

Reviews in Computational Biology

2. Review Writing



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January 2012

Purpose of a Review

“Reviews synthesise for a non-specialist readership current topics in [a particular] field”

Trends in **Genetics**

Purpose of a Review

“A literature review is a body of text that aims to review the critical points of current knowledge and or methodological approaches on a particular topic.”

“Literature reviews are secondary sources, and as such, do not report any new or original experimental work.”

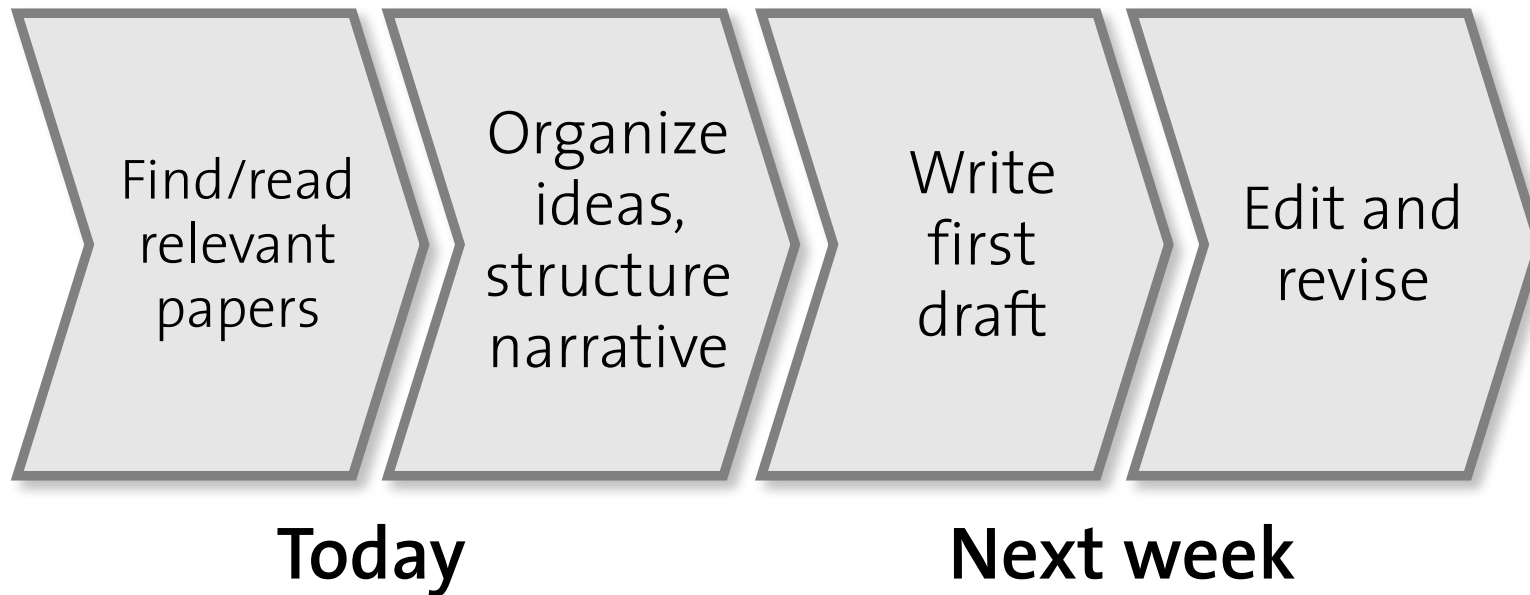


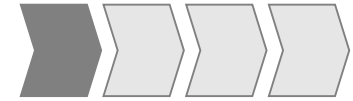
Purpose of a Review

“Key aims of reviews are to provide systematic and substantial coverage of mature subjects, evaluations of progress in specified areas, and/or critical assessments of emerging technologies.”



The Writing Process





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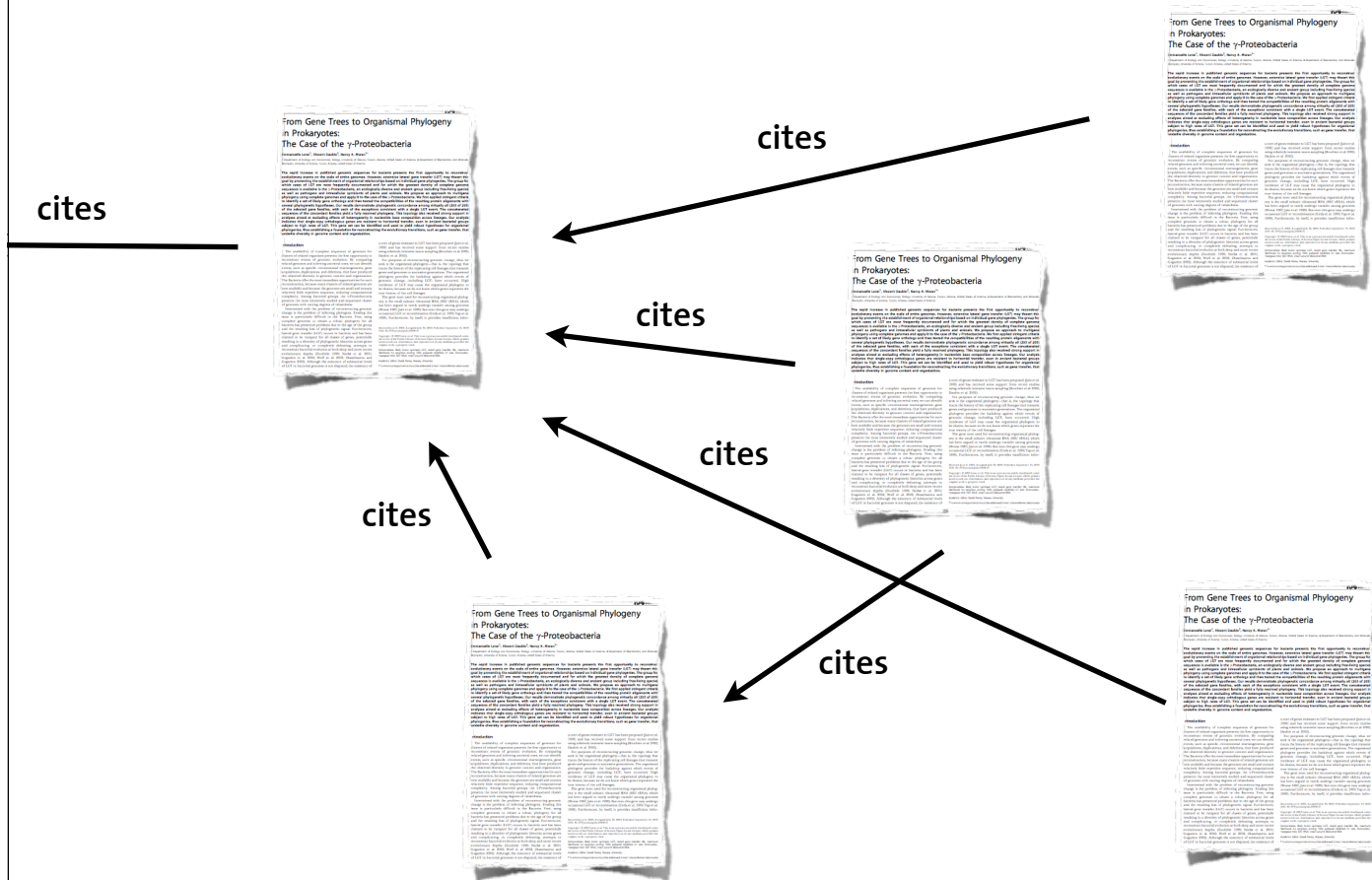
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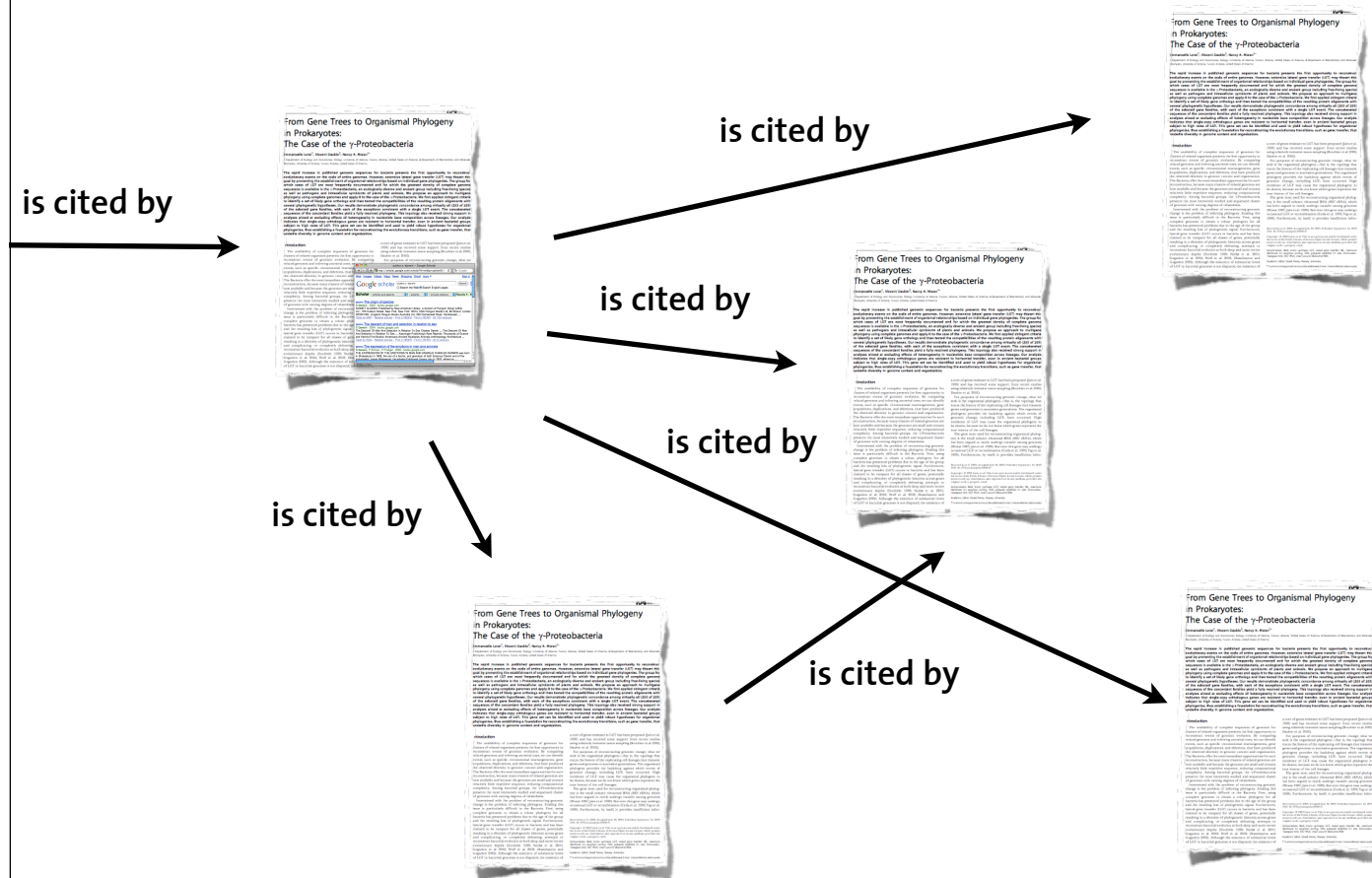
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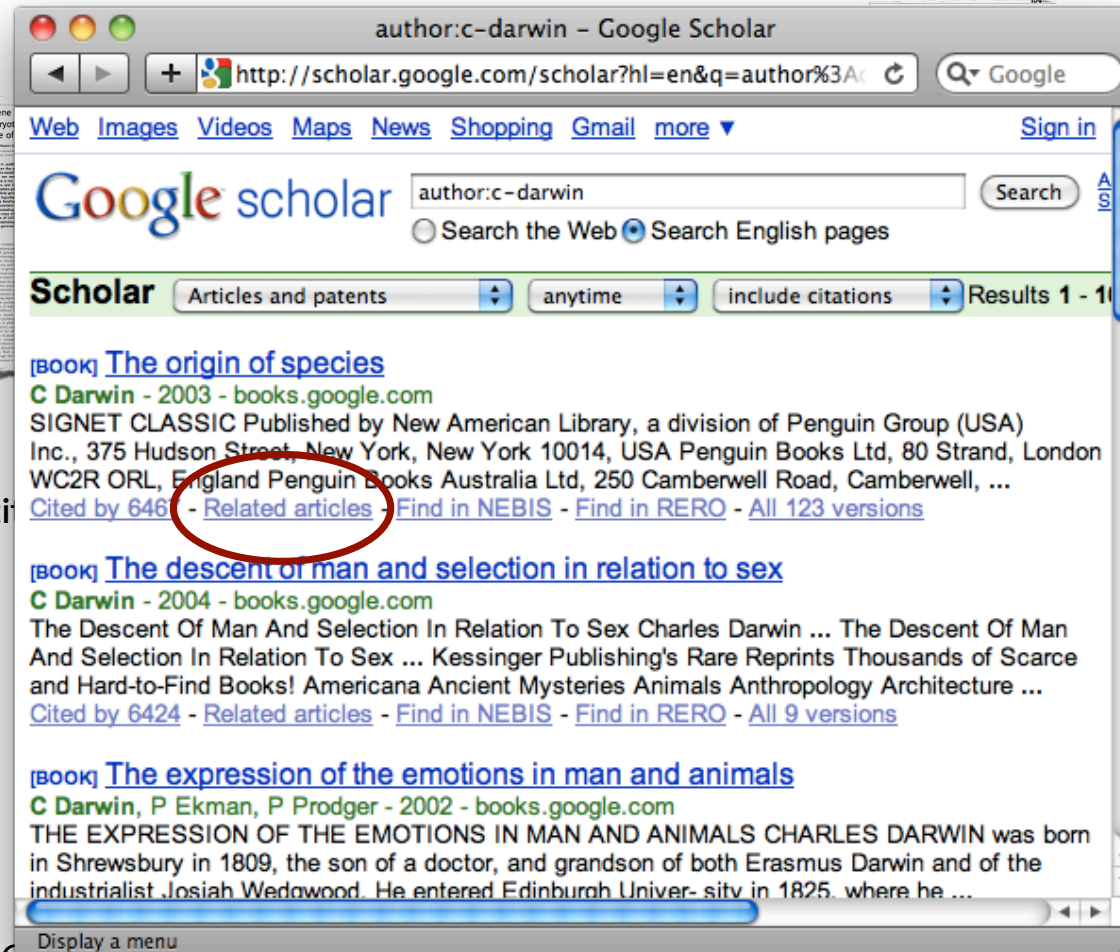
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- **Identify (possibly record) key points:**
Hypothesis? Approach? Findings?
Significance?
- **Order**
 1. Start with title and abstract
 2. Then, read introduction
 3. Figures and tables
(captions often self-contained)
- **If not relevant, stop reading!**

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- You found a good paper. Record citation!
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**Organize ideas,
structure narrative**

Key Questions

- What is the hypothesis/problem/question?
- Why is it interesting?
- What answers are provided by current literature? How did they do it? Implications?
- Which particular studies are particularly interesting and why?
- What is unsatisfactory about current literature? What remains unanswered?

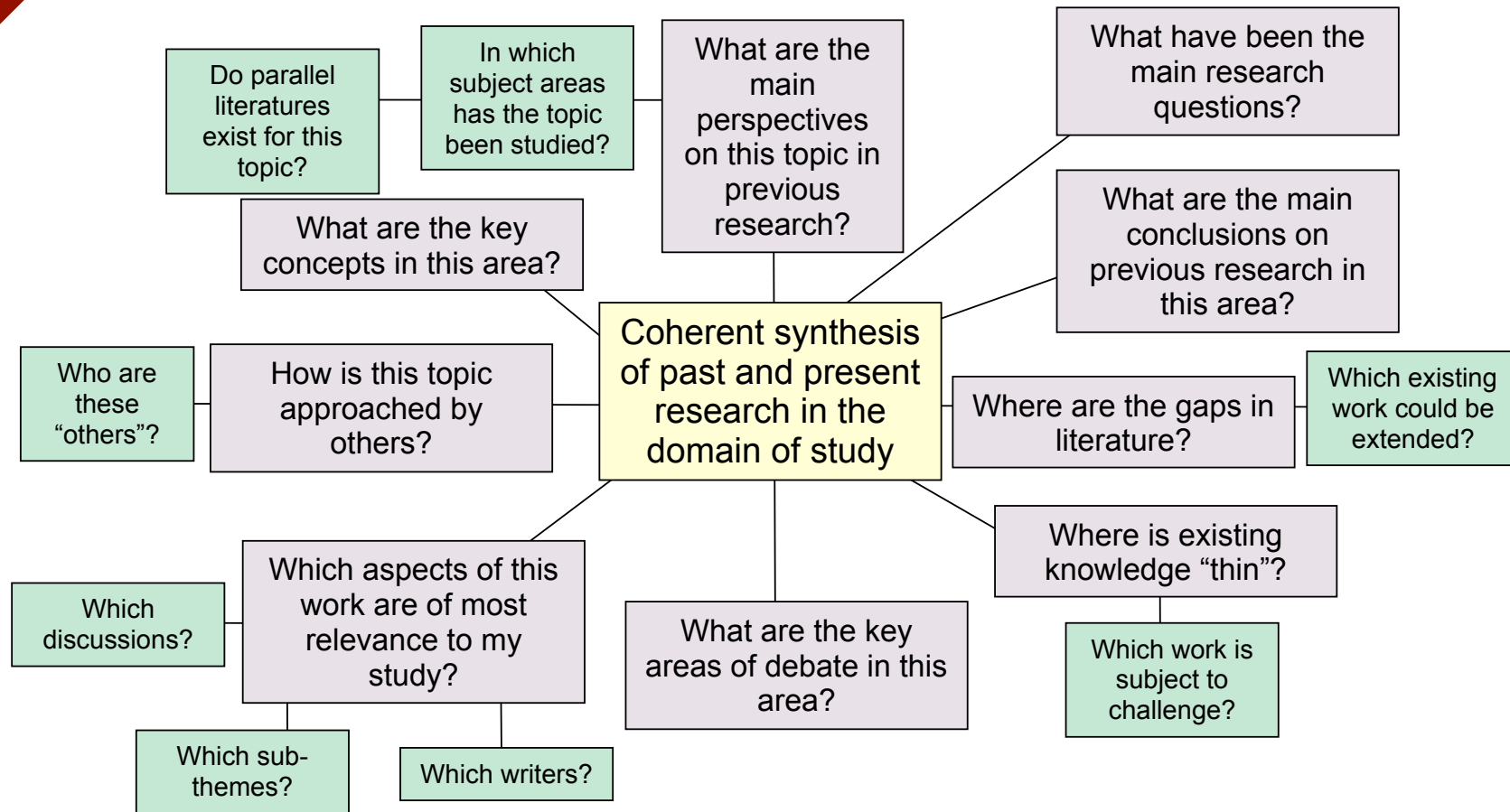
**Distill the answers into
your synthesis**

In other words:

What is your point?

Reference Only

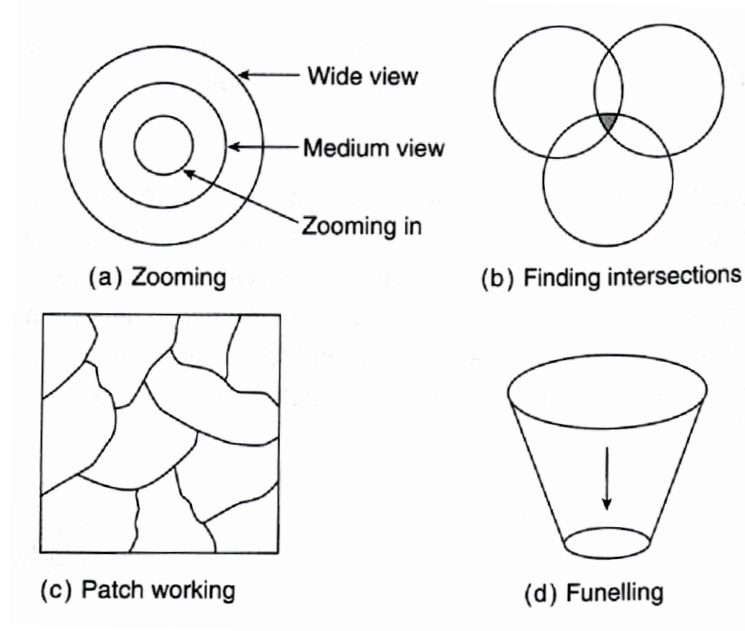
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Typical structures

- Chronological
- Conceptual (e.g. pro/contra)
- Experimental/
Methodological
- Centered on
Implications

But: remember your point!



Ridley, "The Literature Review", 2008

Example