

## Making Complex Writing Intelligible with the Known-New Contract

A sentence can be divided into two parts: a **topic** and a **stress** position. The topic is first part of the sentence, the stress is last.

Below is an example sentence with the topic and stress positions labeled.

Accounts of depression<sup>Topic</sup> evolved after psychologists introduced the concepts of defeat and entrapment.<sup>Stress</sup>

Readers expect to find different types of information in the topic and stress positions.

### Topic

In the *topic position*, readers

- expect to understand what the sentence is about
- try to connect the sentence to what they've already read

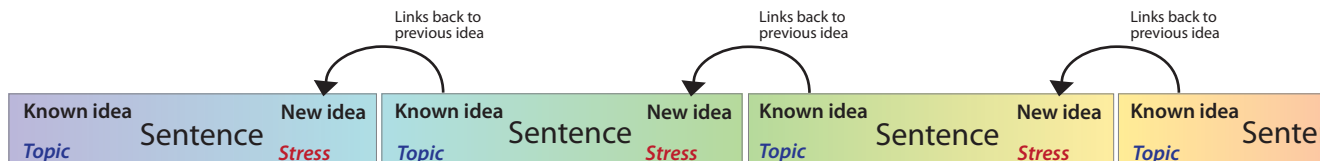
### Stress

In the *stress position*, readers

- expect to see new and important ideas and information
- focus most of their interpretative effort

## The Known-New Contract

The known-new contract suggests that comprehension is increased when the topic position of a sentence contains information that links back to what the reader already knows and the stress position contains new information that the writer wants to emphasize.



Notice how the following example uses the known-new contract to create a coherent flow of ideas.

Accounts of depression<sup>Topic</sup> evolved after psychologists introduced the concepts of<sup>Stress</sup>  
defeat and entrapment.<sup>Stress</sup> These concepts<sup>Topic</sup> have been implicated in theoretical<sup>Stress</sup>  
accounts of anxiety and suicide.<sup>Stress</sup> Such theories...<sup>Topic</sup>

### What if I have multiple ideas I want to stress in a sentence?

Try to introduce just one major new idea per sentence, especially if you anticipate your reader will have difficulty because of your text's complexity. If your text is highly technical or complex—and you have multiple ideas or concepts worth emphasizing—create two sentences.

## Three Steps for Editing and Improving Complex Writing

- 1) Identify stress positions
  - Is this new information?
  - Is this the most important info to emphasize?
- 2) Identify topic positions
  - Is this old information that links back?
- 3) Rearrange to put old info in the topic position and new, important info in the stress position

Let's try using these steps to improve our sample text.

### Step 1- Identify stress position

People are injuring themselves at home, work and out in public from <sup>Stress</sup>slipping and falling.

The material of the shoe sole, the material of the floor surface that the individual is walking across, and a contaminant, like water or oil, that may decrease friction between the two materials <sup>Stress</sup>all contribute to slipping. ← stress position does not contain new information

### Step 2- Identify topic position

<sup>Topic</sup>People are injuring themselves at home, work and out in public from <sup>Stress</sup>slipping and falling.

<sup>Topic</sup>The material of the shoe sole, the material of the floor surface that the individual is walking across, and a contaminant, like water or oil, that may decrease friction between the two materials <sup>Stress</sup>all contribute to slipping.

topic position does not link back

### Step 3- Put old information in the topic position and new information in the stress position

<sup>Topic</sup>People are injuring themselves at home, work and out in public from <sup>Stress</sup>slipping and falling.

<sup>Topic</sup>Factors contributing to slipping include <sup>Stress</sup>the material of the shoe sole, the material of the floor surface that the individual is walking across, and a contaminant, like water or oil.

Let's look at another example, using these three steps to revise the text.

### Step 1- Identify stress position

The 5-year plan does not indicate a clearly defined commitment to <sup>Stress</sup>long-range <sup>Stress</sup>environmental research. For instance, the development of techniques rather than the identification and definition of important long-range issues is the subject of <sup>Stress</sup>the plan where it does address long-range research. ← stress position does not contain new information

### Step 2- Identify topic position

<sup>Topic</sup>The 5-year plan does not indicate a clearly defined commitment to <sup>Stress</sup>long-range <sup>Stress</sup>environmental research. For instance, <sup>Topic</sup>the development of techniques rather than the identification and definition of important long-range issues is the subject of <sup>Stress</sup>the plan where it does address long-range research. ← topic position does not link back

### Step 3- Put old information in the topic position and new information in the stress position

<sup>Topic</sup>The 5-year plan does not indicate a clearly defined commitment to <sup>Stress</sup>long-range <sup>Stress</sup>environmental research. <sup>Topic</sup>Where the plan does address long-range research, it focuses on the development of techniques rather than the <sup>Stress</sup>identification and <sup>Stress</sup>definition of important long-range issues.

## Additional Steps to Edit and Improve Complex Writing

- 4) Move the subject and verb closer together
- 5) Break apart sentences that contain too much new information. Remember to use the known-new contract while revising your sentence
- 6) Add transitional phrases to indicate relationships

Phrases indicating accumulation	Phrases indicating sequence	Phrases indicating cause/effect	Phrases indicating example	Phrases indicating contrast
Moreover	First, Second.....	Consequently	For example	However
In addition	Next	Therefore	For instance	Although
Also	After	Because		
Furthermore	Finally			

Let's look at an example using all these steps to edit complex writing.

**Steps 1 & 2- Identify the topic and stress positions**

The enthalpy of hydrogen bond formation between the nucleoside bases 2'deoxyguanosine (dG) and 2'deoxyctidine (dC) has been determined by direct measurement. dG and dC were derivatized at the 5' and 3' hydroxyls with triisopropylsilyl groups to obtain solubility of the nucleosides in non-aqueous solvents and to prevent the ribose hydroxyls from forming hydrogen bonds.

Annotations: "Topic" labels above "The enthalpy of hydrogen bond formation between the nucleoside bases" and "2'deoxyguanosine (dG) and 2'deoxyctidine (dC)". "Stress" labels above "by direct measurement" and "prevent the ribose hydroxyls from forming hydrogen bonds".

Callouts: "Subject and verb are far apart" (pointing to "has been determined" and "by direct measurement"); "Stress position does not contain the most important information" (pointing to "by direct measurement").

**Step 3 & 4- Put most important information into the stress position and put verb and subject close together**

We directly measured the enthalpy of hydrogen bond formation between the nucleoside bases 2'deoxyguanosine (dG) and 2'deoxyctidine (dC). dG and dC were derivatized at the 5' and 3' hydroxyls with triisopropylsilyl groups to obtain solubility of the nucleosides in non-aqueous solvents and to prevent the ribose hydroxyls from forming hydrogen bonds.

Annotations: "Topic" label above "We". "Stress" labels above "2'deoxyguanosine (dG) and 2'deoxyctidine (dC)" and "prevent the ribose hydroxyls from forming hydrogen bonds".

Callouts: "Subject and verb are now close together" (pointing to "We directly measured"); "Stress position contains the most important information" (pointing to "2'deoxyguanosine (dG) and 2'deoxyctidine (dC)").

**Step 5- Break lengthy sentences into two sentences**

We directly measured the enthalpy of hydrogen bond formation between the nucleoside bases 2'deoxyguanosine (dG) and 2'deoxyctidine (dC). dG and dC were derivatized at the 5' and 3' hydroxyls with triisopropylsilyl groups. These groups allowed us to obtain solubility of the nucleosides in non-aqueous solvents and to prevent the ribose hydroxyls from forming hydrogen bonds.

Annotations: "Topic" label above "We". "Stress" labels above "2'deoxyguanosine (dG) and 2'deoxyctidine (dC)", "with triisopropylsilyl groups", and "prevent the ribose hydroxyls from forming hydrogen bonds".

Callout: "The second sentence has been broken into two sentences" (pointing to "These groups allowed us to obtain").

**Step 5 & 6- Break sentences into two and add transitional phrase to show relationship**

We directly measured the enthalpy of hydrogen bond formation between the nucleoside bases 2'deoxyguanosine (dG) and 2'deoxyctidine (dC). dG and dC were derivatized at the 5' and 3' hydroxyls with triisopropylsilyl groups. These groups allowed us to obtain solubility of the nucleosides in non-aqueous solvents. In addition, this process prevented the ribose hydroxyls from forming hydrogen bonds.

Annotations: "Topic" label above "We". "Stress" labels above "2'deoxyguanosine (dG) and 2'deoxyctidine (dC)", "with triisopropylsilyl groups", "solubility of the nucleosides in non-aqueous solvents", and "the ribose hydroxyls from forming hydrogen bonds". "Topic" label above "this process".

Callouts: "The third sentence has been broken into two sentences" (pointing to "In addition, this process"); "A transitional phrase has been added to the last sentence to show relationships." (pointing to "In addition, this process").