

Overall review article structure: Global-sectional-paragraph levels

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The three-layer synthesis technique is a common way to organize entire review articles so that readers move from broad understanding → integrated interpretation → specific supporting evidence. This approach is widely used in major review journals such as Nature Reviews. Synthesis occurs at three hierarchical levels (Layers 1, 2, and 3) of the paper.

Layer 1: Global synthesis (the whole paper)

At this level, the review begins by synthesizing the entire field. This occurs in the introduction. It answers the question “What does the overall body of research suggest about this topic?” An example structure to achieve this is as follows.

- Introduce the problem
- Summarize the current understanding
- Identify key controversies or gaps

An opening statement example that gives the reader a field-level synthesis before details might be: *A growing body of evidence indicates that endothelial dysfunction plays a central role in the development of cardiovascular disease.*

Layer 2: Section-level synthesis

Each major section of the review presents a sub-synthesis of a specific theme.

For example, a cardiovascular review might have sections such as:

- Molecular mechanisms
- Physiological regulation
- Clinical implications

Each section begins with a mini-synthesis statement summarizing the evidence in that area.

Example: *Multiple experimental and clinical studies suggest that oxidative stress is a primary driver of endothelial dysfunction.*

Layer 3: Paragraph-level synthesis

Within each section, individual paragraphs perform fine-scale synthesis.

These paragraphs typically have the following pattern:

Umbrella sentence → evidence → interpretation → limitation. Example paragraph sequence:

- Umbrella claim
- Supporting studies
- Mechanistic explanation
- Qualifications or limitations

The umbrella claim is the first sentence of a paragraph or section summarizing the overall conclusion drawn from multiple studies. It “covers” all subsequent studies rather than introducing them one by one. The key idea is that interpretation always precedes details.

The three-layer synthesis technique organizes a review so that interpretation occurs at the paper level, section level, and paragraph level, with individual studies serving as supporting evidence.