Chapter 5: Analyzing Sentence Construction, Other Structural Analyses

Sheila walked into the room, flaunting the kind of body that made grown men wish they were teenagers, made teenagers wish they were grown men, made toddlers wish they were preteens, made preteens wish they were young adults, and made everyone wish editors swung blue pencils the same way she swung her hips as she crossed the threshold of both the room and bad taste, her breasts swaying like dual house-trailers on a windy overpass. ~Marx Prewett, Dallas, TX, Bulwer-Lytton contest, 2004

Table 5.1: Another Grammar Myth

Myth: The only good sentence is a short sentence.

The 81-word final sentence of Lincoln’s “Gettysburg Address” illustrates the wrong headiness of this assumption. So does the 181-word sentence that introduces Stephen Blackpool in Charles Dickens’s *Hard Times*:

> In the hardest working part of Coketown; in the innermost fortifications of that ugly citadel, where Nature was as strongly bricked out as the killing airs and gases were bricked in; at the heart of the labyrinth of narrow courts upon courts, and close streets upon streets, which had come into existence piecemeal, every piece in a violent hurry for some one man’s purpose, and the whole an unnatural family, shouldering and trampling, and pressing one another to death; in the last close nook of this great exhausted receiver, where the chimneys, for want of air to make a draught, were built in an immense variety of stunted and crooked shapes, as though every house put out a sign of the kind of people who might be expected to be born in it; among the multitude generically called “the Hands,”–a race who would have found more favor with some people, if Providence had seen fit to make them only hands, or, like the lower creatures of the seashore, only hands and stomachs—lived a certain Stephen Blackpool, forty years of age.

This sentence is a perfectly grammatical, perfectly clear sentence that only requires a bit of attention for any reader to understand. Structurally the main clause is a simple sentence with the subject [Stephen Blackpool] and the verb marked for tense [lived] in reverse order for dramatic effect. The remaining sentence elements are strings of prepositional phrases (In the . . . in the . . . at the heart of . . . ) interlaced with relative and adverbial clauses. Dickens isn’t just showing off his syntactic authority; he uses the numerous phrases and dependent clauses to illustrate how Blackpool’s cramped, airless world is typical of the suffocating life endured by workers in early industrial England.

Once an editor feels confident about the parts of speech, the functions in a sentence, and the location of a good dictionary and grammar handbook, then that editor must consider what use this information has in reviewing documents. The following sections discuss several methods of looking at the sentences in texts to analyze them and, with some work, make unusually long or overly complex sentences more understandable. Among the methods ignored in this discussion are the related questions of readability scoring and whether the many indices for determining the reading level of a document actually help editors do

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1Schacht, Paul and Celia A Easton. “Myths about Good Writing.”
2See the examples of Lincoln’s speech—both manuscript and humorous—at the beginning of
| Chapter 3
their jobs.\textsuperscript{3} Doubtless these measures provide information for various researchers, scholars, textbook writers and even textbook editors. But for the current exchange, they are bulky and awkward, giving less information than sentence considerations do.\textsuperscript{4}

**Transformation-Generative Grammar for Editing**

Starting in the late 1940s and blossoming in the 1950s, grammarians started looking at sentences such as the following (now classic) examples and asking questions such as *How do speakers know the difference between these sentences when the structure of each appears identical?*

5.1. Igor is easy to please. [Where Igor receives the pleasing.]
5.2 Igor is eager to please. [Where Igor performs the pleasing.]

Native speakers of English know the difference between 5.1 and 5.2 because they know that people may be described as ‘eager’ but actions may not. Hence, in order to understand fully the structure of these example sentences, grammarians must address the issues surrounding meaning.

What furthered intrigued younger language scholars was the question of how speakers understand sentences not yet uttered. They pointed to a very simple phenomenon as ‘unscientific’ evidence of native speakers’ amazing language ability: one speaker can complete another speaker’s sentence correctly. How can this happen?

Of Chomsky’s early publications, *Syntactic Structures*, a 108-page monograph, inaugurated a new approach to study of language (variously called transformational, generative, transformational-generative). However, Chomsky did not create a single transformational-generative grammar; there were then, as now, many transformational grammars. Chomsky maintains in *Syntactic Structures* that speakers know the grammar of their language intuitively. For Chomsky, it is entirely proper to begin with the assumption that you can test a grammar’s adequacy against the intuitions of a mature native speaker. Note that he’s not arguing that utterances can be identified as “grammatical” solely on the basis of the utterances having been spoken and then collected by a field worker. But a linguist can test the grammaticality of an utterance, that is whether the utterance is well-formed in that it agrees with the conventions of the language, instead of concerning themselves with the acceptability, or the appropriateness within a context, of an utterance. Grammaticality is what Chomsky went after.

The type of grammar study Chomsky and others proposed laid out a different set of criteria for what made an adequate grammatical explanation. No longer would explanations (or rules) stand merely because someone found an example of a structure in Latin or because some pundit exclaimed it. Adequate grammatical explanation had to be able to explain what a (ideally thought of) native speaker of a language knows is a possible construction in that language.

\textsuperscript{3}For an overview of readability formulae, see Appendix F.
\textsuperscript{4}For more on dictionaries, their history, development, and importance—see Appendix A: A Brief History of the Dictionary as Authority
No grammar would be considered adequate unless it is able to mirror that speaker's ability both to produce and to understand an unlimited number of grammatical utterances—whether the speaker has heard, produced, or written those utterances before. This means a definition of grammar now includes the rules whereby speakers combine words into sentences. In other words, a grammar is a rule system that includes knowledge of sounds, units of meaning, syntactic patterns.

Rather than depend upon the reputation or educational background of the grammarian, these linguists want any discussion of grammar to satisfy five requirements that fit a scientific method rather than historical assumptions. Grammar models—that is, systems that lay out the rules of a language—must have

- **Simplicity**, it must not be so elaborate that the model begins to take over from what it intends to represent. Simplicity is a variation on the Law of Parsimony, or Occam’s Razor, in which the simplest evaluation that takes account of all the data is the best evaluation.
- **Completeness**, its categories must be explicable within the model, it must have basic definitions, and must not omit aspects. Nothing that actually functions within the model should be omitted; and a model's generalizations must match the real world behaviors that it describes.
- **Mutual exclusiveness**, its categories within a system of grammar must be mutually exclusive. Thus, one definition can’t refer to two referents, two definitions can’t be applicable to one referent, nor can a one-to-one correlation exist between category and referent.
- **Consistency**, a model must be consistent in its applications of categories and principles to data. That is, it cannot define some parts of speech by meaning and others by function; nor can it apply a postulate differently in different situations.
- **Predictability**, a model or grammar theory must be usable when linguists need to predict how new data (e.g., sentences not yet heard or uttered) will fit the model. In other words, a workable theory of grammar should not just describe what language investigators already know. It must be able to give reliable assessments of what we do not yet know. It’s inefficient to create a new grammar every time a grammarian comes across a new sentence.

Initially Chomsky was not primarily concerned with the possibility of incorporating a semantic theory into a transformational approach to grammar problems. He wanted instead to look at sentences like the "eager/easy" pair and investigate structure from a more creative, egalitarian viewpoint. Later in his thinking (i.e., Chomsky, 1965), he incorporates the semantic theories of Katz and Fodor (1964). He writes several grammars that appear to be elegant, intra-linguistic methods of describing meaning without making a commitment to any of the disputed theories about what meaning is.

*Garbled Syntax and the Quick Fix: Transformational Grammar Applied to Difficult Writing*
Faced with such scientific approaches to language, the obvious question any practicing editor must ask is So What? If an editor knows these basics of linguistic structure, what does that editor do with this knowledge? Consider this all-too-familiar situation: sometimes writers’ constructions just make editors want to throw up their hands and blue pencils in utter frustration. Take, for example, the following sentence:

Visual observation of the waterflood displacement mechanisms after asphaltene precipitation are shown to be similar to the mechanisms of displacement of the unprecipitated crude oil.

As Campbell rightly characterizes it, this sentence “looks like two men in a horse costume—except that they’re wearing half-costumes from different horses.” The question is how to get some sense of the sentence in order to edit it into more understandable text. One means is to go back to the basics of grammar and take another look at what’s going on in sentences.

Many grammarians hold that grammar is more than labeling; grammar, like psychology, assumes an underlying level both of structure and of meaning. As a speaker or writer moves from that underlying structure to a spoken or written version of a sentence, the author transforms the underlying in different ways. That is, underlying any utterance or surface structure is a deep structure. The deep structure, which can only be revealed by analysis, contains canonical sentences. Canonical sentence structure varies by language; in English it is noun phrase plus verb phrase:

\[ C = NP \quad VP^6 (X) \]

Transforming canonical sentences produces different surface structures, such as questions, commands, and passive sentences. Other deep-structure transformations embed sentences within other sentences as modifiers. For instance, the two canonical sentences

*The greenhouse effect traps solar rays.*

*Solar rays overheat the earth.*

easily becomes

*The greenhouse effect traps solar rays that overheat the earth.*

by embedding the second sentence into the first as a relative clause modifying *solar rays*. That relative clause is further reducible to a participial phrase.

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5 The following discussion is based on Charles Campbell’s excellent application of transformational-generative grammar as discussed in his “Using Transformational Grammar as an Editing Tool” (Presentation given at the IPCC 95, Savannah, Georgia, on September 29, 1995) and on the text *How To Edit Technical Documents*, Donald W. Bush and Charles P. Campbell (Phoenix, AZ: Oryx, 1995).

6 Campbell accurately notes that “The basic canonical sentences are few, being permutations of four basic kinds of VP.” See the basic discussion of this formula in Chapter 4.
The greenhouse effect traps solar rays overheating the earth.

or prepositional phrases, and adjectives; nonrestrictive modifiers, including absolute phrases, subordinate clauses, participial phrases, and relatives. Still the canonical sentences, the underlying structures that were transformed into The greenhouse effect traps solar rays that overheat the earth remain and could be simply restated.

Sometimes trying to edit sentences by dealing with the surface structures just won’t work. Remember the example above:

Visuals observation of the waterflood displacement mechanisms after asphaltene precipitation are shown to be similar to the mechanisms of displacement of the unprecipitated crude oil.

Instead, editors backtrack. They trace the deep structure, understand the relationships there, and then revise the surface structure. The steps are relatively straightforward, even when the sentences are contorted.\(^7\)

Step 1: Circle or bracket any modifiers, and set them temporarily aside.

Visual observations [of the waterflood displacement mechanisms] [after asphaltene precipitation] are shown to be [similar to the mechanisms] [of displacement] [of the unprecipitated crude oil].

Matrix sentence is therefore: Visual observations are shown to be [X].

Step 2: Determine the verb structure of the matrix sentence.

Visual observations are shown to be [X], is shown = [to be] + tense marker [present] + [—en] + verb show passive voice

Step 3 Look for the verb form of the nouns\(^8\) in the matrix sentence.

Putting steps 2 and 3 together yields the following matrix sentence:

[Somebody] observes [something]

Because the sentence begins with the phrase visual observation, it seems visual observation is the agent. But it isn’t. In transforming the idea, the agent was suppressed and the visual observation took over the agent slot. Transformed back into a canonical sentence, it would look like this:

[Somebody] shows [some] mechanisms to be similar to [other] mechanisms.

\(^7\)Rhetorician Richard Lanham proposes a variation on these steps in his Paramedic Method. See the discussion starting on page 120.

\(^8\) Called, appropriately, the smothered verb.
The original sentence’s structure suggests that it’s about visual observation; the underlying structure reveals the topic is the similarity of mechanisms. While an editor could create an actor for the subject/topic slot for the sentence, that move might not be needed because the mechanisms is more than likely the topic. Eliminating the actor is a matter of returning to the passive voice construction:

[Some] mechanisms are shown to be similar to [other] mechanisms.

Re-embedding the modifiers puts sense back into the revised base sentence:

The waterflood displacement mechanisms after asphaltene precipitation are similar to the mechanisms of displacement of the unprecipitated crude oil.

One final change—mechanisms of displacement to displacement mechanisms—clarifies the sentence more:

The waterflood displacement mechanisms after asphaltene precipitation are similar to the displacement mechanisms of the unprecipitated crude oil.

The sentence as it now reads will make sense for its intended audience, more than likely petroleum engineers who would more than likely know that someone on an oil company crew

**Editing Exercise: Using Matrix sentences**

Identify the grammatical subject and the matrix sentence for each of the following sentences.

1. Clarity, as a norm for speech and writing, presents a paradox: although the burden of achieving it falls on the speaker, the achievement itself apparently falls on the hearer.

   Subject: __________________________
   Matrix: __________________________

2. I can labor mightily to produce a clear essay, argument or sentence.

   Subject: __________________________
   Matrix: __________________________

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3. But I have not actually produced it until you agree that I have—if only tacitly, but continuing the conversation.

4. If, by contrast, you tell me that I have not made myself clear, there is no arguing with you about that; all I can do is try again to express what I have to say, in different terms, so that you can understand it.

5. My words are not clear until you have understood what I have meant by them.

6. Natural history museums, like the American Museum, constitute one decisive means for power to de-privatize and re-publicize, if only ever so slightly, the realms of death by putting dead remains into public service as social tokens of collective life, rereading dead fossils as chronicles of life’s everlasting quest for survival, and canonizing now dead individuals as nomological emblems of still living collectives in Nature and History.

7. An anatomo-politics of human and non-human bodies is sustained by accumulating and classifying such necroliths in the
museum’s observational/expository performances.\(^{10}\)

8. Social mores are well-established and understood, but with the rapid growth of populations in the Western world the unaccustomed abrasiveness of individual against individual takes its toll in human intercourse.

9. Seduction and knowledge have been acknowledged as the two possible ways women are perceived to have possession of status in the business world.

10. Also, performance, plateaus of achievement, and excellence may, in fact, become isolated terms and insulated goals with little relevance to the mainstream of viable life.

**Paramedic Method**\(^{11}\)

Chomsky’s insights into language structure have had wide influence not only in the field of linguistics but also in rhetoric, communication theory, writing and editing. For instance, Richard Lanham,\(^{12}\) a professor of English at UCLA, recommends an easy-to-use method for making writing concise. Lanham believes readers find sentences stylistically weak when the text lacks punch, interest, and precision. Such sentences, he argues, are typically filled with nouns rather than verbs, things rather than actions. In other words, readers find nominal styles less appealing to read than verbal styles. To change a nominal to a verbal style, Lanhan suggests emergency linguistic treatment—a paramedic

\(^{11}\)Adapted from Richard A. Lanham, *Revising Prose* (NY: Charles Scribner, 1979), 1-8.

\(^{12}\) Adapted from Richard Lanham. *Revising Prose*, 4\(^{th}\) ed. (New York: Allyn & Bacon, 1999.)
method—that entails identifying a sentence’s core elements and modifiers and then improving the clause by shifting nouns into verbs. The steps he proposes are best illustrated with relatively simple sentences:

1a. **Circle any prepositions and bracket their phrases.** Prepositions, a closed class of conjunctives, link one item—the object of the preposition—to another element in a sentence. Typically prepositional phrases add information about time, place, cause, or manner. Stylistically, most readers find too many prepositional phrases dilute the action in a sentence. So, editors start by identifying the prepositions and then their phrases to change the phrases from modifiers to pivotal concepts in a sentence.

   Original: [In this passage] is an example [of the use [of the rule [of justice] in argumentation]].

   In this example, in this passage modifies is telling where the information is. And in argumentation modifies justice, of justice modifies rule, of the rule modifies use, and of the use of the rule of justice in argumentation modifies an example. Putting the modifiers aside, the only words left in the sentence are is and an example!

1b. **Circle any use of the verb to be as finite verbs in a clause.** That directive means look for is, was, am, are, were, and [auxiliary + be] as the only verb marked for tense in a clause. Using "is" in a sentence gets it off to a slow start, and makes the sentence weak. Replace as many "to be" verbs with action verbs as you can, and change all passive voice ("is defended by") to an active voice ("defends").

   Original: In this passage is an example of the use of the rule of justice in argumentation.

2. Look at the nouns in the sentence, and ask "Do any of these nouns include the action of the clause?" "Who is doing what to whom?" This second question helps editors figure out the active voice version of any sentence.

   Original: In this passage is an example of the use of the rule of justice in argumentation.

   Passages as an action
   Example as an action
   Use as an action
   Argumentation as an action

   Passing
   Exemplifying
   Using
   Arguing

3. Use at least one of the nouns as a simple active verb.

   Original sentence: In this passage is an example of the use of the rule of justice in argumentation.
   Edited version: This passage exemplifies argumentation using the rule of justice.

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13 Primary auxiliaries: be and have. Modal auxiliaries: can/could, will/would, shall/should, may/might, ought, and must. An auxiliary + be would be, for instance, can be, have been, should be being.
Table 6.2: Paramedic Method Exemplified

**ORIGINAL:**  
This sentence is in need of an active verb.

**Step 1:**  
This sentence is in need of an active verb.

**Step 2:**  
The action in the first prepositional phrase \[\text{in need}\] is needing.  
The action in the second prepositional phrase \[\text{of an active verb}\] is acting.

**Step 3:**  
Using the first prepositional phrase:

**EDITED:**  
This sentence needs an active verb.

**ORIGINAL:**  
There is a great deal of feeling and involvement in his description of the scene.

**Step 1:**  
There is a great deal of feeling and involvement in his description of the scene.

**Step 2:**  
The action in the first prepositional phrase \[\text{of feeling and involvement}\] is of feeling and involving  
The action in the second prepositional phrase \[\text{in his description}\] is describing.  
Use only one as core of sentence.

**EDITED:**  
He describes the scene with great feeling.

Lanham also warns writers against the graphic equivalent of throat clearing; that is, he suggests that writers get to their topics directly rather than add discourse about the discourse. For editors the situation is obvious: delete the throat clearings of writers such as:  
My opinion is that...  
The point I wish to make is that...  
The fact of the matter is that...
These first steps work well with many clunky sentences, such as the following:

<table>
<thead>
<tr>
<th>Original</th>
<th>Edited version</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my not so humble opinion, the theory of relativity isn’t demonstrated by this experiment.</td>
<td>This experiment does not demonstrate the theory of relativity.</td>
</tr>
<tr>
<td>Creating a good newsletter as an addition to your web site would be a rewarding investment of your time and energy.</td>
<td>If you have a web site, creating a good newsletter will reward your efforts.</td>
</tr>
<tr>
<td>With respect to the 76-minute interruption of service on August 15 due to unexpected levels of user demand which coincided with scheduled maintenance of our backup systems and unrelated technical problems at our customer call center, we offer apologies to any of our valued customers who experienced inconvenience as a result.</td>
<td>Technical problems on August 15 interrupted service. We apologize for the inconvenience.</td>
</tr>
</tbody>
</table>

Lanham goes on from this basic advice to advocating editing the rhythmic sense of sentences. Literally, he suggests an additional method to improve the illusive quality called the “flow” of a sentence. These proposals improve the conciseness and clarity of any text. Remembering the basic rescue steps, Lanham suggests

1. Checking the grammatical structure of the sentence to make sure it includes a main clause.
2. Dividing an awkward sentence into phrases, and paying attention to the length of each unit. If the units don’t vary, the sentence will probably seem flat and monotonous.

Original: Under current regulations, government mandated rates for local telephone companies are set on a statewide basis for the entire service area of each individual company, so that a provider’s customer pays essentially the same rate without regard to whether the

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14 The first version takes 21 words; the second takes 14, a 33% reduction.
customer is located in a high cost service area or a low cost service area. (44 words)

Prep. Phrase  Under current regulations, /
Subject phrase  government mandated rates /
Prep. Phrase  for local telephone companies /
Predicate  are set on a statewide basis /
Prep. Phrase  for the entire service area /
Prep. Phrase  of each individual company, /
Subject phrase  so that a provider’s customer /
Predicate  pays essentially the same rate /
Prep. Phrase  without regard to whether /
Sub. clause  the customer is located /
Prep. Phrase  in a high cost service area /
Prep. Phrase  or a low cost service area. /

3. Reading the sentence aloud and listening for a conversational tone.
4. Creating that conversational tone by changing the noun objects in prepositional phrases into actions in the sentence. For example,

Edited version  Providing telephone service costs more in some areas than others, but wherever our customers live they all pay the same rate. (21 words)

Subj. phrase  Providing telephone service
Verb + adv  costs more
Prep. phrase  in some areas
Comparison  than others
Conjunction  but
Adverb clause  wherever our customers live
Subj. phrase  they all
Verb + object  pay the same rate.

Using fewer prepositional phrases, changing nominal style into verbal, eliminating meta-discourse,\textsuperscript{15} mixing shorter and longer phrases creates concise sentences that mimic the rhythms of human speech. Any writer appreciates an editor who can make a text better!

Another example\textsuperscript{16} for study:

Original text:  Creating a good newsletter as an addition to your web site would be a rewarding investment of your time and energy. If your newsletter is about subjects related to your business, you will be in regular contact with potential customers. Another purpose for a newsletter is to be a place where advertisers are able to reach a

\textsuperscript{15} That is, throat clearing phrases and clauses.
Creating a good newsletter as an addition to your web site would be a rewarding investment of your time and energy. If your newsletter is about subjects related to your business, you will be in regular contact with potential customers. Another purpose for a newsletter is to be a place where advertisers are able to reach a ready-made target audience. For instance, a newsletter on ceramics can be attractive to those advertisers who want to sell artists’ materials online.

Suggested edited version:

If you have a web site, creating a good newsletter will reward your efforts. Relate the newsletter’s content to your products and services, and potential customers will subscribe. Or pick a subject that attracts people who share a similar interest.
For instance, a widely-read ceramics newsletter could attract ads that offer artists’ supplies online.

Editing Exercise: Practice with Paramedic Method

Start with the following sentences and work into the longer text using Lanham’s paramedic method. Since you are new to using this strategy,

• start by circling all of the prepositions/prepositional phrases,
• list the noun object of each phrase and the verb that connects to that noun,
• decide whether the verb forms you’ve identified need an actor (human) or an agent as subjects,
• pick at least one of the verb forms and restructure the sentence using the proofreading/editing marks—and a query to the writer if the sentence makes utterly no sense.
• Determine if the sentence uses a dummy subject or the main verb + tense is a form of to be. If so, change them!
• Outline the structural units of the sentence, and
• look for ways to vary the length of the units.

1. The integration of a set of common value patterns with the internalized need-disposition structure of the constituent personalities is the core phenomenon of the dynamics of social systems.

2. In the light of the association in the last quarter of the sixteenth century of wit with the means of amplification, which consist mainly of the processes of dialectical investigation, this definition probably has more validity than has generally been accorded it.

3. The fact of the matter is that machines are merely amplifiers of the abilities of workers and exist only as they are able to do the bidding of workers effectively.

4. In the next thirty-five years, it is expected by many experts that there will be a lot more engineering work to be done than has been done in all of recorded history.

5. Another fact which is revealed by the census statistics is that 72.4 percent of the nonwhite component of the population lives in urban areas.

6. Another noticeable feature of the passage is the use of nouns, not only in reference to the name of things present, but in achieving a more forceful description of the scene.

7. I think that all I can usefully say on this point is that in the normal course of their professional activities social anthropologists are usually concerned with the third of these alternatives, while the other two levels are treated as raw data for analysis.
8. The most important thing to remember is the fact that interest in the arts has not declined in popularity.

9. Heartfelt House has earned a reputation for excellence for the sharing of the wisdom of the path of compassionate service in the natural healing arts.

10. Throughout our lives, we are exposed to a lot of different teachings and one of them, in our society, is the value placed upon a life in which we are successful.

11. The main reason why he is worried is because he is afraid of what people will think if they get home late.

12. One of his major themes that he returns to repeatedly is that a lot of the people who are making the claims that the U.S. was hasty in using the bomb are not coming from a position of experience in combat.