Technical Session on Finding and Organizing References

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This talk is a “Technical Session on Finding and Organizing References”. It is not an in-depth discussion of how to use a particular Reference Manager, just like a lecture on how to build a house would not be an in-depth discussion of how to handle a screwdriver.

The real question IS NOT “How do I make the time I spend adding references minimal”? BUT IS “How do I make the time I spend adding references impactful?”

OUTLINE OF THIS TALK:
Why Include a Reference?
Google Scholar, Google Patents, Research Gate, Primo, etc.
How do I Preserve my References?
What About Confidential and/or Proprietary Documents?
What About I.P.?
Why Include a Reference?
The real question

**IS NOT**

“How do I make the time I spend adding references minimal”?

**BUT IS INSTEAD**

“How do I make the time I spend adding references impactful?”

**Putting together your reference list is a time to:**

1. Re-run the searches you’ve run in the past
2. Determine which references to use based on the category
   a. Introduction
   b. Methods and Materials
   c. Results
   d. Discussion
   e. Conclusions
Why include a reference?

**BOLD STATEMENT**: The only reason to include a reference is to improve the quality of your paper.

![ELABORATE.]

I will indeed elaborate by example.

**Introduction**—Including the right references, particularly broad survey and review articles, incorporates many additional references by inference. They also give you a chance to quickly some up to speed as you begin writing.

Porous materials for bone engineering

SJ Simske, RA Ayers, TA Bateman - Materials Science Forum, 1997 - Trans Tech Publ

Maintaining bone geometric and structural integrity is a necessity for normal mobility. After fracture, bone disease or other conditions resulting in skeletal loss or compromise, porous materials offer the possibility for near faultless replacement of the normal bone material. …
Why include a reference?

**BOLD STATEMENT:** The only reason to include a reference is to improve the quality of your paper.

I will indeed elaborate by example.

**Methods and Materials**—use a reference to avoid a lengthy justification and “cut and paste” of a previously peer reviewed method, process, material, etc.

**Effects of rehydration state on the flexural properties of whole mouse long bones**

JJ Broz, SJ Simske, AR Greenberg, MW Luttges - 1993 - asmedigitalcollection.asme.org

The effects of bone water content during dehydration and rehydration on the flexural properties of whole mouse femora were evaluated using three-point bending. The elastic and plastic flexural properties of the bones were determined on a dry mass normalized basis over ...
Why include a reference?

**BOLD STATEMENT:** The only reason to include a reference is to improve the quality of your paper

I will indeed elaborate by example

**Results**—use previous results to avoid the inevitable question about why you didn’t compare your algorithm to the 100 algorithms preferred by your reviewer (who may be well-meaning, but may also be a narcissistic sociopath)

Part 6 of the ICAE review form:

"A lot of manuscripts still present small/overly simplified examples or academic exercises. Such papers were common and might have been appropriate in the 60’s, 70’s, or 80’s. But, in the 21st century we would like to encourage authors to present large and realistic examples. Please comment whether examples presented in the paper are appropriate and justified considering the significant advances made in computational modeling in recent years as well as the increasing power of computers. Are the examples presented small academic exercises? "

https://aminoapps.com/c/plankaren/page/blog/a-quick-psa/aJoz_o2u0uaGpY3X40/Xlz88meQR84Opoe
Why include a reference?

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**Discussion**—here is the chance to show you’re not operating in a vacuum. Include any reference that you thought particularly insightful.

**Protein measurement with the Folin phenol reagent.**

CH Lowry, NJ Rosebrough, AL Farr… - Journal of biological …, 1951 - cabdirect.org

... Abstract: The use of the Folin phenol reagent with proteins proteins Subject Category: Chemicals and Chemical Groups … The absorptiometric procedure described is suitable for amounts of protein as small as 0.2 µg. Care is necessary in the use of the reagent, since the ...

☆ Save  ☑ Cite  Cited by 226700  Related articles  All 9 versions  ☟

https://www.pinterest.com/pin/4559014954735004/
https://aminoapps.com/c/plankaren/blog/a-quick-psa/ajoz_o2u0uaGpY3X40/XXz88meQR84Qpo
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I will indeed elaborate by example.

**Conclusion**—What might you have done if you’d thought of it first? Is there anything else that might help you contextualize your findings?

[PDF] Imagenet classification with deep convolutional neural networks
A Krizhevsky, I Sutskever... - Advances in neural..., 2012 - proceedings.neurips.cc

... We trained a large, deep convolutional neural network to classify the 1.2 million high-resolution images in the ImageNet LSVRC-2010 contest into the 1000 different classes. On the test ...
Google Scholar, Google Patents, Research Gate, Primo, etc.
Elements to use for improving the impact of your reference search:

Abstract
Keywords
Title
Author
References

Advanced Search

Didja know?

Google Scholar includes Google Patents as a subset of its content?
Google Patents, &c.

How to use:

Abstract
Keywords
Title
Author
References

[[Demo…]]

https://patents.google.com/
https://www.epo.org/
https://patents.justia.com/

[[Demo…]]

https://www.uspto.gov/
Research Gate, &c.

Plenty of other search locations:
1. Research Gate
2. PubMed
3. Web of Science
4. Scopus
5. ACM Digital Library
6. IEEE
7. DBLP
8. …more…

Colorado State University’s library search, Primo, incorporates these into your single search therein.
https://lib.colostate.edu/

1. Perform your searches
2. Select articles that are the most salient
3. Select from their reference list those that are most salient
4. Cut and paste the titles into Primo directly
5. Primo will return a PDF, book, or interlibrary loan suggestion for almost any such article

DEMO: [[Pick random topic, like “pickled herring”]]

\[
\text{Saliency} = \frac{\text{Citations}}{\text{Years since publication}}
\]

For example, an article published in 2017 with 57 citations has a saliency of 11.4, while one published in 2012 with 68 citations has a saliency of 6.8

This is *not* a primo burger
How do I Preserve my References?
Save your searches – re-run them when you create your bibliography

Save the ones that worked for you...here is an example for the research I am doing on text analytics around mendacity in argumentation...

<table>
<thead>
<tr>
<th>Search</th>
<th>Notes</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="https://scholar.google.com/scholar?hl=en&amp;as_sdt=4007&amp;q=red+herrings&amp;btnG=">https://scholar.google.com/scholar?hl=en&amp;as_sdt=4007&amp;q=red+herrings&amp;btnG=</a></td>
<td>“Resource Curse” is a term I need to be sure to include in my discussion</td>
<td>Brunnschweiler</td>
</tr>
<tr>
<td><a href="https://scholar.google.com/scholar?hl=en&amp;as_sdt=4007&amp;q=topical+cul-de-sac&amp;btnG=">https://scholar.google.com/scholar?hl=en&amp;as_sdt=4007&amp;q=topical+cul-de-sac&amp;btnG=</a></td>
<td>This did not work...“topical” was too overloaded an operator, “topical anesthetic,” etc.</td>
<td>N/A</td>
</tr>
<tr>
<td><a href="https://scholar.google.com/scholar?hl=en&amp;as_sdt=4007&amp;q=argumentation+distraction&amp;btnG=">https://scholar.google.com/scholar?hl=en&amp;as_sdt=4007&amp;q=argumentation+distraction&amp;btnG=</a></td>
<td>Search suggested by synonym for “red herring”</td>
<td>Walton, <a href="https://link.springer.com/chapter/10.1007/978-3-87-98197-0_1">https://link.springer.com/chapter/10.1007/978-3-87-98197-0_1</a></td>
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<td><a href="https://scholar.google.com/scholar?hl=en&amp;as_sdt=4007&amp;q=logical+fallacy&amp;btnG=">https://scholar.google.com/scholar?hl=en&amp;as_sdt=4007&amp;q=logical+fallacy&amp;btnG=</a></td>
<td>“Homology” a term to be used in the introduction to explain “logical fallacy” in depth</td>
<td>Rieppel, use evolutionary biology as a rich analogy here...</td>
</tr>
</tbody>
</table>
Reference Managers

Reasons to Use Reference Managers
1. Ease of formatting
2. Ease of re-formatting (rejection is inevitable), e.g., changing citation styles
3. Many are free: Mendeley, Bibme, Zotero
4. Many are available through institutions: Endnote, RefWorks

Reasons not to Use Reference Managers
1. Gateway to Complacency
2. Intransigence
3. Idiosyncrasies, Updates, Incompatibilities
4. Creating your list of references is SUPPOSED to take time!
1. **Add files menu** - Adds new entries to your Mendeley library.

2. **Folders menu** - Create a new folder to organize your Mendeley library. Creates a folder within whatever you're currently viewing - if used on *All Documents*, it will create a new top-level folder. If used on an existing folder, it will create a nested folder with the current folder as the parent.

Use the ‘Remove folder’ button to remove the folder you are currently viewing. Note that this will not affect any documents within the folder.
3. **Sync** - Pushes your changes to the cloud for storage, making them available on other devices and computers.

4. **Search** - Use this field to search your Mendeley library. Note that Mendeley Desktop’s search function is context-specific – performing a search while viewing a particular folder will only search within that folder. Make sure ‘All documents’ is selected if you want to search your entire library.

   - Click into the search field to set it as active. Additional search modifiers can also be selected using the dropdown menu that appears next to the magnifying glass.
   - Also returns results within the text of PDF documents incorporated into your library, in addition to the contents of the document’s details.
5. Discovery – Mendeley allows you to discover new references in a number of different ways. From within Mendeley Desktop, you can use ‘Literature Search’ to search within Mendeley’s crowd-sourced catalog. Alternatively, you can use ‘Mendeley Suggest’ to receive bespoke recommendations based on your area of study and the contents of your library.

6. My Library – View the entire contents of your personal library by selecting ‘All Documents’. Mendeley also offers a number of ways to filter your library. Any folders you create will also be listed under the ‘My Library’ section.
7. Groups – Any groups you join or create will be listed under this heading. The icon that appears next to the group’s name indicates the group type.

8. Main panel – when in browsing mode, the main panel of Mendeley Desktop will display the contents of the currently selected view. You can use the column headings (Authors, Title, Year, Published In, Added) to quickly reorder the contents.

Double click an entry with a PDF attached (indicated by an icon) to open it in the PDF reader (see below)
9. **Details panel** – details of whichever library entry you currently have selected. Relevant detail fields for the document type, along with contents. You can use this panel to modify an entry’s details. The ‘Notes’ tab that appears at the top will allow you to view any notes you’ve created for the entry.

10. **Filter panel** – Different options to allow you to quickly filter your current view. Like search, the filtering is context specific - the panel displays filtering options relevant to your current view only (e.g. only the authors of entries within a selected folder will appear as options for filtering).

To filter your entire library, ensure that the ‘All Documents’ view is selected.
What About Confidential and/or Proprietary Documents?
One city you are not allowed to visit as a research author is MendaCity

If you wish to publish but there are confidentiality and proprietary concerns, you must still provide public references to the general area:

1. Take the topics from the private documents (along lines of using titles and keywords in previous examples) and use as search terms on Google Scholar, etc., to see if any reasonable public equivalent can be found.
2. Otherwise, if they really are private, you can’t cite them without breach of disclosure agreement. So, wait to publish, please.
3. If you can find software, process, diagram, etc., similar to your work on GitHub or a like search, you can include such a project as a reference. Like with web pages, you need to cite the day accessed...

Beware the lie tree

What About I.P.?
If you have not filed a provisional patent yet, please don’t publish

Q. Can you cite a provisional U.S. patent?
A. Absolutely—here is one in Chicago style:

Q. Can you cite a trade secret?
A. That is an oxymoron—once published, it is a trade practice, not secret

Q. Can you cite a patent, copyright, or trademark?
A. Absolutely

They should be distinguished from surrounding text, for example, with italics or capital letters
A trademark should be shown with TM, C, or R, preferably the initial time the trademark appears
Must inform the public that the symbol, word, device, or image that you're utilizing is yours
Displaying the trademark symbol more than once may be distracting
I’ll have some perspective
The perspective of reviewing

That's it. I’d like some fresh, clear, well seasoned reviewing perspective.

1. Reviewers are going to check for the most highly-regarded references—if the number of citations is high (e.g., > 50 total or a saliency score > 10), you may wish to consider using the reference
2. Reviewers are going to look for the most pertinent references—make sure to perform a Google Scholar search on your title and your set of keywords
3. Reviewers are going to look for their own references. It makes sense to see who reviews similar material to your own for the journal or conference you send your article to
4. Reviewers are looking for alternative approaches not covered—reference and discuss them
5. Reviewers want to see public data sets used—reference them

\[ Saliency = \frac{Citations}{Years \ since \ publication} \]
The perspective of impact

That’s it. I’d like some fresh, clear, well seasoned impact perspective.

1. Survey or review article? Perform and incorporate multiple searches
2. If you are undecided about a reference, re-read it and plan to incorporate it—connecting to all relevant articles is not a choice, it is a primary responsibility of the authors
3. The more you contextualize the references that you include, the more likely your reader will look to your article as a fundamental article in the field
4. Contextualization = understanding = having the ability to show how your work impacts the overall field

https://www.lpi.usra.edu/science/kieler/Education/SSRG2-Craters/craterstructure.html
http://kensolowrotary.com/2019/03/31/fresh-clear-well-seasoned-perspective/
1. RTFA – don’t even think about putting a reference in your article without re-reading it. This is one of the main problems with using a Reference Manager. Complacency is complicity, and your writing will suffer.

2. Context is everything. A sentence taken out of context can lead to the perspective of your article being rejected, or ignored even if accepted for publication.

3. Attitude is everything—why view putting together references as drudgery? Instead, make it the centerpiece of your writing. Celebrate the talent and accomplishment of your peers: **a rising tide lifts all boats**

4. Learning is not something you do…it is what you are. Never stop.
Thank you!
SYSTEMS ENGINEERING
COLORADO STATE UNIVERSITY