

Writing Mini-Reviews



7.17 Project Lab
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What's the purpose of a Mini Review?

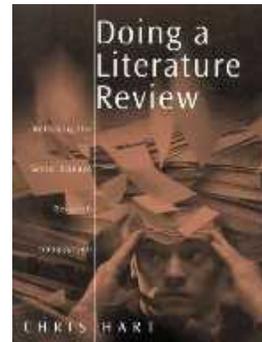
- SUMMARIZE and EVALUATE the literature
- SHOW RELATIONSHIPS between different studies (e.g., differences in methodology)
- And in a research article introduction - SHOW HOW PUBLISHED WORK RELATES to your work.



What is the work done by a review article?

"A review article *summarizes and synthesizes* and more importantly *evaluates* the concepts and/or results from several research articles on a related topic; thus authors of review articles *compare, contrast, and interpret* work of others."

Anne Cordon, Anne Pound, Nicola Wade, University of Toronto



What questions do mini reviews answer?

- What do we know about the area of inquiry (key concepts, factors, variables)?
- What are the relationships between key concepts, factors, variables?
- What are the current theories?
- What are the inconsistencies and other shortcomings?
- What needs further testing because evidence is lacking, inconclusive, contradictory, limited?
- What designs or methods are faulty?
- Why study this question further?
- What contribution will your work make?



Where is the Literature?



JOURNAL ARTICLES (Primary Research):
Most up-to-date but still about 2 yrs old.

REVIEW ARTICLES: Good for summarizing large amounts of previous research and commonly held beliefs.

INTERNET SOURCES: Use only refereed electronic journals.

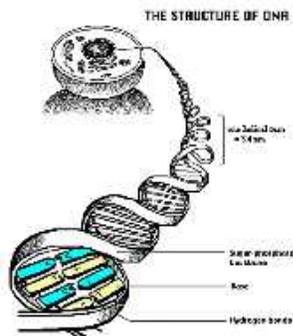
CONFERENCE PROCEEDINGS: Latest research, but not yet published as full papers.

GOVERNMENT AND CORPORATE REPORTS: Good resources for commissioned research.

THESES AND DISSERTATIONS: Limited use, may be difficult to obtain, researcher usually inexperienced.

BOOKS: Less up to date than journals, can be a good starting point, e.g., Annual Reviews.

How is a review article typically structured?



Introduction: Defines a topic and stresses the importance of recent work on it.

Body: Research findings are arranged in some larger narrative with author balancing *plot* and *story*.

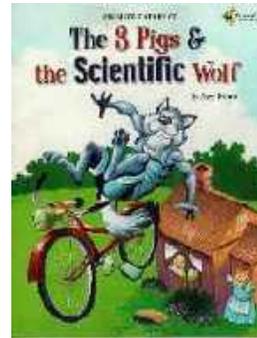
Conclusion: Presents the prospects for research in the near future.

Greg Myers
"Stories and Styles in Two
Molecular Biology Review Articles"

The review article is a way of “telling a story about the past that shapes the future.”

“The writer of a review shapes the literature of a field into a story in order to enlist the support of readers to continue that story.”

Greg Myers



Author’s control of Plot and Story are key to a successful review article.

Plot: The order of events as presented in the text (as revealed by an outline of the subheadings).

Story: The author’s imposed order of events behind the plot:

- gradual accumulation of findings over time
- competing theories
- major known findings to related minor findings to what’s left to be discovered

“The plot of a review article is what gives it a surface organization. . . . The story is the underlying narrative it aims to convey.” Greg Myers

Controlling the narrative of a review

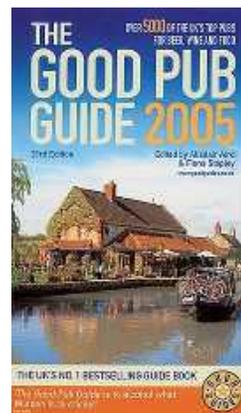
“The review selects from [existing articles], juxtaposes them, and puts them in a narrative that holds them together, a narrative with actors and events but still without an ending. It draws the reader into the writer’s view of what has happened, and by order the recent past, suggests what can be done next.” Greg Myers



As Guides to the Published Literature...

...Reviews must be:

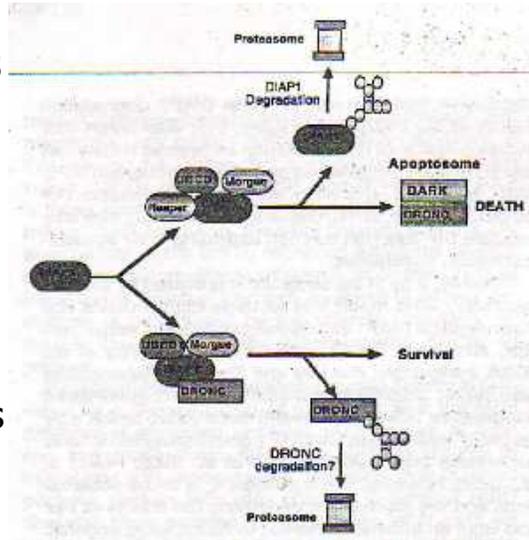
- **Accurate:** e.g., Citations correct, findings attributed to authors correct.
- **Complete:** i.e., Include all important papers (not every paper written on the topic).



Is it Appropriate for Reviews to Contain Illustrations?

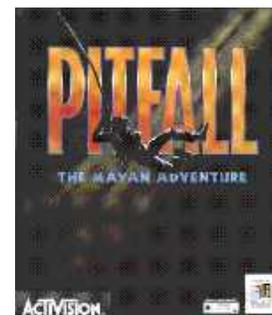
Yes! Illustrations can:

- Summarize
- Propose a model
- Illustrate areas of inquiry or controversy



Try to avoid these mini-review pitfalls.

- **Trying to read everything:** Try to read the most relevant work instead.
- **Reading but not writing:** Writing is a way of thinking...write many drafts.
- **Failing to keep bibliographic information:** Remember that you'll be including a References page at some point.
- **Organizing your review chronologically:** Best to organize your paper by ideas.



Considerations for mini reviews in 7.17

Questions

- What's the "story" of CG2005?
- Why is CG2005 important?
- What do we know about CG2005?
 - What is CG2005 similar to?
 - What is the function of CG2005?
 - What happens when CG2005 is inactivated?
- What do we **not** know about CG2005?



Potential Stories of CG2005

- Focus on the larger biological mechanism (e.g., telomeres)
- Focus on the potential disease state
- Focus on the problem-solving research history
- Focus on the competing theories of the role of CG2005