How to Read a Ribbon Diagram

A ribbon diagram is a visual representation of the organization of a text. Think of it as a table of contents stretched out horizontally so that you can see not only what is in the text, but how large each piece is. We have created ribbons by hand, on pieces of paper, and by using computer programs such as Microsoft Excel.

We can add as many layers as we want to the diagram to represent different aspects of the text.
In Lexomic analysis, the top layer shows how we have divided up the text into segments. Though for convenience we often use segments of identical size, there are times when it is helpful to divide a text into different-sized chunks.

The second layer of a ribbon diagram indicates the major divisions in the text we are analyzing. In a poem this might be line numbers, in a book page numbers or chapters, and in a play acts or scenes. We use the two layers to give us an easy way of identifying the content of each segment.
The third layer of a ribbon diagram indicates the source of the material in the second layer. We use this layer to represent the relationship of source to segment.

As an example, we’ll construct a ribbon diagram of the Anglo-Saxon poem *Daniel*.

For our analysis, we cut *Daniel* into five 900-word chunks, which we have labeled Daniel_1, Daniel_2, etc. These make up the top layer of the ribbon.
For the second layer, we note the line numbers that correspond to the chunks. Word counts are relevant to Lexomic analysis, but line numbers are important for scholars using traditional methods. The relationship of layer one to layer two allows us to see how these two types of division relate to each other, and what is contained in each segment.

For the third layer, we indicate the sources of various segments of the poem.

The yellow color indicates the primary source, the Latin Bible, which is the source for the vast majority of the Old English poem.
However, two small sections of Daniel had a different immediate source: two Latin canticles (short hymns sung in Church) that were themselves based on the Bible, but which are somewhat different in organization and style from that source. These are marked in purple.

The ribbon diagram lets us see at a glance that almost all of Daniel comes from one source, but one particular bit, which includes lines 382-531, comes from the canticles.

We can then compare what we see in this ribbon diagram to what we see in other sorts of representations, such as branching diagrams, which are called dendrograms.
We can also use ribbon diagrams to note places in a text where closer scrutiny may be rewarded.

Texts with multiple or more complicated sources require more complicated ribbon diagrams. This ribbon diagram of King Alfred’s Old English translation of the Saint Augustine’s *Soliloquies* shows that although most of the translation comes directly from Augustine’s text, some parts have other sources, and some (those in red) seem to have been composed directly by King Alfred and not based on any known source.

Ribbon diagrams, particularly when they are linked with dendrograms, can help us to gain a sense of the overall construction of a text and can be used to highlight areas that might reward closer investigation.

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