine, nor yet living overcareless, suiting our speech as most men do, and ordering our wits as the fewest have done. Some seek so far for outlandish English that they forget altogether their mother's language. And I dare swear this, if some of their mothers were alive, they [would] not [be] able to tell what they say. And yet these fine English clerks will say they speak in their mother tongue, if a man should charge them for counterfeiting the King's English.

—Thomas Wilson, *Art of Rhetoric*, 1553

By the middle of the seventeenth century, this impulse toward “over-fine” prose had infected scholarly writing. Shortly after the Royal Society was established in 1660, Thomas Spratt, one of its historians, complained that scientific writing suffered from a “vicious abundance of phrase, [a] trick of metaphors, [a] volubility of tongue which makes so great a noise in the world.” Better, he said, to

reject all the amplifications, digressions, and swellings of style: to return back to the primitive purity, and shortness, when men deliver'd so many things, almost in an equal number of words . . . [to prefer] the language of Artizans, Countrymen, and Merchants, before that, of Wits, or Scholars.

—From *The History of the Royal Society*

When the New World was settled, American writers had a chance to create such a prose style, one lean and sinewy fit for a new society. But we did not. Early in the nineteenth century, James Fenimore Cooper complained that “the common faults of American language are an ambition of effect, a want of simplicity, and a turgid abuse of terms”:

The love of turgid expressions is gaining ground, and ought to be corrected. One of the most certain evidences of a man of high

breeding, is his simplicity of speech: a simplicity that is equally removed from vulgarity and exaggeration. . . . He does not say, in speaking of a dance, that “the attire of the ladies was exceedingly elegant and peculiarly becoming at the late assembly,” but that “the women were well dressed at the last ball”; nor is he apt to remark, “that the Rev. Mr G—— gave us an elegant and searching discourse the past sabbath,” but that “the parson preached a good sermon last sunday.”

The utterance of a gentleman ought to be deliberate and clear, without being measured. . . . Simplicity should be the firm aim, after one is removed from vulgarity, and let the finer shades of accomplishment be acquired as they can be attained. In no case, however, can one who aims at turgid language, exaggerated sentiments, or pedantic utterances, lay claim to be either a man or a woman of the world.

—James Fenimore Cooper, *The American Democrat*, 1838

In these sentiments, Cooper reflects a long tradition about what constitutes genteel behavior in the English-speaking world. For five hundred years, writers on courtesy have urged aspiring gentle people to avoid speech that is loquacious, flamboyant, or pompous, to keep their language plain, modest, and unassuming. In *The American Democrat*, Cooper was attempting to define what constituted an American gentleman in a democratic world.

But in Cooper’s own style we can see the inexorable power of that ambition of effect, want of simplicity, and turgid abuse of terms, for he demonstrated—unconsciously, it would seem—the very style he condemned. Had he been aware of his own language, he would have avoided those abstract, mostly Romance nouns—*love, expressions, simplicity, speech, vulgarity, exaggeration, utterance, simplicity, aim, accomplishment, claim* for something closer to this:

We should discourage writers who love turgid language. A well-bred man speaks simply, in a way that is neither vulgar nor exaggerated. . . . He does not say of a dance that “the attire of the ladies was exceedingly elegant and peculiarly becoming at the late assembly,” but that “the women were well-dressed at the last ball”; nor does he remark that “the Rev. Mr G—— gave us an elegant and searching discourse the past Sabbath,” but that “the parson preached a good sermon last Sunday.”

A gentleman does not measure his words, but speaks them deliberately and clearly. After he rids [his language] of vulgarity, he should aim at simplicity, and then, as he can, acquire the finer

shades of accomplishment. No one can claim to be a man or woman of the world who deliberately speaks in turgid or pedantic language or who exaggerates sentiments.

In fact, after abusing the pretentious style of “The attire of the ladies was elegant,” he echoed it in his own next sentence: “The utterance of a gentleman ought to be deliberate. . . .”

About a half century later, Mark Twain demonstrated the style that we now like to identify as American—clear, straight, and plainspoken:

There have been daring people in the world who claimed that Cooper could write English, but they are all dead now—all dead but Lounsbury [a scholar who praised Cooper’s novels]. I don’t remember that Lounsbury makes the claim in so many words, still he makes it, for he says that *Deerslayer* is a “pure work of art.” Pure, in that connection, means faultless—faultless in all details—and language is a detail. If Mr. Lounsbury writes himself—but it is plain that he didn’t; and so it is likely that he imagines until this day that Cooper’s [style] is as clean and compact as his own. Now I feel sure, deep down in my heart, that Cooper wrote about the poorest English that exists in our language.³

Unfortunately, twentieth-century writers have not all followed Twain’s example.

In probably the best-known essay on English style in the twentieth century, “Politics and the English Language,” George Orwell described turgid language when it is used by politicians, bureaucrats, and other chronic dodgers of responsibility. Orwell’s advice is sound enough:

⌈ The keynote [of such a style] is the elimination of simple verbs. Instead of being a single word, such as *break*, *stop*, *spoil*, *mend*, *kill*, a verb becomes a *phrase*, made up of a noun or adjective tacked on to some general-purposes verb such as *prove*, *serve*, *form*, *play*, *render*. In addition, the passive voice is wherever possible used in preference to the active, and noun constructions are used instead of gerunds (*by examination* of instead of *by examining*). The range of verbs is further cut down by means of the *-ize* and *de-*formations, and the banal statements are given an appearance of profundity by means of the *not un-*formation.

⌈ But in the very act of anatomizing the turgid style, Orwell demonstrated it in his own. Had Orwell himself avoided making a verb a phrase, had he avoided the passive voice, had he avoided

noun constructions, he would have written something closer to this (I begin with a phrase Orwell used a few lines earlier):

When writers dodge the work of constructing prose, they eliminate simple verbs. Instead of using a single word, such as *break*, *stop*, *spoil*, *mend*, *kill*, they turn the verb into a phrase made up of a noun or adjective; then they tack it on to some general-purposes verb such as *prove*, *serve*, *form*, *play*, *render*. Wherever possible, such writers use the passive voice instead of the active and noun constructions instead of gerunds (*by examination* instead of *by examining*). They cut down the range of verbs further when they use *-ize* and *de-*formations and try to make banal statements seem profound by the *not un-*formation.

If Orwell could not avoid this kind of passive, abstract style in his own writing (and I don't believe that he was trying to be ironic), we ought not be surprised that the prose style of our academic, scholarly, and professional writers is often worse. On the language of social scientists:

a turgid and polysyllabic prose does seem to prevail in the social sciences. . . . Such a lack of ready intelligibility, I believe, usually has little or nothing to do with the complexity of thought. It has to do almost entirely with certain confusions of the academic writer about his own status.

—C. Wright Mills, *The Sociological Imagination*

On the language of medicine:

It now appears that obligatory obfuscation is a firm tradition within the medical profession. . . . [Medical writing] is a highly skilled, calculated attempt to confuse the reader. . . . A doctor feels he might get passed over for an assistant professorship because he wrote his papers too clearly—because he made his ideas seem too simple.

—Michael Crichton, *New England Journal of Medicine*

On the language of the law:

in law journals, in speeches, in classrooms and in courtrooms, lawyers and judges are beginning to worry about how often they have been misunderstood, and they are discovering that sometimes they cannot even understand each other.

—Tom Goldstein, *New York Times*

In short, bad writing has been with us for a long time, and its roots run wide in our culture and deep into its history.

Some Private Causes of Bad Writing

These historical influences alone would challenge those of us who want to write well, but many of us also have to deal with problems of a more personal sort. Michael Crichton cited one: some of us feel compelled to use pretentious language to make ideas that we think are too simple seem more impressive. In the same way, others use difficult and therefore intimidating language to protect what they have from those who want a share of it: the power, prestige, and privilege that go with being part of the ruling class. We can keep knowledge from those who would use it by locking it up, but we can also hide facts and ideas behind language so impenetrable that only those trained in its use can find them.

Another reason some of us may write badly is that we are seized by the memory of an English teacher for whom the only kind of good writing was writing free of errors which only that teacher understood: fused genitives, dangling participles, split infinitives. For many such writers, filling a blank page is now like laying a minefield; they are concerned less with clarity and precision than with survival.

Finally, some of us write badly not because we intend to or because we never learned how, but because occasionally we seem to experience transient episodes of stylistic aphasia. Occasionally, many of us write substantially less well than we know we can, but we seem unable to do anything about it. This kind of dismaying regression typically occurs when we are writing about matters that we do not entirely understand, for readers who do. This problem afflicts most severely those who are just getting started in a new field of knowledge, typically students who are learning how to think and write in some academic area or profession new to them, in some well-defined “community of discourse” to which they do not yet belong. ✓

All such communities have a body of knowledge that their apprentices must acquire, characteristic ways of thinking about problems, of making and evaluating arguments. And just as important, each community articulates its arguments in a characteristic voice: lawyers talk and write in ways distinct from physicians, whose style is distinct from sociologists, whose style is distinct from philosophers. When a writer new to a field is simultaneously trying to master its new knowledge, its new style of

thinking, and its new voice, she is unlikely to manage all those new competencies equally well. Some aspect of her performance will deteriorate: typically the quality of her writing.

I once discussed these matters at a seminar on legal writing. At the end, a woman volunteered that I had recounted her academic history. She had earned a Ph.D. in anthropology, published several books and articles, and been judged a good writer. But she became bored with anthropology and went to law school, where during the first few months she thought she was developing a degenerative brain disorder: she could no longer write clear, concise English prose. She was experiencing a breakdown like that experienced by many students taking an introductory course in a complex field—a period of cognitive overload, a condition that predictably degrades their powers of written expression.

Here is a passage from the first paper written by a first year law student who as an undergraduate had been evaluated as a superior writer.

The final step in Lord Morris's preparation to introduce the precedents is his consideration of the idea of conviction despite the presence of duress and then immediate pardon for that crime as an unnecessary step which is in fact injurious for it creates the stigma of the criminal on a potentially blameless (or at least not criminal) individual.

This means,

Before Lord Morris introduces the precedents, he considers a final issue: If a court convicts a defendant who acted under duress and then immediately pardons that defendant, the court may have taken an unnecessary step, a step that may even injure the defendant, if it stigmatizes him as criminal when he may be blameless.

This writer had to juggle several related actions, few of which he entirely understood, much less how they were related. When he had to express his confused ideas, he dumped onto the page all the concepts that seemed relevant, expressing them in abstractions loosely tied together with all-purpose prepositions.

Now here is a great irony: As he struggles with his ideas, his prose predictably degenerates. But much of what he is reading for the first time (and is probably also trying to imitate) typically suffers from the same clotted abstraction:

Because the individualized assessment of the appropriateness of the death penalty is a moral inquiry into the culpability of the defendant, and not an emotional response to the mitigating evidence, I agree with the Court that an instruction informing the jury that they “must not be swayed by mere sentiment, conjecture, sympathy, passion, prejudice, public opinion or public feeling” does not by itself violate the Eighth and Fourteenth Amendments to the United States Constitution.

—Sandra Day O’Connor, concurring, *California v. Albert Greenwood Brown, Jr.*, no. 85-1563)

This means,

When a jury assesses whether the death penalty is appropriate in individual cases, it must not respond to mitigating evidence emotionally but rather inquire into the defendant’s moral culpability. I therefore agree with the majority: When a court informs a jury that it “must not be swayed by mere sentiment, conjecture, sympathy, passion, prejudice, public opinion or public feeling,” the court has not violated the defendant’s rights under the Eighth and Fourteenth Amendments.

In other words, as a novice in a field reads its professional prose, he will predictably try to imitate those features of style that seem most prominently to bespeak membership, professional authority. And in complex professional prose, no feature of style is more typical than clumps of Latinate abstractions:

individualized assessment of the appropriateness of the death penalty . . . a moral inquiry into the culpability of the defendant.

Simultaneously, if a writer new to a field does not entirely control his ideas, his own prose will often slip into a style characterized by those same clumps of abstraction:

consideration of the idea of conviction despite the presence of duress and then immediate pardon.

What we should find astonishing is not that so many young writers write badly, but that any of them writes well.

It may be that in these circumstances most of us have to pass through some dark valley of stylistic infelicity. But once we realize that we are experiencing a common anguish, we may be less dismayed by our failures, or at least those failures will seem explicable. If we understand some of the specific ways that our

prose is likely to break down, and are able to articulate to ourselves and to others the reasons and the ways, we might even be able to do something about it.

As I write these sentences, though, hovering over my shoulder is another critic of English style. About fifty years ago H. L. Mencken wrote,

With precious few exceptions, all the books on style in English are by writers quite unable to write. The subject, indeed, seems to exercise a special and dreadful fascination over school ma'ams, bucolic college professors, and other such pseudoliterates. . . . Their central aim, of course, is to reduce the whole thing to a series of simple rules—the overmastering passion of their melancholy order, at all times and everywhere.

Mencken is right, of course: no one can teach clear writing by rule or principle, simple or not, to those who have nothing to say and no reason to say it, to those who cannot think or feel or see. But I also know that many who see well and think carefully and feel deeply still cannot write clearly. I also know that learning to write clearly can help us think and feel and see, and that in fact there are a few straightforward principles—not rules—that help.

Here they are.

Suit the action to the word, the word to the action.

William Shakespeare

Action is eloquence.

William Shakespeare

*Words and deeds are quite different modes of the divine energy.
Words are also actions, and actions are a kind of words.*

Ralph Waldo Emerson

I am not built for academic writings. Action is my domain.

Gandhi

2

Clarity

Finding a Useful Language: Some First Steps

How might we describe the difference between these two sentences?

- 1a. Because we knew nothing about local conditions, we could not determine how effectively the committee had allocated funds to areas that most needed assistance.
- 1b. Our lack of knowledge about local conditions precluded determination of committee action effectiveness in fund allocation to those areas in greatest need of assistance.

Most of us would call the style of (1a) clearer, more concise than the style of (1b). We would probably call (1b) turgid, indirect, unclear, unreadable, passive, confusing, abstract, awkward, opaque, complex, impersonal, wordy, prolix, obscure, inflated. But when we use *clear* for one and *turgid* for the other, we do not describe sentences on the page; we describe how we feel about them. Neither *awkward* nor *turgid* are on the page. Turgid and awkward refer to a bad feeling behind my eyes.

To account for style in a way that lets us go beyond saying how we feel, we need a way to explain how we get those impressions. Some would have us count syllables and words—the fewer the better, according to most such schemes. But if we counted every syllable and word we wrote, we would spend more time counting than writing. More to the point, numbers don't explain what makes a sentence awkward or turgid, much less tell anyone how to turn it into a clear and graceful one. And even if counting did tell us when a passage was hard to read, we shouldn't have to count if we knew that it was hard to read just by reading it.

The words we use to communicate our impressions cannot alone constitute a vocabulary sufficient to describe style, but they

are part of one, and so before we move on to a new way of thinking and talking about style, we should reflect on how we use those words. Here are three more sentences that we could say are in some sense “unclear,” which is to say, sentences that make us feel we have to work harder than we think we ought to (or want to). But do they seem “unclear” in the same way?

2. Decisions in regard to the administration of medication despite the inability of irrational patients voluntarily appearing in Trauma Centers to provide legal consent rest with a physician alone.
3. China, so that it could expand and widen its influence and importance among the Eastern European nations, in 1955 began in a quietly orchestrated way a diplomatic offensive directed against the Soviet Union.
4. When pAD4038 in the *E. coli pmiimanA* mutant CD1 heterologously overexpressed the *P. aeruginosa pmi* gene, there appeared high levels of PMI and GMP activities that were detectable only when pAD4038 was present.

Sentence (2) makes us work too hard because we have to sort out and then mentally re-assemble several actions expressed mostly as abstract nouns—*decisions, administration, medication, inability, consent*—actions that are also arranged in a way that both distorts their underlying sequence and obscures who performs them. When we revise the abstract nouns into verbs expressing actions, when we make their actors the subjects of those verbs and rearrange the events into a chronological sequence, we create a sentence that we could call “clear” because as we read it, it does not confuse us:

- 2a. When a patient voluntarily appears at a Trauma Center but behaves so irrationally that he cannot legally consent to treatment, only a physician can decide whether to administer medication.*

*Many readers would revise the original passages more radically than I have. And they would be right to do so. But if I completely rewrote these sentences, I would show only that I was able to rethink the whole idea of the sentence, usually a good thing but not something that can be easily taught. Principled revision would remain a mystery. So for pedagogical reasons, I stay close to the content of each original sentence to demonstrate that we can improve murky sentences without relying on a talent that comes only through experience.

Sentence (3) seems less than entirely clear and direct not because the writer used too many abstract nouns, displaced its actors, and confused the sequence of events, but because he separated parts of the sentence that he should have kept together and because he used more words than he needed. Here's (3) revised:

- 3a. In 1955, China began to orchestrate a quiet diplomatic offensive against the Soviet Union to expand its influence in Eastern Europe.

Sentence (4) seems unclear not because the writer fell into abstractions or split elements of the sentence, but because she used words that most of us do not understand. If that sentence baffles us, it is clear to someone who knows the field.

The single impressionistic word “unclear” can mask a variety of problems. To correct those problems, we need not avoid impressionistic language; but we do have to use it precisely, and then move beyond it. If we sharpen our impressionistic language a bit, we might say that sentence (2) feels unclear because it is “abstract” or “turgid”; (3) is unclear because it is “disjointed,” or does not “flow.” If sentence (4) seems incomprehensible, it is because we don't understand the technical language; it is “too technical.”

It is at this point that we need that second vocabulary, one that will help us explain what it is that makes us want to call a passage turgid or disjointed, a vocabulary that also suggests how we can revise it. In this chapter, we're going to discuss the particular kind of unclarity that we feel in (1a) and (2), the kind of sentences that feel gummy, lumpy, abstract; the kind of sentences that—depending on their subject matter—we variously characterize as academese, legalese, medicalese, bureaucratese. In the following chapters, we'll discuss different kinds of unclear writing.

Telling Stories

Stories are among the first kinds of continuous discourse we learn. From the time we are children, we all tell stories to achieve a multitude of ends—to amuse, to warn, to excite, to inform, to explain, to persuade. Storytelling is fundamental to human behavior. No other form of prose can communicate large amounts

of information so quickly and persuasively. At first glance, most academic and professional writing seems to consist not of narrative but of explanation. But even prose that may seem wholly discursive and abstract usually has behind it the two central components of a story—characters and their actions. There are no characters visible in (5a), but that doesn't mean there aren't any; compare (5b):

- 5a. The current estimate is of a 50% reduction in the introduction of new chemical products in the event that compliance with the Preliminary Manufacturing Notice becomes a requirement under proposed Federal legislation.
- 5b. If Congress requires that the chemical industry comply with the Preliminary Manufacturing Notice, we estimate that the industry will introduce 50% fewer new products.

It may even be a story whose main characters are concepts:

Because the intellectual foundations of evolution are the same as so many other scientific theories, the falsification of their foundations would be necessary for the replacement of evolutionary theory with creationism.

We can make theories play the roles of competing characters:

In contrast to creationism, the theory of evolution shares its intellectual foundations with many other theories. As a result, creationism will displace evolutionary theory only when it can first prove that the foundations of all those other theories are false.

We can see how pairs of sentences like these tell the “same” story in different ways if we start with a story that seems clear and then change the way it represents characters and their actions:

Though the Governor knew that the cities needed new revenues to improve schools, he vetoed the budget bill because he wanted to encourage cities to increase local taxes.

What's the story here, which is to say, who are the characters and what are they doing? The characters are the Governor, the cities, and the schools (the legislature is also in there, but hidden). The Governor is part of three actions: he *knew* something, he *vetoed* a bill, and he *will encourage* the cities; the cities are part of three actions: they *need* revenues, they [should] *improve* schools, and

they [should] *increase* taxes; and the schools are part of one action: they will be *improved*. Those six actions are all represented by the same part of speech—they are all verbs. And that part of speech—the verb—is singularly important to why we think that this sentence about the Governor and the schools is reasonably clear.

Before you read on, rewrite that story, but instead of using those six verbs to express actions, use their noun forms. Three of the noun forms are different from the verbs: *to know* → *knowledge*, *to encourage* → *encouragement*, *to improve* → *improvement*. The other three nouns are identical to their corresponding verbs: *to need* → *the need*, *to veto* → *the veto*, *to increase* → *the increase*.

Here is a version using nouns instead of verbs. Yours may differ.

Despite his **knowledge** of the **need** by cities for new revenues for the **improvement** of their schools, the Governor executed a **veto** of the budget bill to give **encouragement** to the cities for an **increase** of local taxes.

At some level of meaning, this sentence offers the same story as the original. But at another level—at the level of how readers perceive voice, style, clarity, ease of understanding—it is different; for most of us, I hope, worse.

It is in this difference between the ways we can tell the “same” story that we locate the first principles of clear writing (which is to say, you will recall, writing that makes the reader feel clear about what he is reading).

The First Two Principles of Clear Writing

Readers are likely to feel that they are reading prose that is clear and direct when

- (1) the subjects of the sentences name the cast of characters, and
- (2) the verbs that go with those subjects name the crucial actions those characters are part of.

Look again at (1b):

- 1b. Our lack of knowledge about local conditions precluded determination of committee action effectiveness in fund allocation to those areas in greatest need of assistance.

Who are the characters? If we were to cast this sentence as a play, how many parts would we have to fill? There is “we” (in the form of *our*); there is “the committee” (are they also “we?”); and there are “areas.” But where in (1b) do those characters appear? *Our* is not a subject, but a modifier of *lack*: our lack. *Committee* is not a subject, but another modifier: committee action effectiveness. And *areas* is not a subject either, but the object of a preposition: to areas. What is the subject of (1b)? An abstraction: *Our lack of knowledge*, followed by its vague verb *precluded*.

Now look at (1a):

- 1a. Because we knew nothing about local conditions, we could not determine how effectively the committee had allocated funds to areas that most needed assistance.

We is the subject of both *knew* and *could not determine*:

Because we knew nothing . . . , we could not determine. . . .

The committee is subject of the verb *had targeted*:

the committee had targeted.

And although *area* is still the object of a preposition (*to areas*), it is also the subject of *needed*:

areas that most needed assistance.

Sentence (1b) consistently violates the first principle: use subjects to name characters; sentence (1a) consistently observes it.

Consider how those two sentences name the actions those characters perform. In the first, the actions are not verbs, but rather abstract nouns: *lack*, *knowledge*, *determination*, *action*, *allocation*, *assistance*, *need*. The second consistently names those actions in verbs: *we knew nothing*, *we could not determine*, *the committee allocated*, *areas needed*. The only action still a noun is *assistance*. So the first sentence violates not only our first principle: name characters in subjects; it violates the second as well: express crucial actions in verbs. And again, the second sentence observes both principles. The real difference between those sentences, then, lies not in their numbers of syllables or words, but in where the writer placed the characters and expressed their actions.

The principle also gives us some simple advice about revising: When your prose feels turgid, abstract, too complex, do two

things. First, locate the cast of characters and the actions that those characters perform (or are the objects of). If you find that those characters are not subjects and their actions are not verbs, revise so that they are.

But even when we don't feel anything wrong with our own prose, others often do, so we ought to do something that will let us anticipate that judgment. A quick method is simply to run a line under the first five or six words of every sentence. If you find that (1) you have to go more than six or seven words into a sentence to get past the subject to the verb and (2) the subject of the sentence is not one of your characters, take a hard look at that sentence; its characters and actions probably do not align with subjects and verbs. (If you want to do a more exact and thorough analysis, underline the subject of every verb, even those in subordinate clauses.) Then simply revise the sentence so that characters appear as subjects and their actions as verbs.

In some cases, we exclude characters altogether. If we had the context of this next passage, we might know who was doing what:

The argument that failure to provide for preservation of the royalty rate upon expiration of the patent discouraged challenges to the contract does not apply here.

Presumably, the writer knew who was arguing, failing, challenging—though often those who write like this in fact do not know. If we invent characters as if we knew who they were and make them subjects and their actions verbs, we can revise this sentence as we have others:

Harris *argues* that when **Smith** *gave* him no way to *preserve* the royalty rate when the patent *expired*, **Smith** *discouraged* him from challenging their contract. But *that argument does not apply* here.

Some readers may think that I am simply giving the standard advice about avoiding passive verbs. As we'll see in a few pages, that's not bad advice, but nothing we have seen so far has anything directly to do with passive verbs. In fact, not one of the "bad" examples in this chapter so far has in it a single passive verb. The bad examples "feel" passive, but that feeling does not arise from passive verbs but rather from abstract nouns and missing characters.

Some Stylistic Consequences

We begin with these two principles—characters as subjects and their actions as verbs—because they have so many unexpected but welcome consequences:

- You may have been told to write more specifically, more concretely.

When we turn verbs into nouns and then delete the characters, we fill a sentence with abstraction:

There has been an affirmative decision for program termination.

When we use subjects to name characters and verbs to name their actions, we write sentences that are specific and concrete.

The Director decided to terminate the program.

- You may have been told to avoid using too many prepositional phrases.

An evaluation of the program by us will allow greater efficiency in service to clients.

While it is not clear what counts as “too many,” it is clear that when we use verbs instead of abstract nouns, we can also eliminate most of the prepositional phrases. Compare,

We will evaluate the program so that we can serve clients better.

- You may have been told to put your ideas in a logical order.

When we turn verbs into nouns and then string them through prepositional phrases, we can confuse the logical sequence of the actions. This series of actions distorts the “real” chronological sequence:

The closure of the branch and the transfer of its business and non-unionized employees constituted an unfair labor practice because the purpose of obtaining an economic benefit by means of discouraging unionization motivated the closure and transfer.

When we use subjects to name characters and verbs to name their actions, we are more likely to match our syntax to the logic of our story:

The partners committed an unfair labor practice when they closed the branch and transferred its business and nonunionized em-

ployees in order to discourage unionization and thereby obtain an economic benefit.

- You may have been told to use connectors to clarify logical relationships:

The more effective presentation of needs by other Agencies resulted in our failure in acquiring federal funds, despite intensive lobbying efforts on our part.

When you turn nouns into verbs, you have to use logical operators like *because*, *although*, and *if* to link the new sequences of clauses.

Although we lobbied Congress intensively, we could not acquire federal funds **because** other interests presented their needs more effectively.

- You may have been told to write short sentences.

In fact, there is nothing wrong with a long sentence if its subjects and verbs match its characters and actions. But even so, when we match subjects and verbs with characters and actions, we almost always write a shorter sentence. Compare the original and revised sentences we've looked at so far.

In short, when you observe this first pair of principles, you reap other benefits. Once you grasp the two root principles, you can apply them quickly, knowing that as you correct one problem, you are solving others. When you align subjects and characters, verbs and actions, you turn abstract, impersonal, apparently expository prose into a form that feels much more like a narrative, into something closer to a story.

I should clarify an often misunderstood point: clear writing does not require Dick-and-Jane sentences. Almost all of the revisions are shorter than the originals, but the objective is not curtness: what counts is not the number of words in a sentence, but how easily we get from beginning to end while understanding everything in between. This was written by an undergraduate attempting academic sophistication:

After Czar Alexander II's emancipation of the Russian serfs in 1861, many now-free peasants chose to live on a commune for purposes of cooperation in agricultural production as well as for social stability. Despite some communes' attempts at economic and social equalization through the strategy of imposing a low

economic status on the peasants, which resulted in their reduction to near-poverty, a centuries-long history of important social distinctions even among serfs prevented social equalization.

In his struggle to follow the principles we've covered here, he revised that paragraph into a primer style:

In 1861, Czar Alexander II emancipated the Russian serfs. Many of them chose to live on agricultural communes. There they thought they could cooperate with one another in agricultural production. They could also create a stable social structure. The leaders of some of these communes tried to equalize the peasants economically and socially. As one strategy, they tried to impose on all a low economic status that reduced them to near-poverty. However, the communes failed to equalize them socially because even serfs had made important social distinctions among themselves for centuries.

In Chapter 7 we discuss some ways to manage long sentences. As we'll see there, some of those same techniques suggest ways to change a series of too-short, too-simple sentences into a style that is more complex, more mature, but still readable. Applying those principles, the student revised once more:

After the Russian serfs were emancipated by Czar Alexander II in 1861, many chose to live on agricultural communes, hoping they could cooperate in working the land and establish a stable social structure. At first, those who led some of the communes tried to equalize the new peasants socially and economically by imposing on them all a low economic status, a strategy that reduced them to near-poverty. But the communes failed to equalize them socially because for centuries the serfs had observed among themselves important social distinctions.

As we might expect, the principles of aligning characters with subjects and actions with verbs have exceptions. We will see later how we must choose *which* character from among many to make the subject and *which* action to make the verb. At this point, though, we can represent our two principles simply and graphically:

FIXED <i>in writing</i>	SUBJECT	VERB	COMPLEMENT
VARIABLE	CHARACTERS	ACTION	_____

As we read a sentence, we have to integrate two levels of its structure: one is its predictable grammatical sequence: Subject + Verb + Complement; the other level is its story, a level of meaning whose parts have no fixed order: Characters + Actions. To a significant degree, we judge a style to be clear or unclear according to how consistently a writer aligns those two levels. We usually feel we are reading prose that is clear, direct, and readable when a writer consistently expresses the crucial actions of her story in verbs and her central characters (real or abstract) in their subjects. We usually feel that we are reading prose that is gummy, abstract, and difficult when a writer unnecessarily dislocates actions from verbs and (almost by necessity) locates her characters away from subjects, or deletes them entirely. There are details about these principles worth examining.

Subjects and Characters

There are many kinds of characters. The most important are agents, the direct source of an action or condition. There are collective agents:

Faculties of national eminence do not always teach well.

secondary or remote agents:

Mayor Daley built Chicago into a giant among cities.

and even figurative agents that stand for the real agents:

The White House announced today the President's schedule.

The business sector is cooperating.

Many instances of malignant tumors fail to seek attention.

In some sentences, we use subjects to name things that are really the means, the instrument by which some unstated agent performs an action, making the instrument seem like the agent of that action.

Studies of coal production reveal these figures.

These new data establish the need for more detailed analysis.

This evidence proves my theory.

That is,

When we study coal production, we find these figures.

I have established through these new data that we must analyze the problem in more detail.

With this evidence I prove my theory.

In the original sentences, the instruments act so much like agents that there is little point in revising them.

Some characters do not appear in a sentence at all, so that when we revise, we have to supply them:

In the last sentence of the Gettysburg Address there is a rallying cry for the continuation of the struggle.

In the last sentence of the Gettysburg Address, Lincoln rallied his audience to continue the struggle against the South.

In other sentences, the writer may imply a character in an adjective:

Determination of policy occurs at the presidential level.

The President determines policy.

Medieval theological debates often addressed what to modern thought seems to be metaphysical triviality.

Medieval theologians often debated issues that we might think were metaphysically trivial.

And in some cases, the characters and their actions are so far removed from the surface of a sentence that if we want to be explicit, we have to recast the sentence entirely.

There seems to be no obvious reason that would account for the apparent unavailability of evidence relevant to the failure of this problem to yield to standard solutions.

I do not know why my staff cannot find evidence to explain why we haven't been able to solve this problem in the ways we have before.

Most often, though, characters in abstract prose modify one of those abstract nouns or are objects of prepositions such as *by*, *of*, *on the part of*:

The Federalists' belief that the instability of government was a consequence of popular democracy was based on their belief in the tendency on the part of factions to further their self-interest at the expense of the common good.

The Federalists believed that popular democracy destabilized government because they believed that factions tended to further their self-interest at the expense of the common good.

Often, we have to supply indefinite subjects, because the sentence expresses a general statement:

Such multivariate strategies may be of more use in understanding the genetic factors which contribute to vulnerability to psychiatric disorders than strategies based on the assumption that the presence or absence of psychopathology is dependent on a major gene or than strategies in which a single biological variable is studied.

If we/one/researchers are to understand the genetic factors that make some patients vulnerable to psychiatric disorders, we/one/researchers should use multivariate strategies rather than strategies in which we/one/researchers study only a single biological variable.

As flexible as English is, it does have a problem with indefinite subjects. Unlike writers of French, who have available an impersonal pronoun that does not seem excessively formal, English has no convenient indefinite pronoun. In this book, we have used *we* quite freely, because parts of this book are written by two people. But many readers dislike the royal *we* when used by a single writer, because they think it pretentious. Even when used by two or more writers, it can be misleading because it includes too many referents: the writer, the reader, and an indefinite number of others. As a consequence, many writers slip back into nominalizations or, as we shall see in a bit, passive verbs:

If the generic factors that make some patients vulnerable to psychiatric disorders are to be understood, multivariate strategies should be used rather than strategies in which it is assumed that a major gene causes psychopathology or strategies in which only a single biological variable is studied.

Verbs and Actions

As we'll use the word here, "action" will cover not only physical movement, but also mental processes, feelings, relationships, literal or figurative. In these next four sentences, the meaning becomes clearer as the verbs become more specific:

There has been effective staff information dissemination control on the part of the Secretary.

The Secretary has exercised effective staff information dissemination control.

The Secretary has effectively controlled staff information dissemination.

The Secretary has effectively controlled how his staff disseminates information.

The crucial actions aren't *be* or *exercise*, but *control* and *disseminate*.

Most writers of turgid prose typically use a verb not to express action but merely to state that an action exists.

A <i>need</i> exists for greater candidate <i>selection</i> efficiency.	=	We <i>must</i> select candidates more efficiently.
There is the <i>possibility</i> of prior <i>approval</i> of it.	=	He <i>may</i> approve of it ahead of time.
We conducted an <i>investigation</i> of it.	=	We investigated it.
A <i>review</i> was done of the regulations.	=	They reviewed the regulations

There is a technical term for a noun derived from a verb or an adjective. It is called a *nominalization*. Nominalization is itself a noun derived from a verb, *nominalize*. Here are some examples:

Verb →	Nominalization	Adjective →	Nominalization
discover	discovery	careless	carelessness
move	movement	difficult	difficulty
resist	resistance	different	difference
react	reaction	elegant	elegance
fail	failure	applicable	applicability
refuse	refusal	intense	intensity

Some nominalizations are identical to their corresponding verb: *hope* → *hope*, *charge* → *charge*, *result* → *result*, *answer* → *answer*, *repair* → *repair*, *return* → *return*.

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

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

Nominalization might sound like jargon, but it's a useful term.

Looking for Nominalizations

A few patterns of useless nominalizations are easy to spot and revise.

1. When the nominalization follows a verb, with little specific meaning, change the nominalization to a verb that can replace the empty verb.

The police *conducted* an investigation into the matter.

The police *investigated* the matter.

The committee *has* no expectation that it will meet the deadline.

The committee does not *expect* to meet the deadline.

2. When the nominalization follows *there is* or *there are*, change the nominalization to a verb and find a subject:

There is a need for further study of this program.

The engineering staff must study this program further.

There was considerable erosion of the land from the floods.

The floods considerably eroded the land.

3. When the nominalization is the subject of an empty verb, change the nominalization to a verb and find a new subject:

The intention of the IRS *is* to audit the records of the program.

The IRS *intends* to audit the records of the program.

Our discussion *concerned* a tax cut.

We discussed a tax cut.

4. When you find consecutive nominalizations, turn the first one into a verb. Then either leave the second or turn it into a verb in a clause beginning with *how* or *why*:

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

First, she reviewed the evolution of the dorsal fin.

First, she reviewed *how* the dorsal fin evolved.

5. We have to revise more extensively when a nominalization in a subject is linked to a second nominalization in the predicate by a verb or phrase that logically connects them:

Subject:	Their cessation of hostilities
Logical connection:	was because of
Object:	their personnel losses.

To revise such sentences,

- (a) Change abstractions to verbs: *cessation* → *cease*, *loss* → *lose*.
- (b) Find subjects for those verbs: *they ceased*, *they lost*.
- (c) Link the new clauses with a word that expresses their logical connection. That connection will typically be some kind of causal relationship:

To express simple cause:	<i>because, since, when</i>
To express conditional cause:	<i>if, provided that, so long as</i>
To contradict expected cause:	<i>though, although, unless.</i>

Schematically, we do this:

Their cessation of hostilities	→	they ceased hostilities
was because of	→	because
their personnel loss	→	they lost personnel

More examples:

- The discovery of a method for the manufacture of artificial skin *will have the result* of an increase in the survival of patients with radical burns.
 - Researchers discover how to manufacture artificial skin
 - More patients will survive radical burns
 - If* researchers can discover how to manufacture artificial skin, more patients will survive radical burns.
- The presence of extensive rust damage to exterior surfaces *prevented* immediate repairs to the hull.
 - Rust had extensively damaged the exterior surfaces
 - We could not repair the hull immediately
 - Because* rust had extensively damaged the exterior surfaces, we could not repair the hull immediately.
- The instability of the motor housing *did not preclude* the completion of the field trials.
 - The motor housing was unstable
 - The research staff completed field trials
 - Even though* the motor housing was unstable, the research staff completed the field trials.

Useful Nominalizations

In some cases, nominalizations are useful, even necessary. Don't revise these.

1. The nominalization is a subject referring to a previous sentence:

These arguments all depend on a single unproven claim.

This decision can lead to costly consequences.

These nominalizations let us link sentences into a more cohesive flow.

2. The nominalization names what would be the object of its verb:

I do not understand either **her meaning** or **his intention**.

This is a bit more compact than, “I do not understand either **what she means** or **what he intends**.”

3. A succinct nominalization can replace an awkward “The fact that”:

The fact that I denied what he accused me of impressed the jury.

My denial of his accusations impressed the jury.

But then, why not

When I **denied his accusations**, I **impressed the jury**.

4. Some nominalizations refer to an often repeated concept.

Few issues have so divided Americans as **abortion on demand**.

The **Equal Rights Amendment** was an issue in past elections.

Taxation without representation was not the central concern of the American Revolution.

In these sentences, the nominalization names concepts that we refer to repeatedly: *abortion on demand*, *Amendment*, *election*, *taxation*, *representation*, *Revolution*. Rather than repeatedly spell out a familiar concept in a full clause, we contract it into a noun. In these cases, the abstractions often become virtual actors.

And, of course, some nominalizations refer to ideas that we can express only in nominalizations: *freedom*, *death*, *love*, *hope*, *life*, *wisdom*. If we couldn’t turn some verbs or adjectives into nouns, we would find it difficult—perhaps impossible—to discuss those subjects that have preoccupied us for millennia. You simply have to develop an eye—or an ear—for the nominalization that expresses one of these ideas and the nominalization that hides a significant action:

There is a demand for an end to taxation on entertainment.

We demand that the government stop taxing entertainment.

5. We often use a nominalization after *there is/are* to introduce a topic that we develop in subsequent sentences (as distinct from an isolated *there is* + nominalization, see p. 31):

There is no need, then, for argument about the existence, the inevitability, and the desirability of change [in language]. *There is* need, however, for argument about the existence of such a thing as good English and correct English. Let us not hesitate to assert that "The pencil was laying on the table" and "He don't know nothing" are at present incorrect no matter how many know-nothings say them. Let us insist that . . . Let us demand that . . . Let us do these things not to satisfy "rules" or to gratify the whims of a pedagogue, but rather to express ourselves clearly, precisely, logically, and directly.

—Theodore M. Bernstein, *The Careful Writer*⁴

(Of course, we might also consider revising those first two sentences into "Language changes, and such changes are both inevitable and sometimes desirable. But there is such a thing as good English and correct English.")

6. And sometimes our topic seems so abstract that we think we can write about it only in nominalizations. Here are two passages about an abstract principle of law. In the first, the abstract nominalization *recovery in equity* acts virtually as a character. It "requires," it "recovers," it "relaxes," just as a real character might.

In comparison to the statutory method of recovery, there are certain advantages in the equitable right of recovery. Recovery in equity does not require strict compliance with statutory requirements. Because equitable recovery can be tailored to the particular controversy, it allows one to recover greater or lesser amounts. A statutory action for the recovery of rents can recover only the value of use and occupation exclusive of improvements to the property. An equity action, on the other hand, can recover rents based upon the value of the property with the defendant's improvements thereupon. Proceedings in equity also relax the evidentiary standard. Most importantly, unlike the statutory method, recovery in equity does not demand one year of possession prior to suit. Both statutory and equitable remedies, however, require the same standard of good faith.

But we can explain the same concepts using subject/characters and verb/actions.

In comparison to the statutory method, a plaintiff will find certain advantages through an equitable right of recovery. In recovery in equity, the plaintiff need not strictly comply with statutory requirements. Because he can tailor recovery to the equities of the controversy, he may be able to recover greater or lesser amounts. In a statutory action regarding the recovery of rents, a plaintiff can recover only the value of use and occupation exclusive of improvements to the property. On the other hand, under recovery in equity, the plaintiff can recover rents based upon the value of the property with the defendant's improvements thereupon. In proceedings in equity, the court may also relax the evidentiary standard. Most importantly, unlike the statutory method, in recovery in equity the plaintiff does not have to possess the land one year prior to suit. In both statutory and equitable remedies, however, the court requires the same standard of good faith.

Other passages do not lend themselves to revision so easily (I boldface the nominalizations and italicize the characters).

The argument is this. The cognitive component of intention exhibits a high degree of complexity. Intention is temporally divisible into two: prospective intention and immediate intention. The cognitive function of prospective intention is the representation of a *subject's* similar past actions, *his* current situation, and *his* course of future actions. That is, the cognitive component of prospective intention is a plan. The cognitive function of immediate intention is the monitoring and guidance of ongoing bodily movement. Taken together these cognitive mechanisms are highly complex. The folk psychological notion of belief, however, is an attitude that permits limited complexity of content. Thus the cognitive component of intention is something other than folk psychological belief.

—Myles Brand, *Intending and Acting*⁵

Translated into an agent-action style, this passage loses something of its generality, some would say its philosophical import. Only its author could judge whether our translation has misrepresented his argument.

I argue like this: When *an actor* intends anything, *he* behaves in ways that are cognitively complex. We may divide these ways into two temporal modes: *He* intends prospectively or immediately.

When *an actor* intends prospectively, *he* cognitively represents to himself what *he* has done similarly in the past, his current situation, and how *he* intends to act in the future. That is, when *an actor* intends prospectively, *he* plans. On the other hand, when *an actor* plans what *he* intends to do immediately, *he* monitors and guides his body as *he* moves it. When *we* take these two cognitive components together, *we* see that they are highly complex. But *our* beliefs about these matters on the basis of folk psychology are too simple. When *we* consider the cognitive component of intention in this way, *we* see that *we* have to think in ways other than folk psychology.

This passage illustrates the problem with finding an impersonal subject. Should *we/one/the writer/you* use as subjects *we, one, he, philosophers, anyone*?

Passives and Agents

In addition to avoiding abstract nominalizations, you can make your style more direct if you also avoid unnecessary passive verbs. In active sentences, the subject typically expresses the agent of an action, and the object expresses the goal or the thing changed by the action:

subject		object
Active: The partners	→ broke →	the agreement.
agent		goal

In passive sentences, the subject expresses the goal of an action; a form of *be* precedes a past participle form of the verb; and the agent of the action may or may not be expressed in a *by*-phrase:

	be (past participle)	prepositional phrase
subject		
Passive: The agreement	← was broken ←	by the partners.
goal		agent

We can usually make our style more vigorous and direct if we avoid both nominalizations and unnecessary passive verbs. Compare:

A new approach to toxic waste management detailed in a chemical industry plan **will be submitted**. A method of decomposing toxic by-products of refinery processes **has been discovered** by Genco Chemical.

The chemical industry will submit a plan that details a new way to manage toxic waste. Genco Chemical has discovered a way to decompose toxic by-products of refinery processes.

Active sentences encourage us to name the specific agent of an action and avoid a few extra words—a form of *be* and, when we preserve the Agent of the action, the preposition *by*. Because the passive also reverses the direct order of agent-action-goal, passives eventually cripple the easy flow of an otherwise energetic style. Compare these passages:

It was found that data concerning energy resources allocated to the states were not obtained. This action is needed so that a determination of redirection is permitted on a timely basis when weather conditions change. A system must be established so that data on weather conditions and fuel consumption may be gathered on a regular basis.

We found that the Department of Energy did not obtain data about energy resources that Federal offices were allocating to the states. The Department needs these data so that it can determine how to redirect these resources when conditions change. The Secretary of the Department must establish a system so that his office can gather data on weather conditions and fuel consumption on a regular basis.

The second passage is a bit longer, but more specific and more straightforward. We know who is supposed to be doing what.

When we combine passives with nominalizations, we create that wretched prose we call legalese, sociologalese, educationalese, bureaucratese—all of the *-eses* of those who confuse authority and objectivity with polysyllabic abstraction and remote impersonality:

Patient movement to less restrictive methods of care may be followed by increased probability of recovery.

If we treat patients less restrictively, they may recover faster.

But those are the easy generalizations. In many other cases, we may find that the passive is, in fact, the better choice.

Choosing between Active and Passive

To choose between the active and the passive, we have to answer two questions: First, must our audience know who is per-

forming the action? Second, are we maintaining a logically consistent string of subjects? And third, if the string of subjects is consistent, is it the right string of subjects?

Often, we avoid stating who is responsible for an action, because we don't know or don't care, or because we'd just rather not say:

Those who are found guilty of murder can be executed.

Valuable records should always be kept in a fireproof safe.

In sentences like these, the passive is the natural and correct choice. In this next sentence, we might also predict the passive, but for a different reason, one having to do with avoiding responsibility:

Because the final safety inspection was neither performed nor monitored, the brake plate assembly mechanism was left incorrectly aligned, a fact that was known several months before it was decided to publicly reveal that information.

This kind of writing raises issues more significant than mere clarity.

The second consideration is more complex: it is whether the subjects in a sequence of sentences are consistent. Look again at the subjects in the pair of paragraphs about energy (p. 37). In the first version, the subjects of the passive sentences seem to be chosen almost at random.

It . . . information . . . This action . . . a determination . . . A system . . . information. . . .

In the second, the active sentences give the reader a consistent point of view; the writer "stages" the sentences from a consistent string of subjects, in this case the agents of the action:

We . . . Department of Energy . . . Federal offices . . . the Department . . . it . . . the Secretary . . . his office. . . .

Now each agent-subject anchors the reader in something familiar at the beginning of the sentence—the cast of characters—before the reader moves on to something new.

If in a series of passive sentences, you find yourself shifting from one unrelated subject to another, try rewriting those sentences in the active voice. Use the beginning of your sentence to orient your reader to what follows. If in a series of sentences you

give your reader no consistent starting point, then that stretch of writing may well seem disjointed.

If, however, you can make your sequence of subjects appropriately consistent, then choose the passive. In this next passage, the writer wanted to write about the end of World War II from the point of view of Germany and Japan. So in each of her sentences, she put Germany and Japan into the subject of a verb, regardless of whether the verb was active or passive:

By March of 1945, the Axis nations had been essentially defeated; all that remained was a final, but bloody, climax. The borders of Germany had been breached, and both Germany and Japan were being bombed around the clock. Neither country, though, had been so devastated that it could not resist.

If, however, she had wanted to write about the end of the war from the point of view of the Allied nations, she would have chosen the active:

By March of 1945, the Allies had essentially defeated the Axis nations; all that remained was a final, but bloody, climax. American, French, and British forces had breached the borders of Germany and were bombing both Germany and Japan around the clock. But they had not so thoroughly devastated either country as to destroy its ability to resist.

We will return to this matter in Chapter 3.

The Institutional Passive

When we try to revise passives in official and academic prose, we often run into a problem, because many editors and teachers believe that passages such as the following are stylistically improper (each comes from the opening of articles published in quite respectable journals):

~~Language~~ is concerned with two problems. How can we best handle, in a transformational grammar (i) Restrictions. . . . To illustrate (i), we may cite . . . we shall show . . .

Since the pituitary-adrenal axis is activated during the acute phase response, we have investigated the potential role . . . Specifically, we have studied the effects of interleukin-1 . . .

Any study of tensions presupposes some acquaintance with certain findings of child psychology. We may begin by inquiring whether . . . we should next proceed to investigate.

Here are the first few words from several consecutive sentences in an article in *Science*, a journal of substantial prestige:

. . . we want . . . Survival gives . . . We examine We compare We have used Each has been weighted We merely take They are subject We use Efron and Morris (3) describe We observed We might find We know. . . .⁶

Certainly, scholars in different fields write in different ways. And in all fields, some scholarly writers and editors resolutely avoid the first person everywhere. But if they claim that all good academic writing in all fields must always be impersonally third-person, always passive, they are wrong.

Metadiscourse: Writing about Writing

We now must explain, however, that when academic and scholarly writers do use the first person, they use it for particular purposes. Note the verbs in the passages cited: *cite, show, begin by inquiring, compare*. The writers are referring to their acts of writing or arguing, and are using what we shall call *metadiscourse*.

Metadiscourse is the language we use when, in writing about some subject matter, we incidentally refer to the act and to the context of writing about it. We use metadiscourse verbs to announce that in what follows we will *explain, show, argue, claim, deny, describe, suggest, contrast, add, expand, summarize*. We use metadiscourse to list the parts or steps in our presentation: *first, second, third, finally*; to express our logical connections: *infer, support, prove, illustrate, therefore, in conclusion, however, on the other hand*. We hedge how certain we are by writing *it seems that, perhaps, I believe, probably*, etc. Though metadiscourse does not refer to what we are primarily saying about our subject, we need some metadiscourse in everything we write.

If scholarly writers use the first person at all, they predictably use *I* or *we* in introductions, where they announce their intentions in metadiscourse: *We claim that, We shall show, We begin by examining*. If writers use metadiscourse at the beginning of a piece, they often use it again at the end, when they review what they have done: *We have suggested, I have shown that, We have, however, not claimed*. Less often, scholarly writers use the first person to refer to their most general actions involved in research-

ing their problem. This is not metadiscourse when it applies to the acts of research: *we investigate, study, examine, compare, know, analyze, review, evaluate, assess, find, discover.*

Academic and scientific writers rarely use the first person when they refer to particular actions. We are unlikely to find passages such as this:

To determine if monokines directly elicited an adrenal steroidogenic response, I added monocyte-conditioned medium and purified preparations of . . .

Far more likely is the original sentence:

To determine if monokines directly elicited an adrenal steroidogenic response, monocyte-conditioned medium and purified preparations . . . were added to cultures . . .

Note that when the writer wrote this sentence in the passive, he unselfconsciously dangled his modifier:

To determine . . . medium and purified preparations were added . . .

The implied subject of the verb *determine* is *I* or *we*; *I determine*. But that implied subject *I* or *we* differs from *medium and purified preparations*, the explicit subject of the main verb *added*. And thus dangles the modifier: the implied subject of the introductory phrase differs from the explicit subject of the clause.

Writers of scientific prose use this pattern so often that it has become standard usage in scientific English. The few editors who have stern views on these matters object, of course. But if they do, they must accept first-person subjects. If they both deprive their authors of a first-person subject and rule out dangling modifiers, they put their writers into a damned-if-you-do, damned-if-you-don't predicament.

As a small historical footnote, we might add that this impersonal "scientific" style is a modern development. In his "New Theory of Light and Colors" (1672), Sir Isaac Newton wrote this rather charming account of an early experiment:

I procured a triangular glass prism, to try therewith the celebrated phenomena of colors. And for that purpose, having darkened my laboratory, and made a small hole in my window shade, to let in a convenient quantity of the sun's light, I placed my prism at the entrance, that the light might be thereby refracted to the opposite

wall. It was at first a very pleasing diversion to view the vivid and intense colors produced thereby.

Noun + Noun + Noun

A last habit of style that often keep us from making the connections between our ideas explicit is the unnecessarily long compound noun phrase:

Early childhood thought disorder misdiagnosis often occurs because of unfamiliarity with recent **research literature** describing such conditions. This paper reviews seven recent studies of particular relevance to **preteen hyperactivity diagnosis** and to **treatment modalities** involving **medication maintenance level evaluation procedures**.

Some grammarians insist that we should never use one noun to modify another, but that would rule out common phrases like *stone wall* or *student committee*. And if we ruled out such phrases, writers of technical prose would be unable to compact into a single phrase complex thoughts that they would otherwise have to repeat in longer constructions. If a writer must refer several times in an article to the idea behind *medication maintenance level evaluation procedures*, then repeating that phrase is marginally better than repeating *procedures to evaluate ways to maintain levels of medication*. In less technical writing, though, compounds like these seem awkward or, worse, ambiguous, especially when they include nominalizations.

So, whenever you find in your writing a string of nouns that you have never read before and that you probably will not use again, try disassembling them. Start from the last and reverse their order, even linking them with prepositional phrases, if necessary. If one of the nouns is a nominalization, change it into a verb. Here is the first compound in the example passage revised:

	1	2	3	4
	early	childhood	thought disorder	misdiagnosis
	4	3	2	1
→	misdiagnose disordered thought in early childhood			

(Now we can see the ambiguity: what's early, the childhood, the disorder, or the diagnosis?) Then reassemble into a sentence:

Physicians are misdiagnosing disordered thought in young children because they are not familiar with the literature on recent research.

Summing Up

1. Express actions and conditions in specific verbs, adverbs, or adjectives:

The intention of the committee is the improvement of morale.

The committee intends to improve morale.

2. When appropriate, make the subjects of your verbs characters involved in those actions.

A decision on the part of the Dean about funding by the Department of its program must be made for there to be adequate staff preparation.

If the staff is to prepare adequately, the Dean must decide whether the Department will fund the program.

We can sum up these principles in the diagram we offered on p. 26.

FIXED	SUBJECT	VERB	COMPLEMENT
VARIABLE	CHARACTERS	ACTION	_____

To the degree that we consistently expresses the crucial actions of our story in verbs and our central characters (real or abstract) in subjects, our readers are likely to feel our prose is clear and direct. This, however, is only the first step toward clear, direct, and *coherent* writing.

Well begun is half done.

Anonymous

The two capital secrets in the art of prose composition are these: first the philosophy of transition and connection; or the art by which one step in an evolution of thought is made to arise out of another: all fluent and effective composition depends on the connections; secondly, the way in which sentences are made to modify each other; for the most powerful effects in written eloquence arise out of this reverberation, as it were, from each other in a rapid succession of sentences.

Thomas De Quincy

“Begin at the beginning,” the King said, gravely, “and go on till you come to the end; then stop.”

Lewis Carroll

3

Cohesion

Clarity and Context

So far, we've discussed clear writing as if we wrote only individual sentences, independent of context or intention; as if we could directly map onto subjects and verbs the way characters and actions appear to us as we directly experience the world. And it's true—if we mechanically arranged characters and their apparent actions so that they matched subjects and verbs, we would achieve a kind of local clarity.

But there is more to readable writing than local clarity. A series of clear sentences can still be confusing if we fail to design them to fit their context, to reflect a consistent point of view, to emphasize our most important ideas. These sentences could all refer to the same set of conditions, but each leads us to understand the conditions from a different point of view.

Congress finally agreed with the Secretary of State that if we ally ourselves with Saudi Arabia and Iran then attacks Kuwait, we will have to protect Kuwait.

The Secretary of State finally convinced Congress that if Kuwait comes under Iranian attack, it will need our protection if Saudi Arabia has acquired us as an ally.

The Secretary of State and Congress finally agreed that if we and Saudi Arabia become allies and Kuwait and Iran enter into hostilities initiated by Iran, then we and Kuwait will become allies in the hostilities.

The problem is to discover how, without sacrificing local clarity, we can shape sentences to fit their context and to reflect those larger intentions that motivate us to write in the first place.

In Chapters 1 and 2, we began explaining matters of style by trying first to refine the way we describe our responses to different kinds of prose. In those chapters, we described passages

such as the next one as “turgid” or “murky” (still keeping in mind that in fact we are describing not the prose but our feelings about it):

- 1a. To obligate a corporation upon a contract to another party, it must be proven that the contract was its act, whether by corporate action, that of an authorized agent, or by adoption or ratification and such ratification will be implied by the acquiescence or the acceptance of the benefits of such contract, it being essential to implied ratification that the acceptance be with knowledge of all pertinent facts.

Once we are aware of how we feel about a passage like this and conscious of the words we can use to describe those feelings, we know how to begin analyzing the passage so that we can revise it. First, who are the characters? Then what actions are they performing? To revise, we name the characters in subjects and actions in verbs:

- 1b. To prove that a corporation *is obligated* to another party, the other party *must prove* one of two conditions:
 - the corporation or its authorized agent explicitly *acted* to *enter* the contract, or
 - the corporation *adopted* or implicitly *ratified* the contract when, knowing all pertinent facts, it *acquiesced* in or *accepted* its benefits.

Now read this next pair of passages. How would you describe their differences?

- 2a. Asian competitors who have sought to compete directly with Acme's X-line product groups in each of six market segments in the Western Pacific region will constitute the main objective of the first phase of this study. The labor costs of Acme's competitors and their ability to introduce new products quickly define the issue we will examine in detail in each segment. A plan that will show Acme how to restructure its diverse and widespread facilities so that it can better exploit unexpected opportunities, particularly in the market on the Pacific Rim, should result.
- 2b. The first phase of this study will mainly examine six market segments in the Western Pacific region to determine how Asian competitors have sought to compete directly with Acme's X-line product groups. In each segment, the study will examine in detail their labor costs and their ability to in-

introduce new products quickly. The result will be a plan that will show Acme how to restructure its diverse and widespread facilities so that it can better exploit unexpected opportunities, particularly in the market on the Pacific Rim.

Passage (2b) is “clearer” than (2a), but to describe how it is clearer and what makes it so, we would have to use words different from those we used to describe the passages about corporate contracts. Neither (2a) nor (2b) has any problems with nominalizations; both have about the same number of characters as subjects of verbs. So (2a) is not more “turgid,” “abstract,” or “complex” than (2b). Most readers have described the first as “disjointed,” “abrupt,” “choppy,” as lacking in “flow”; (2b) as “flowing,” “connected,” and “cohesive.”

This chapter will explain these responses and suggest how to revise a passage like (2a) into a passage like (2b).

Managing the Flow of Information

Few principles of style are more widely repeated than “use the direct active voice, avoid the weak and indirect passive.” Not

- a. A black hole is created by the collapse of a dead star into a point perhaps no larger than a marble.

but rather,

- b. The collapse of a dead star into a point perhaps no larger than a marble creates a black hole.

But what if the context for either of those sentences was this:

- (1) Some astonishing questions about the nature of the universe have been raised by scientists exploring the nature of black holes in space. (2a/b) — (3) So much matter compressed into so little volume changes the fabric of space around it in profoundly puzzling ways.

Our sense of coherence should tell us that this context calls not for the active sentence, but for the passive. And the reasons are not far to seek: The last part of sentence (1) introduces one of the important characters in the story: black holes in space. If we write sentence (2) in the active voice, we cannot mention black holes again until its end, as the object of an active verb:

- (2b) The collapse of a dead star . . . creates a black hole.

We can improve the flow between sentences (1) and (2) if we shift that object in sentence (2)—a black hole—to the beginning of its own sentence, where it will echo the last few words of sentence (1). We can do that by making *black hole* the subject of a passive verb:

the nature of black holes in space. A black hole is created by the collapse of a dead star (or . . . when a dead star collapses).

By doing that, we also move to the end of sentence (2) the concept that will open sentence (3), and thereby create a tight conceptual link between those two sentences:

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

The problem—and the challenge—of English prose is that, with every sentence we write, we have to strike the best compromise between the principles of local clarity and directness that we discussed in Chapter 2, and the principles of cohesion that fuse separate sentences into a whole discourse. But in that compromise, we must give priority to those features of style that make our discourse seem cohesive, those features that help the reader organize separate sentences into a single, unified whole.

We've illustrated two complementary principles of cohesion. One of them is this:

Put at the beginning of a sentence those ideas that you have already mentioned, referred to, or implied, or concepts that you can reasonably assume your reader is already familiar with, and will readily recognize.

The other principle is this:

Put at the end of your sentence the newest, the most surprising, the most significant information: information that you want to stress—perhaps the information that you will expand on in your next sentence.

As you begin a sentence, you have to prepare your readers for new and therefore important information. Give your readers a familiar context to help them move from the more familiar to the less familiar, from the known to the unknown.

All of us recognize this principle when a good teacher tries to

teach us something new. That teacher will always try to connect something we already know to whatever new we are trying to learn. Sentences work in the same way. Each sentence should teach your reader something new. To lead your reader to whatever will seem new *to that reader*, you have to begin that sentence with something that you can reasonably assume *that reader* already knows. How you begin sentences, then, is crucial to how easily your readers will understand them, not individually, but as they constitute a whole passage. But in designing sentences in this way, you must have some sense of what your reader already knows about your subject.

Beginning Well

It's harder to begin a sentence well than to end it well. As we'll see later, to end a sentence well, we need only decide which of our ideas is the newest, probably the most complex, and then imagine that complex idea at the end of its own sentence. The problem is merely to get there gracefully. On the other hand, every time we begin a sentence, we have to juggle three or four elements that typically occur early on.

1. To connect a sentence to the preceding one, we use transitional metadiscourse, such as *and*, *but*, *therefore*, *as a result*:
And therefore

2. To help readers evaluate what follows, we use expressions such as *fortunately*, *perhaps*, *allegedly*, *it is important to note*, *for the most part*, *under these circumstances*, *from a practical point of view*, *politically speaking*.

And therefore, it is important to note, that from a practical point of view. . . .

3. We locate action in time and place: *then*, *later*, *on May 23*, *in Europe*.

And therefore, it is important to note, that from a practical point of view, in the Northeastern states in recent years. . . .

4. And most important (note the evaluation), we announce at the beginning of a sentence its *topic*—the concept that we intend to say something about. We ordinarily name the topic of a sentence or clause in its subject:

And therefore, it is important to note, that from a practical point of view, in the Northeastern states in recent years, these sources of acid rain have been a matter of much concern. . . .

Your style will seem cohesive to the degree that you can subordinate the first three of the elements that open a sentence to the fourth, to its topic. If you begin sentences with the kind of throat-clearing introduction of the sentence above, your prose will seem not just uncertain, but unfocused. We will begin with topics, because they are centrally important in the ways readers read.

Topics: Psychological Subjects

The topic of a sentence is its *psychological* subject. The psychological subject of a sentence is that idea we announce in the first few words of a sentence. It is almost always a noun phrase of some kind that the rest of the sentence characterizes, comments on, says something about. In most English sentences, psychological subjects (topics), are also grammatical subjects:

Private higher education is seriously concerned about population trends through the end of the century.

The writer first announces the grammatical subject, *Private higher education*. As readers, we assume the writer is going to comment on, say something about that concept. In this sense, the sentence is “about” private higher education.

But we can create a topic out of the object of a verb if we shift that object to the beginning of its sentence, before the subject:

I cannot explain the reasons for this decision to end the treaty.

The reasons for this decision to end the treaty, I cannot explain.

We can also put topics in introductory phrases:

As for abortion, it is not clear how the Supreme Court will rule.

In regard to regulating religious cults, we must proceed cautiously.

Neither *abortion* nor *regulating religious cults* is the subject of its sentence. The main subject of the first is *it*, and of the second, *we*. If we ask what either of those sentences is really “about,” we would not say that the sentences were “about” their grammatical subjects, *it* or *we*. Those sentences are “about” their psycho-

logical subjects, their topics—abortion, and regulating religious cults.

Here's the point. In the clearest writing, the topics of most sentences and clauses are their grammatical subjects. But what's more important than their grammatical function is the way topics control how readers read sentences, not individually, but in sequences, and the way that writers must therefore organize *sequences* of those topics. The most important concern of a writer, then, is not the individual topics of individual sentences, but the cumulative effect of the sequence of topics.

The Role of Topics

In this paragraph, **boldface** indicate topics. Particular ideas toward the beginning of each clause define what a passage is centrally “about” for a reader, so a sense of coherence crucially depends on topics. Cumulatively, the thematic signposts that are provided by these ideas should focus the reader's attention toward a well-defined and limited set of connected ideas. Moving through a paragraph from a cumulatively coherent point of view is made possible by a sequence of topics that seem to constitute this coherent sequence of topicalized ideas. A seeming absence of context for each sentence is one consequence of making random shifts in topics. Feelings of dislocation, disorientation, and lack of focus will occur when that happens. The seeming coherence of whole sections will turn on a reader's point of view as a result of topic announcement.

Compare that with this.

In this paragraph, I have boldfaced the topics of every clause. Topics are crucial for a reader because they focus the reader's attention on a particular idea toward the beginning of a clause and thereby notify a reader what a clause is “about.” Topics thereby crucially determine whether the reader will feel a passage is coherent. Cumulatively, through a series of sentences, these topicalized ideas provide thematic signposts that focus the reader's attention on a well-defined set of connected ideas. If a sequence of topics seems coherent, that consistent sequence will move the reader through a paragraph from a cumulatively coherent point of view. But if through that paragraph topics shift randomly, then the reader has to begin each sentence out of context, from no coherent point of view. When that happens, the reader will feel dislocated, disoriented, out of focus. Whatever *the writer* announces

as a topic, then, will fix the reader’s point of view, not just toward the rest of the sentence, but toward whole sections.

To most readers the original has no consistent focus, no consistent string of topics that focuses attention on a circumscribed set of concepts. So, as most readers feel dislocated, disoriented, or unfocused, they describe the passage as disjointed, choppy, lacking in “flow.” The revised version consistently focuses on fewer concepts: for the most part, some variation on *topics* and *reader*. It has a more consistent *topic string*, and therefore feels more focused, more cohesive.

This principle of a coherent topic string also helps us understand why we can be confused by one long sentence after another. Long sentences may not announce topics often enough or clearly enough to guide us through a multitude of ideas. We need topics as thematic signposts to help us assemble ideas in individual sentences and clauses into cohesive discourse.

This principle of using a consistent string of topics reinforces a point we made about characters and actions: When you design your sentences so that their subjects predictably name your central characters—real or abstract—and the verbs in those sentences name crucial actions, you are beginning your sentences from a point of view your readers will feel is consistent, from the point of view of your characters, the most familiar units of information in any story you tell. In fact, we can expand the graphic model that we offered in the last chapter:

TOPIC			FIXED
OLD INFORMATION		NEW INFORMATION	VARIABLE
SUBJECT	VERB	CONTEXT	FIXED
CHARACTERS	ACTION	—	VARIABLE

The secret to a clear and readable style is in the first five or six words of every sentence. At the beginning of every sentence, locate your reader in familiar territory; at the beginning of a series of sentences, create for your reader a reasonably consistent point of view, a consistent topic string. When that consistent topic

string consists of your cast of characters as subjects, and you immediately connect those subjects with verbs that express the crucial actions, you are a long way toward writing prose that your readers will perceive as clear, direct, and cohesive.

Keeping Topics Visible

We can now appreciate why a writer has to get most of his or her sentences off to a brisk start with an appropriate topic. We fail to do this when we introduce sentences with too much metadiscourse, that language we use when we write about our own writing or thinking. These next sentences appeared in a study of a college curriculum. I have italicized the metadiscourse and bold-faced what I believe should have been the topics.

We think it useful to provide some relatively detailed illustration of the varied ways “corporate curricular personalities” organize themselves in programs. We choose to feature as a central device in our presentation what are called “introductory,” “survey,” or “foundational” courses. It is important, however, to recognize the diversity of what occurs in programs after the different initial survey courses. But what is also suggested is that if one talks about a program simply in terms of the intellectual strategies or techniques engaged in, when these are understood in a general way, it becomes difficult to distinguish many programs from others.

Get rid of the metadiscourse, make the central character—programs—the topic, and we get a substantially more compelling claim:

Our programs create varied “corporate” curricular personalities, particularly through their “introductory,” “survey,” or “foundational” courses. After these initial courses, they continue to offer diverse curricula. *But* in these curricula they seem to employ similar intellectual strategies.

At this point, some of you may be recalling advice that you once received about avoiding “monotony”—vary how you begin your sentences, avoid beginning sentences with the same subjects. Bad advice.

Your prose will become monotonous for reasons more serious than repeated topics or subjects. It will be monotonous if you

write one short sentence after another, or one long sentence after another. Your prose will seem monotonous if you stuff it with nominalizations and passives.

You avoid monotony by saying what you have to say as clearly as you can, by so thoroughly engaging your readers in your ideas that they lose touch with the surface of your prose. Under any circumstances, because we ordinarily write “stories” with several different characters, we are unlikely to repeat the same words for the same characters at the beginning of several consecutive sentences. And even if we do, most readers will not notice.

At the risk of asking a question that might invite the wrong answer, did the revised paragraph about topics, the one with the consistent topics, seem more monotonous than the original (p. 51)? It has only two main topics: *topics* and *reader*. If, as you read the paragraph, your eyes did not glaze over (as a result of the prose style, at any rate), then we have settled the issue of monotony and consistent subjects.

Managing Subjects and Topics for Flow

English provides us with several ways to replace a long subject that expresses new information with a shorter segment that probably expresses information repeated from or referring to a previous sentence. Notice how, in each of the example sentences below, we move to the end a long subject that expresses new and therefore relatively more important information. Note as well that the shorter segment which we move to the beginning expresses older information, information that typically connects the reader to something that has gone before.

Passives again. As we have seen, an important role of the passive is to let us replace a long subject full of new information with a short one that locates the reader in the context of something more familiar:

During the first years of our nation, *a series of brilliant and virtuous presidents committed to a democratic republic yet confident in their own superior worth* conducted its administration.

During the first years of our nation, its administration was conducted by *a series of brilliant and virtuous presidents committed to a democratic republic yet confident in their own superior worth*.

Astronomers, physicists, and a host of other researchers entirely familiar with the problems raised by quasars have confirmed these observations.

These observations have been confirmed by *astronomers, physicists, and a host of other researchers entirely familiar with the problems raised by quasars*.

These sentences illustrate the main reason the passive exists in the language—to improve cohesion and emphasis.

Subject-complement switching. Sometimes, we simply switch the subject and complement, especially when what follows the linking verb *be* refers to something already mentioned:

The source of the American attitude toward rural dialects is more interesting [than something already mentioned].

More interesting [than something already mentioned] is *the source of the American attitude toward rural dialects*.

We can make a similar switch with a few other verbs:

The failure of the administration to halt the rising costs of hospital care lies at the heart of the problem.

At the heart of the problem lies *the failure of the administration to halt the rising costs of hospital care*.

Some complex issues run through these questions.

Through these questions run *some complex issues*.

Subject-Clause Transformations. If you have a very long subject that does not allow you simply to switch it to the end of the clause, you can occasionally turn it into an introductory clause, allowing you to construct two shorter topics (subjects are boldfaced):

An attorney who uncovers after the close of a discovery proceeding documents that might be even peripherally relevant to a matter involved in the discovery proceeding must notify both the court and the opposing attorney immediately.

[**If a discovery proceeding closes and an attorney then uncovers documents that might be even peripherally relevant to the matter of the proceeding,**] he must notify both the court and the opposing attorney immediately.

Two Principles

Here are two principles that are more important than getting characters into the subjects of your sentences.

1. Put in the subject/topic of your sentences ideas that you have already mentioned, or ideas that are so familiar to your reader that if you state them at the beginning of a sentence, you will not surprise anyone.
2. Among groups of related sentences, keep their topics consistent, if you can. They don't have to be identical, but they should constitute a string that your readers will take to be focused.

Here are two consequences:

1. You may find yourself writing as many passive sentences as active. But if active sentences create a less consistent string of topics, leave the sentences passive.
2. You may find yourself using nominalizations as topics because those nominalizations refer to ideas in sentences that went before. That is an important use of nominalizations: to sum up in one phrase actions you have just mentioned so that you can comment on them.

To account for the relationships among colonies of related samples, it is necessary to track their genetic history through hundreds of generations. This kind of study requires a careful history of a colony.

Here is a quick way to determine how well you have managed your topics in a passage. Run a line under the first five or six words of every sentence (in fact under the subject of every verb in every clause, if you can do it). Read the phrases you underlined straight through. If any of them seems clearly outside the general set of topics, check whether it refers to ideas mentioned toward the end of the previous sentence. If not, consider revising.

Again, do not take this to mean that you have to make your topics identical or that all your topics have to be in subjects. A topic string is consistent to the degree that your reader can see connections in the sequence of words and phrases that open your sentences (and clauses). You will change your topic strings as you begin a new section or a new paragraph. The crucial point is not

to force your reader to begin each sentence in a sequence of sentences with information that the reader will find startling, unfamiliar, unexpected, disconnected from any of the other topics or from the end of the immediately preceding sentence.

The best diagnosis, however, is your own sensibility. When you stuff your prose with nominalizations and passives, it feels bloated. When you jump from topic to topic, your prose will feel different—disjointed, choppy, out of focus. Be sensitive to how you feel when you read and you will develop an instinct for where to look when you don't like what you've written. You will also know where to begin revising.

Some Special Problems with Topics

Audience as Topic

From time to time, some of us have to write for an audience able to understand only the simplest prose. Or more often, we have to write on a matter so complex that even a competent reader will understand it only if we take special care to make it clear. This does not mean “dumbing down.” It means only that we take special care to apply everything that we have said so far—an agent/action style, consistent topics, a predictable flow of old-new information. But we can make our prose more immediate, more available to the reader, if in those sentences we can also make the reader the topic of a sequence of sentences.

Here is some advice on renting a house that appeared in a publication directed to a broad audience:

The following information should be verified in every lease before signing: a full description of the premises to be rented and its exact location; the amount, frequency, and dates of payments; the amounts of deposits and prepayment of rents; a statement setting forth the conditions under which the deposit will be refunded.

That's not particularly difficult for an educated reader. But we can make it clearer, more reader-friendly, if you will, if we bring the reader into the flow of information in the form of *you*:

When you get the lease from the landlord, do not sign it right away. Before you sign, make sure the lease . . .

- (1) describes the place that you are renting;
- (2) states where it is;

(3) states

- how much rent you have to pay
- how often you have to pay it
- on what day you have to pay it;

(4) states

- how much security deposit you have to pay
- how much rent you have to pay before you move in;

(5) states when the landlord can keep your deposit.

I did more than shorten sentences, use simple words, and put agents into subjects, and actions into verbs. I also made the reader and the reader's experience a direct part of the discourse. (I also used a tabular arrangement with lots of white space. Had it been longer, I could have broken it up with headings and subheadings.)

Even complex material will yield to this kind of revision. If, for example, you are trying to explain some complex matter of taxes, imagine explaining the problem to someone sitting across the table. Since that person has to pay the taxes, you would begin most of your sentences with *you*. As you write—or rewrite—simply make a point of beginning every sentence with *you*. If you think the prose sounds too chatty, you can always replace the *you* with some third-person subject—*the taxpayer*. Compare:

To maximize eventual postretirement after-tax cash flow, the decision between a taxfree rollover of the imminent distribution into an IRA, or lump-sum ten-year forward averaging depends on whether the benefits of tax deferral will exceed the benefits of paying a small tax at the time of monthly distribution, though as a general rule, tax deferral will rarely exceed the benefits of a low tax rate.

To receive the most money after taxes, you have to decide what to do with the lump sum you will receive.

- (1) You can roll it over into your IRA and then defer taxes until you start withdrawing it after you retire.
- (2) You can average it over ten years and pay taxes on it now. You will probably have more money if you roll it over because when you retire, you'll probably pay taxes at a lower rate.

It's true that if these revisions are more readable, they are also a bit longer. But we ought not assume that they are therefore less economical, at least not if we judge economy by a measure more sophisticated than counting words. The real measure of economy

should be whether we have achieved our ends, whether our readers understand or do what we want them to. The next is perhaps a more telling example.

In 1985, the Government Accounting Office sponsored a study that inquired into why fewer than half the automobile owners who receive recall letters complied. It found that many car owners could not understand the letters. I received the following. It is an example of how writers can simultaneously meet legal requirements and ignore ethical obligations.

✓ A defect which involves the possible failure of a frame support plate may exist on your vehicle. This plate (front suspension pivot bar support plate) connects a portion of the front suspension to the vehicle frame, and its failure could affect vehicle directional control, particularly during heavy brake application. In addition, your vehicle may require adjustment service to the hood secondary catch system. The secondary catch may be misaligned so that the hood may not be adequately restrained to prevent hood fly-up in the event the primary latch is inadvertently left unengaged. Sudden hood fly-up beyond the secondary catch while driving could impair driver visibility. In certain circumstances, occurrence of either of the above conditions could result in vehicle crash without prior warning.

✓ The author—probably a committee—nominalized all the verbs that might make a reader anxious, made most of the rest of the other verbs passive, and then deleted just about all references to the characters, particularly to the manufacturer. You might try revising this along the lines of the others. Certainly one of the sentences will read,

If you brake hard and the plate fails, you will not be able to steer your car.

Designing Topics

A writer can create quite subtle effects by finding verbs that will let him shift into the subject/topic position those characters that will best serve his purposes. Children learn how quickly. Even four year olds understand the difference between,

When Tom and I bumped, my glass dropped, and the juice spilled.

When I bumped into Tom I dropped my glass and spilled the juice.

Neither sentence is more or less “true” to the facts. But while both have an agent-action style, the second assigns responsibility to an agent in a way different from the first.

We best appreciate this design when we recognize how skilled writers draw on the resources of English syntax to achieve important ends. Here are the first few sentences of Lincoln’s Gettysburg Address, rewritten from a plausible and coherent topical point view, but rather different from Lincoln’s original:

Four score and seven years ago, this continent witnessed the birth of a new nation, conceived in liberty and dedicated to the proposition of our fathers that all men are created equal. Now, this great Civil War that engages us is testing whether that nation or any nation so conceived and so dedicated can long endure.

The War created this great battlefield. A portion of it is now to be dedicated as the final resting place for those who here gave their lives that this nation might live. This is altogether a fitting and proper thing to do. But in a larger sense, this ground will not let us dedicate, consecrate, or hallow it. It has already taken that consecration from the brave men, living and dead, who struggled here, far above our poor power to add or detract. Our words will be little noted nor long remembered, but their actions will never pass from human memory.

Compare the original:

Four score and seven years ago our fathers brought forth on this continent a new nation, conceived in liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we cannot dedicate—we cannot consecrate—we cannot hallow this ground. The brave men, living and dead, who struggled here have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember that we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full

measure of devotion—that we here highly resolve that these dead shall not have died in vain—that **this nation**, under God, shall have a new birth of freedom—and that **government of the people, by the people, and for the people**, shall not perish from the earth.

Lincoln assigned responsibility to his audience. By consistently topicalizing *we* to make himself and his audience the agents of the crucial actions, Lincoln made them one with the founding fathers and with the men who fought and died at Gettysburg. By so doing, he tacitly invited his listeners to join their dead forefathers and their dead countrymen in making the great sacrifices the living had still to make to preserve the Union.

My revision shifts agency away from people and assigns it to abstractions and places: *the continent witnesses, a great civil war tests, the war creates, the ground will not let, it has taken*. I have metaphorically invested agency and responsibility not in people but in abstractions. Had Lincoln presented my version, he would have relieved his audience of their responsibility to act, and would thereby have deprived us of one of the great documents in our history.

You may think at this point that I am saying it is always good to design prose so that agents always act on their own responsibility; that when we deflect responsibility away from people, when we topicalize abstractions, we create prose that is less honest, less direct than prose whose agents act as topic/subjects. Not so. If in 1775 Thomas Jefferson had followed that advice, he would have written a very different Declaration of Independence. Note in the first two paragraphs of the original how Jefferson seems to have *designed* most of the sentences so that they do not open with the colonists acting as agents, asserting their own actions, but rather with words that topicalize mostly events, rights, duties, needs—concepts that make the colonists the objects of more actions than they initiate, concepts that force colonists to act on behalf of higher forces (I boldface what seem to be main topics of clauses and italicize actions):

When in the Course of human events, it *becomes necessary* for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a **decent respect to the opinions of mankind** *requires* that they should declare the causes which impel them to the separation.

We *hold* these truths to be self-evident, that all men *are created equal*, that they *are endowed* by their Creator with certain unalienable Rights, that among these *are Life, Liberty and the pursuit of Happiness*. That to secure these rights, Governments *are instituted* among Men, deriving their just powers from the consent of the governed. That whenever any Form of Government *becomes destructive* of these ends, it is the Right of the People *to alter or to abolish* it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to affect their Safety and Happiness. Prudence, indeed, *will dictate* that Governments long established *should not be changed* for light and transient causes. . . .

Contrast that opening with a version in which the colonists are the consistent and freely acting topic/agents of every action:

When we *decided* that we *would dissolve* the political bands that connected us with Britain and that we *would assume* among the powers of the earth the separate and equal station that we *claim* through the Laws of Nature and of Nature's God, then since we decently *respect* the opinions of mankind, we *decided* that we *would declare* why we *do* so. These truths *are* self-evident—we *are all equal* in our creation, we *derive* from God certain Rights that we *intend to keep*, and among those rights, we *include* Life, Liberty and the opportunity to make ourselves Happy. [Try revising the rest of the passage along the same lines.]

In my version, I have topicalized the revolutionary colonists, making them the main players, acting simply because they will themselves to act. Jefferson topicalized abstractions, subordinating the will of the revolutionaries to a higher force that acts on them. But after Jefferson established the principles that forced the colonists to act by animating and topicalizing a higher necessity, he switched his topic/subjects to King George, an agent whom Jefferson made seem to act entirely out of malign will:

He *has refused* his Assent to Laws, the most wholesome and necessary for the public good.

He *has forbidden* his Governors to pass Laws of immediate and pressing importance, unless suspended in their operation till his Assent should be obtained; and when so suspended, he *has utterly neglected* to attend to them.

He *has refused* to pass other Laws for the accommodation of large districts of people, unless those people would relinquish the

right of Representation in the Legislature, a right inestimable to them and formidable to tyrants only.

He *has called* together. . . .

He *has dissolved* Representative Houses. . . .

.

He *has excited* domestic insurrections. . . .

Someone who believed in the divine right of kings could have made George the constrained object of demands from some Higher Order:

Duty to His Divine responsibilities *demand*ed that Assent to Laws not issue from his office. . . . Prudence *requir*ed His opposition to Laws for the accommodation of large districts of people. . . . *It was necessary* to call together . . . The dissolution of Representative Houses *became needful* when . . .

When he was finished with this bill of particulars, Jefferson was ready to move to his third set of subjects/topics/agents and draw the inevitable conclusion (the capitalization in the last paragraph is Jefferson's):

In every stage of these Oppressions We have Petitioned for Redress in the most humble terms: Our repeated Petitions have been answered only by repeated injury. A Prince, whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people.

Nor have We been wanting in attention to our British brethren. We have warned them from time to time of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They too have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity, which denounces our Separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

We, THEREFORE, the Representatives of the UNITED STATES OF AMERICA, in General Congress, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by Authority of the good People of these Colonies, solemnly publish and declare, That these United Colonies are, and of Right ought to be FREE AND INDEPENDENT STATES;

that they are Absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain, is and ought to be totally dissolved; and that as Free and Independent States, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which Independent States may of right do. And for the support of this Declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our Lives, our Fortunes and our sacred Honor.

Did Jefferson “intend” to create this systematic sequence of topic/subject/agents, beginning with abstractions, moving to *he*, and concluding with *we*? We can no more answer that question than we can know what any great writer intends. But once a coherent pattern emerges, we have to treat that pattern as part of a design in the service of some larger end.

The lesson to be drawn here (both politically and stylistically, perhaps) is that all local principles must yield to higher principles. The real problem is to recognize those occasions when we should subordinate one principle to another. That’s not something I can help you with. That knowledge comes only with experience.

Summing Up

1. Generally, use the beginning of your sentences to refer to what you have already mentioned or knowledge that you can assume you and your reader readily share. Compare these:

The huge number of wounded and dead in the Civil War exceeded all the other wars in American history. One of the reasons for the lingering animosity between North and South today is the memory of this terrible carnage.

Of all the wars in American history, none has exceeded the Civil War in the huge number of wounded and dead. The memory of this terrible carnage is one of the reasons for the animosity between North and South today.

2. Choose topics that will control your reader’s point of view. This will depend on how creatively you can use verbs to make one or another of your characters the seeming agent of an action. Which of these would better serve the needs of a patient suing a physician is obvious:

A patient whose reactions go unmonitored may also claim physician liability. In this case, a patient took Cloromax as prescribed, which resulted in partial renal failure. The manufacturer’s literature indicated that the patient should be observed frequently and should immediately report any sign of infection. Evidence indicated that the patient had not received instructions to report any signs of urinary blockage. Moreover, the patient had no white cell count taken until after he developed the blockage.

If a physician does not monitor his patient’s reactions, he may be held liable. In this case, the physician prescribed Cloromax, which caused the patient to experience partial renal failure. The physician had been cautioned by the manufacturer’s literature that he should observe the patient frequently and instruct the patient to report any sign of infection. Evidence indicates that the physician also failed to instruct the patient to report any sign of urinary blockage. Moreover, he failed to take any white cell count until after the patient developed the blockage.

We can integrate the general guiding principles—not binding rules—in this:

FIXED	TOPIC	
VARIABLE	OLD INFORMATION	NEW INFORMATION

FIXED	SUBJECT	VERB	COMPLEMENT
VARIABLE	CHARACTERS	ACTION	

Organize your sentences so that you open them with old information in the topic position, usually with a character as a subject. Then follow the subject with a verb that expresses a crucial action. Move complex information to the end of your sentence. Then be certain that your string of topics is consistent and appropriate. At this point, your good judgment has to take control.

All's well that ends well.

William Shakespeare

In the end is my beginning.

T. S. Eliot

4

Emphasis

If you begin a sentence well, the end will almost take care of itself. So the first step toward a style that is clear, direct, and coherent lies in how you manage the first few words of every sentence. If at the beginning of your sentences, you consistently organize your subject/topics around a few central characters or concepts and then move quickly to close that subject with a precise verb expressing a crucial action, then by default you will have to put important new information at the ends of your sentences. If you do not manage the flow of your ideas in this way, your prose will seem not just unfocused, but weak, anticlimactic. Compare these two sentences:

A charge of gross violation of academic responsibility is required for a Board of Trustees to dismiss a tenured faculty member for cause, and an elaborate hearing procedure with a prior statement of charges is provided for before a tenured faculty member may be dismissed for cause, in most States.

In most States, before a Board of Trustees may dismiss a tenured faculty member for cause, it must charge him with a gross violation of academic responsibility and provide him with a statement of charges and an elaborate hearing procedure.

The first trails off; the second builds a climactic rhythm.

Because one element that opens a sentence is so important, we named it *topic*. Since the end of a sentence plays a role no less crucial, we should give it a name as well. When you utter a sentence, your voice naturally rises and falls. When you approach the end, you ordinarily raise your pitch on one of those last few words and stress it a bit more strongly than you do the others:

o

... a bit more strongly than the
thers.

This rising pitch and stress signal the end of a sentence. We'll call that part of a sentence its *stress*.

Managing Endings

We manage the information in this stressed part of the sentence in several ways. We can put our most important information there in the first place. More often, we have to revise our sentences to give the right information the right emphasis.

Trim the end. In some cases, we can just lop off final unnecessary words until we get to the information we want to stress, leaving that information in the final stressed position.

Sociobiologists are making the provocative claim that our genes largely determine our social behavior in the way we act in situations we find around us every day.

Since *social behavior* means the way we act, we can just drop everything after *behavior*:

Sociobiologists are making the provocative claim that our genes largely determine our social behavior.

Shift less important information to the left. One way to revise for emphasis is to move unimportant phrases away from the end of a sentence to expose what you want to emphasize:

The data that are offered to establish the existence of ESP do not make believers of us for the most part.

For the most part, the data that are offered to establish the existence of ESP do not make us believers.

Occasionally, when we shift a phrase, we may have to separate subjects from verbs or verbs from objects. This sentence ends weakly:

No one can explain why that first primeval superatom exploded and thereby created the universe in a few words.

The modifier of *explain* (*in a few words*) is much shorter than the object of *explain* (the clause *why that first primeval super-*

atom exploded and thereby created the universe). To create better emphasis, we put that short, less important modifier before the longer, more important object, even if we have to split the object from its verb:

No one can explain in a few words why that first primeval super-atom exploded and thereby created the universe.

Shift important information to the right. Moving the important information to the end of a sentence is another way to manage the flow of ideas. And the sentence you just read illustrates a missed opportunity. This is more cohesive and emphatic:

Another way you can manage the flow of ideas is to move the most important information to the end of the sentence.

In fact, this is just the other side of something we've already seen—how to move old information to the beginning of a sentence. Sentences that introduce a paragraph or a new section are frequently of an *X is Y* form. One part, usually older information, glances back at what has gone before; the other announces something new. As we have seen, the older information should come first, the newer last. When it doesn't, we can often reverse the order of subjects and what follows the verb:

Those questions relating to the ideal system for providing instruction in home computers are just as confused.

Just as confused are those questions relating to the ideal system for providing instruction in home computers.

The switch not only puts the reference to the preceding sentences, *Just as confused*, early, but it also puts at the end information that the next several sentences will probably address.

. . . instruction in home computers. For example, should the instruction be connected to some source of information, or. . . .

Sometimes, you can move a relative clause out of the subject:

A discovery that will change the course of world history and the very foundations of our understanding of ourselves and our place in the scheme of things is imminent.

A discovery is imminent that will change the course of world history and the very foundations of our understanding of ourselves and our place in the scheme of things.

Don't shift the clause if it creates an ambiguous construction. In this sentence, the clause seems to modify *staff*:

A marketing approach has been developed by the staff that will provide us with a new way of looking at our current problems.

Extract and isolate. When you put your most important ideas in the middle of a long sentence, the sentence will swallow them up. A way to recover the appropriate emphasis is to break the sentence in two, either just before or just after that important idea. Then revise the new sentences so that you guide your reader to the crucial information. That often means you have to isolate the point of a long sentence by putting it into a shorter sentence of its own.

Under the Clean Water Act, the EPA will promulgate new standards for the treatment of industrial wastewater prior to its discharge into sewers leading to publicly owned treatment plants, with pretreatment standards for types of industrial sources being discretionary, depending on local conditions, instead of imposing nationally uniform standards now required under the Act.

First, break up the sentence:

Under the Clean Water Act, the EPA will promulgate new standards for the treatment of industrial wastewater prior to its discharge into sewers that lead to publicly owned treatment plants. Standards for types of industrial sources will be discretionary. They will depend on local conditions, instead of imposing the nationally uniform standards now required under the act.

Then rearrange to get the right emphasis:

Under the Clean Water Act, the EPA will promulgate new standards for the treatment of industrial wastewater before it is discharged into sewers leading to publicly owned treatment plants. Unlike the standards now required under the act, the new standards will not be uniform across the whole nation. They instead will be discretionary, depending on local conditions.

The point here is the discretionary nature of the rules and their dependence on local conditions—two ideas that the next sentences will probably expand on. So we express that point in its own sentence and put it at the end, in the stress position.

When we ignore these principles of old and new information,

we risk writing prose that is both confusing and weak. Read these next few sentences aloud. Hear how your voice trails off into a lower note when, at the ends of the sentences, you have to repeat words that you read earlier, such as *infringe on patents*. Then listen to how the rewritten version lifts your voice up and brings it down emphatically on the words that ought to be stressed.

In 1972, the United States Supreme Court declared that components of a patented assembly could be produced in this country without infringing on US patents. Since then, several cases have tested whether various combinations of imported and domestic items could be produced without infringing on US patents. The courts have consistently held any combination would infringe. However, the concept of local production and foreign assembly has not been tested as to infringement.

In 1972, the United States Supreme Court declared that components of a patented assembly could be produced in this country without infringing on US patents. Since then, this concept has been tested by several cases involving various combinations of imported and domestic items. The courts have consistently held that US patents would be infringed by any combination. What has not been tested, however, is the concept of local production and foreign assembly.

Some Syntactic Devices

There are a few grammatical patterns that add weight to the end of a sentence.

There. I wrote the sentence above without realizing that I had illustrated this first pattern. I could have written,

A few grammatical patterns add weight to the end of a sentence.

If you begin too many sentences with “There is” or “There are,” your prose will become flat-footed, lacking movement or energy. But you can open a sentence with *there* in order to push to the end of that sentence those ideas that the next sentences will build on. In other words, like the first sentence of this section, a *there*- sentence lets you introduce in its stress the topics for the following string of sentences. Again, you may remember some-

one telling you not to begin sentences with *there*. More bad advice. Like passives, *there*- constructions have a function: to stress those ideas that you intend to develop in following sentences.

What. A *what*- sentence throws special emphasis on what follows a linking verb. Compare the emphasis of:

This country needs a monetary policy that will end the violent fluctuations in money supply, unemployment, and inflation.

What this country needs is a monetary policy that will end the violent fluctuations in money supply, unemployment, and inflation.

You have to pay for this added emphasis with a few more words, so use the pattern sparingly.

It- shift 1. By using *it* as a fill-in subject, you can shift a long introductory clause that would otherwise have been the subject to a position after the verb:

That domestic oil prices must eventually rise to the level set by OPEC once seemed inevitable.

It once seemed inevitable that domestic oil prices must eventually rise to the level set by OPEC.

It- shift 2. With this pattern, you simultaneously select and emphasize a topic and throw added weight on the stress. Compare:

In 1933 this country experienced a depression that almost wrecked our democratic system of government.

It was in 1933 that this country experienced a depression that almost wrecked our democratic system of government.

Because all these syntactic patterns are so self-conscious, and because a few of them actually obscure topics, use them sparingly.

When All Else Fails

If you find yourself stuck with a sentence that ends flatly because you have to repeat a phrase you used in a previous sentence, at least try changing the phrase to a pronoun:

When the rate of inflation dropped in 1983, large numbers of investors fled the bond market and invested in stocks. However,

those particularly interested in the high tech market often did not carefully investigate **the stocks**.

When the rate of inflation dropped in 1983, large numbers of investors fled the bond market and invested in **stocks**. However, those particularly interested in the high tech market often did not carefully investigate **them**.

By substituting the pronoun for the lightly stressed repeated word, you throw the emphasis on the word before the pronoun.

Finally, avoid ending a sentence with metadiscourse. Nothing ends a sentence more anticlimactically, as we see:

The opportunities we offer are particularly rich at the graduate level, **it must be remembered**.

The opportunities we offer are, **it must be remembered**, particularly rich at the graduate level.

Nuances of Emphasis

When we write highly technical prose, we often write to an audience that understands as well as we do—or better—the complex terminology, the background, the habits of mind that workers in that field have to control. When we do, we don't have to explain technical terms as we would to a layperson.

But the problem in writing for a nonexpert audience is more complex than merely defining strange terms. If for a nonexpert audience I used terms like *sarcomere*, *tropomyosin*, and *myoplasm*, I would not only have to define them; I would also have to take care to locate those words at that point where my reader is most ready to receive them—at the end of a sentence.

In these next two passages, underline each term that you do not understand. Once you have underlined the occurrence of a term, don't underline it again in that passage. (As you read the second passage, assume you are reading it for the first time.) Then generalize: Where in the two passages do the technical terms typically occur? How does that difference affect how easily you can read the two versions? What other devices did I use to revise the first into the second? One sentence in the second still has all the characteristics of prose written for an insider: which one?

An understanding of the activation of muscle groups depends on an appreciation of the effects of calcium blockers. The proteins

actin, myosin, tropomyosin, and troponin make up the sarcomere, the basic unit of muscle contraction. Its thick filament is composed of myosin, which is an ATPase or energy-producing protein. Actin, tropomyosin, and troponin make up its thin filament. There is a close association between the regulatory proteins, tropomyosin and troponin, and the contractile protein, actin, in the thin filament. The interaction of actin and myosin is controlled by tropomyosin. Troponin I, which participates in the interaction between actin and myosin; troponin T, which binds troponin to tropomyosin; and troponin C, which binds calcium constitute three peptide chains of troponin. An excess of 10^{-7} for the myoplasmic concentration of Ca^{++} leads to its binding to troponin C. The inhibitory forces of tropomyosin are removed, and the complex interaction of actin and myosin is manifested as contraction.

To contract, muscles use calcium. When we understand what calcium does, we understand how muscles are affected by calcium blocker drugs.

The fundamental unit of muscle contraction is the sarcomere. The sarcomere has two filaments, one thin and one thick. These filaments are composed of proteins that cause and prevent contraction. Two of these proteins cause a muscle to contract. One is in the thin filament—the protein actin. The other protein is in the thick filament—myosin, an energy producing or ATPase protein. When actin in the thin filament interacts with myosin in the thick filament, the muscle contracts.

The thin filament also has proteins that inhibit contraction. They are the proteins troponin and tropomyosin. Troponin has three peptide chains: troponin I, troponin T, and troponin C.

- (a) troponin I participates in the interaction between actin and myosin;
- (b) troponin T binds troponin to tropomyosin;
- (c) troponin C binds calcium.

When a muscle is relaxed, tropomyosin in the thin filament inhibits actin, also in the thin filament, from interacting with the myosin in the thick filament. But when the concentration of Ca^{++} in the myoplasm in the sarcomere exceeds 10^{-7} , the calcium binds to troponin C. The tropomyosin then no longer inhibits actin and myosin from interacting and the muscle contracts.

For the novice in muscle chemistry, the second version is more readable than the first. Yet both have the same technical terms. In fact, the second has no more information than the first. The versions differ, however, in two ways.

1. In the second, I made explicit some of the information that the first only implied—the sarcomere has thick and thin filaments—or information that was indirectly stated in an adjective—converting *regulatory protein* into *proteins that regulate*.

2. In the second, I introduced technical terms at the ends of their sentences.

So in addition to everything we learned in Chapters 2 and 3, here is another key to communicating complex information that requires terminology unfamiliar to your readers: when you introduce a technical term for the first time—or even a familiar but very important term—design the sentence it appears in so that you can locate that term at the end, in its stress, *never at the beginning, in its topic*, even if you have to invent a sentence simply for the sake of defining or emphasizing that term.

Writers often introduce terms in this same way even in highly technical writing for a relatively specialized audience. This passage is from an article in *The New England Journal of Medicine* (note as well the metadiscourse *we*):

We have previously described a method for generating lymphocytes with antitumor reactivity. The incubation of peripheral-blood lymphocytes with a lymphokine, interleukin-2, generates lymphoid cells that can lyse fresh, noncultured, natural-killer-cell-resistant tumor cells but not normal cells. We have termed these cells lymphokine-activated killer (LAK) cells.

Compare these two passages. One of them was written by W. Averell Harriman for an article in the *New York Times*.

The Administration has blurred the issue of verification—so central to arms control. Irresponsible charges, innuendo and leaks have submerged serious problems with Soviet compliance. The objective, instead, should be not to exploit these concerns in order to further poison our relations, repudiate existing agreements, or, worse still, terminate arms control altogether, but to clarify questionable Soviet behavior and insist on compliance.

The issue of verification—so central to arms control—has been blurred by the Administration. Serious problems with Soviet compliance have been submerged in irresponsible charges, innuendo and leaks. The objective, instead, should be to clarify questionable Soviet behavior and insist on compliance—not to exploit these concerns in order to further poison our relations, repudiate existing agreements, or, worse still, terminate arms control altogether.

In the original article, Harriman was attacking what he believed were the President's misguided policies. Look at the way the sentences in the two versions end, at what each stresses. As you have probably guessed, Harriman's version is the second one, the one that stresses *blurred by the Administration, irresponsible charges, innuendo and leaks, poison our relations . . . terminate arms control altogether*. It is this second version in which Harriman comes down hard not on references to the Soviet Union, but on references to a Republican administration.

In some cases, a writer can manipulate the stress of sentences in ways that encourage us to respond not to what *is* new, but to what we should *take* as new, what we should take as familiar. In this next passage, Joan Didion arranged what should be unsurprising and familiar, new and shocking in a way that seems to contradict our principles. Look at how she ends her sentences at the point where she begins to describe the dark side of Los Angeles (they are boldfaced):

We put "Lay Lady Lay" on the record player, and "Suzanne." We went down to Melrose Avenue to see the Flying Burritos. There was a jasmine vine grown over the verandah of the big house on Franklin Avenue, and in the evenings the smell of jasmine came in through all the open doors and windows. I made bouillabaisse for people who did not eat meat. I imagined that my own life was simple and sweet, and sometimes it was, but there were odd things going on around town. There were rumors. There were stories. Everything was unmentionable but nothing was unimaginable. This mystical flirtation with the idea of "sin"—this sense that it was possible to go "too far," and that many people were doing it—was very much with us in Los Angeles in 1968 and 1969. A demented and seductive vortical tension was building in the community. The jitters were setting in. I recall a time when the dogs barked every night and the moon was always full. On August 9, 1969, I was sitting in the shallow end of my sister-in-law's swimming pool in Beverly Hills when she received a telephone call from a friend who had just heard about the murders at Sharon Tate Polanski's house on Cielo Drive. The phone rang many times during the next hour. These early reports were garbled and contradictory. One caller would say hoods, the next would say chains. There were twenty dead, no twelve, ten, eighteen. Black masses were imagined and bad trips blamed. I remember all of the day's misinformation very clearly, and I also

remember this, and I wish I did not: *I remember that no one was surprised.*

—Joan Didion, “The White Album”⁷

Read just the bold-faced words and phrases—with the exception of *hoods* and *chains*, they convey largely mundane information. We might expect an ordinary writer to locate at the ends of her sentences information that would shock and surprise us. But Didion is writing about the very lack of surprise, that what in ordinary times would be shocking did not surprise her circle because evil was somehow already familiar. To reflect just that sense of eerie familiarity, she constructs her sentences to locate her references to evil in the least emphatic places. What is unexpected is only where the evil emerged and how.

Here is that passage revised according to our principles, a revision that is substantially less interesting than the original.

The record player played “Lay Lady Lay” and “Suzanne.” We went down to Melrose Avenue to see the Flying Burritos. At the big house on Franklin Avenue there was a jasmine vine grown over the verandah and in the evenings the smell of jasmine came in through all the open doors and windows. I made bouillabaisse for people who did not eat meat. I imagined that my own life was simple and sweet, and sometimes it was, but going around town were some things that seemed odd. There were stories. There were rumors. Everything was unmentionable but nothing was unimaginable. In Los Angeles in 1968 and 1969, we all had this sense that it was possible to go “too far,” and that many people were doing it. It was a mystical flirtation with the idea of “sin.” Our community was building a vortical tension, a tension that was seductive and demented. We were getting the jitters. I recall a time when the dogs barked every night and the moon was always full. On August 9, 1969, as I was sitting in the shallow end of my sister-in-law’s swimming pool in Beverly Hills, she received a telephone call from a friend who had just heard that over on Cielo drive, at Roman Polanski’s house, Sharon Tate and others had been murdered. During the next hour the phone rang many times. These early reports were garbled and contradictory. One caller would say hoods, the next would say chains. There were ten, no twelve, eighteen, twenty dead. People blamed bad trips and imagined black masses. I remember very clearly all of the day’s misinformation, and I also remember this, and I wish I did not: *I remember that it surprised no one.*

The System of Clarity

By now, we begin to appreciate the extraordinary complexity of an ordinary English sentence. A sentence is more than its subject, verb, and object. It is more than the sum of its words and parts. It is a system of systems whose parts we can fit together in very delicate ways to achieve very delicate ends—if we know how. We can match, mismatch, or metaphorically manipulate the grammatical units and their meanings:

SUBJECT	VERB	COMPLEMENT
CHARACTERS	ACTION	—

We can match or mismatch rhetorical units to create more or less important meanings:

TOPIC	STRESS
OLD/LESS IMPORTANT	NEW/MORE IMPORTANT

And we can fit these two systems into a larger system:

TOPIC		STRESS	
OLD/LESS IMPORTANT		NEW/MORE IMPORTANT	
SUBJECT	VERB		COMPLEMENT
CHARACTERS	ACTION		—

Of course, we don't want every one of our sentences to march lockstep across the page in a rigid character-action order. When a writer exercises his stylistic imagination in the way Jefferson did with the Declaration of Independence, he can create and control fine shades of agency, action, emphasis, and point of view. But if for no good reason he writes sentences that consistently depart from any coherent pattern, if he consistently hides agency, nominalizes active verbs into passive nominalizations, and if he

consistently ends sentences on secondary information, he will write prose that is not just turgid, but incoherent.

In fact, when we stand back from the details of subjects, agents, passives, nominalizations, topic and stress, when we listen to our prose, we should hear something beyond sheer clarity and coherence. We should hear a voice. The voice our readers hear contributes substantially to the character we project—or more accurately, to the character our readers construct.

Some teachers of writing want to make voice a moral choice between a false voice and the voice “authentic.” I suspect that we all speak in many voices, no one of which is more or less false, more or less authentic than any other. When you want to be pompous and authoritative, then that’s in the voice you project because that’s what you are being. When you want to be laconic and direct, then you should be able to adopt that voice. The problem is to hear the voice you are projecting and to change it when you want to. That’s no more false than choosing how you dress, how you behave, how you live.

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.

Benjamin Cardozo

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