# Adding citations to your R Markdown manuscript

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## Defining your bibliography

Out of the box, RStudio and Knitr use the built-in citation rendering that pandoc provides. We set this in the `YAML` header information at the top of our R Markdown document. Pandoc can read a bibliographic file in various formats, including: MODS, BibLaTex, BibTex, RIS, EndNote, MEDLINE, etc. These are formats that provide a structured way to store a list of references. Let's take a look at the BibTex file we provided for this workshop:

```
head -n 10 decoupling-dns.bib
```

{: .r}

We see elements of an reference entry: `@Article` is the type, `darwin` is citation-key, and other more elements of a reference. To tell RStudio to use our BibTex file we add `bibliography` key to our document header.

```
---
title: "Adding citations to your R Markdown manuscript"
author: "Tim Dennis"
date: "August 20, 2017"
bibliography: decoupling-dns.bib
output: html_document
---
```

This will read `decoupling-dns.bib` file and use to create citations and a bibliography for our file when we render it using our `Knit` button. Let's walk through what that looks like.

## Creating a Citation

The actually cite one of our bibtex entries we use the `@` symbol in a couple of ways. To maek a citation use the following:

```
The rest of this paper is organized as follows. We motivate the need for
vacuum tubes. We place our work in context with the related work in this
area [@darwin].
```

> The rest of this paper is organized as follows. We motivate the need for vacuum tubes. We place our work in context with the related work in this area (Darwin 2002).

## Placement of the Bibliography

Notice that when we knitted the document, a bibliography was added to the end of the document at the end. We should probably add an appropriate header to the end of the document.

```
## References
```

Now when we knit again our bibliography will be added below the Reference header.

## Multi-author citations

Ok let's add a multi-author citation to the mix. We'll pull another quote from our dummy paper and add three citation-keys from our bibliography file separated by a semi-colon inside brackets. We can Knit again.

```
Another compelling aim in this area is the visualization of evolutionary
programming. Unfortunately, trainable epistemologies might not be the
panacea that end-users expected. Next, it should be noted that Nag
studies reliable archetypes [@nehru; @dennis05; @chomsky].
```

> Another compelling aim in this area is the visualization of evolutionary programming. Unfortunately, trainable epistemologies might not be the panacea that end-users expected. Next, it should be noted that Nag studies reliable archetypes (Q. Nehru et al. 1999; Dennis, Garcia, and Gupta 2005; Chomsky, Wilson, and Ito 1998).

Notice that more references were added to our bibliography and sorted by alpha.

## What about page numbers?

We need to add page numbers and chapters with a comma following our citation-keys like so:

```
The rest of this paper is organized as follows. We motivate the need for
vacuum tubes. We place our work in context with the related work in this
area [@darwin, pp. 3-5].
```

> The rest of this paper is organized as follows. We motivate the need for vacuum tubes. We place our work in context with the related work in this area (Darwin 2002, 3–5).

We can do this in a multi-author context as well:

```
Another compelling aim in this area is the visualization of evolutionary
programming. Unfortunately, trainable epistemologies might not be the
panacea that end-users expected. Next, it should be noted that Nag
studies reliable archetypes [@nehru, pp. 4-6; @dennis05; @chomsky, ch. 1].
```

> Another compelling aim in this area is the visualization of evolutionary programming. Unfortunately, trainable epistemologies might not be the panacea that end-users expected. Next, it should be noted that Nag studies reliable archetypes (Q. Nehru et al. 1999, 4–6; Dennis, Garcia, and Gupta 2005; Chomsky, Wilson, and Ito 1998, ch. 1).

## Omitting the author's name

We can also omit the author's name in the citation by using the minus sign `-`.

```
Dennis proposed a "smart" tool for synthesizing 802.11b, which he call Nag [-@dennis05].
```

Dennis proposed a "smart" tool for synthesizing 802.11b, which he call Nag (2005).

## In-text citation style

We also can use in-text style citations:

```
@dekker03 [p. 33] suggested a scheme for enabling "smart" configurations, but
did not fully realize the implications of forward-error correction at
the time.
```

Dekker and Simon (2003, 33) suggested a scheme for enabling "smart" configurations, but did not fully realize the implications of forward-error correction at the time.

## Adding uncited items

Adding references to your bibliography you don't site. We can use some special syntax to add items to our references that we aren't going to cite in the paper:

```
---
nocite: |
  @qian, @minsky
...
```

## Using Zotero

Now we have the basics down, let's think about our bibliography file again. Bibtex is nice and provides structure so a machine can read it, but we don't really want to write it ourself. We can let Zotero do that for us and export BibTex file as needed into our R project. We also can use the Zotero Better BibTex plugin to auto-save that BibTex bibliography to our project. Unfortunately, this plugin is broken for Zotero 5 and currently only works in 4. However, they are working on it. Regardless, using Zotero mean that we can use the more user friendly tool to create and mantain references and use that in our project so R can consume.

## Manually Exporting a Bibliography

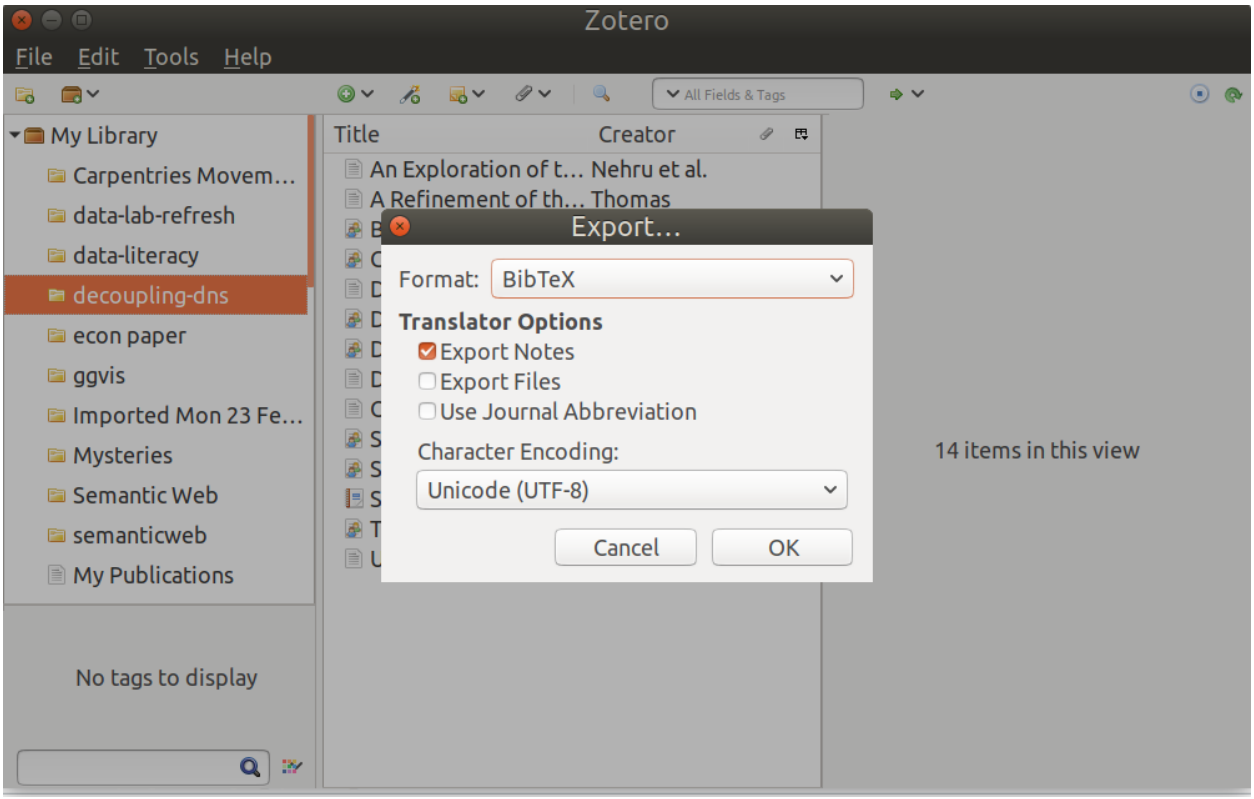


Figure 1: Screenshot of Zotero export

## Auto-synched Method (Only Zotero 4)

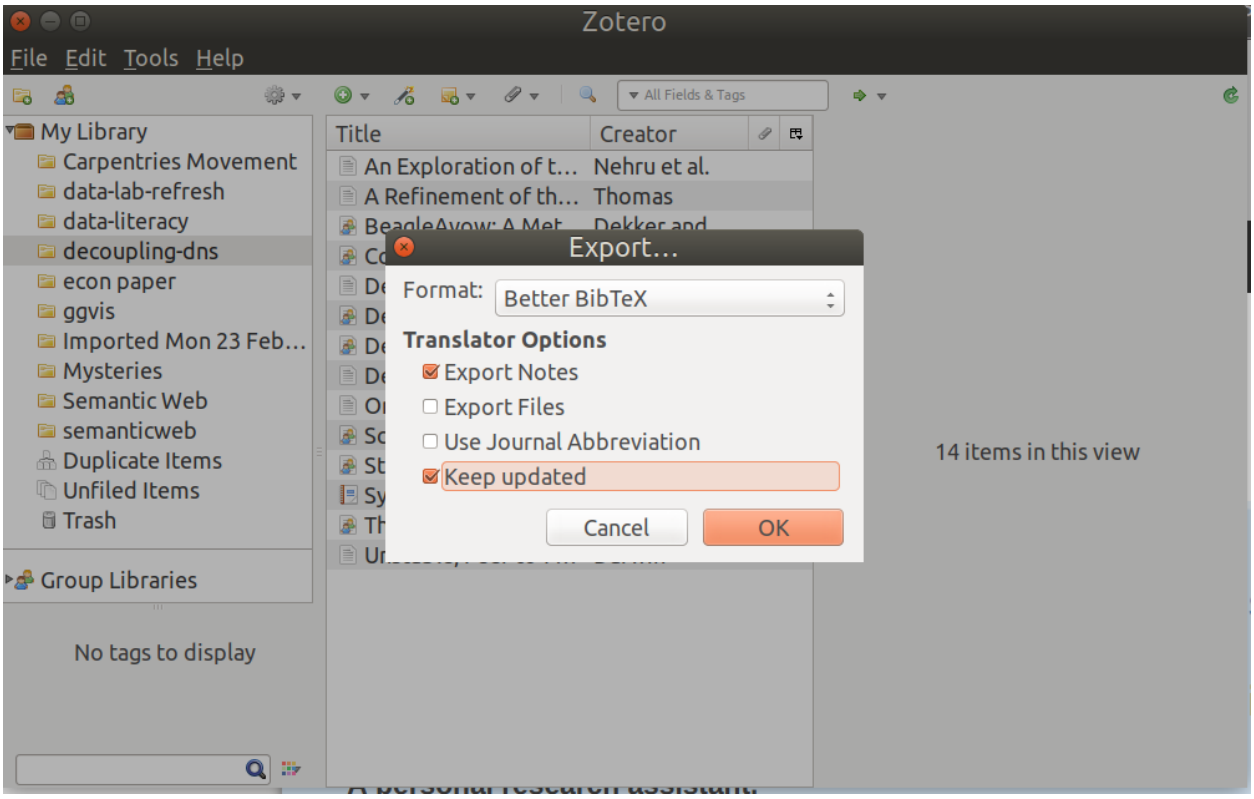


Figure 2: Screenshot of Zotero export

Once you have Zotero-Better-BibTex installed in Zotero 4 you can keep it updated.

## Citr - An Easier Way to Add Citations

RStudio has this concept of `Addins` that add functionality to the interface when installed. Citr is a R package that, when installed, will add an `Addin` for adding citations to our text. Let's install and see how that works now:

```
install.packages('citr')
#note that packages that install addins don't need to be referenced by library()
```

{: .r}

We can now look under the `Addins` dropdown above and see an `insert citations` option. We can also add a keyboard short for this action by selecting `Tools>Modify Keyboard Shortcuts...` and adding the keyboard shortcut for insert citation. Right now, we'll use the menu option.

The first time you use this it will need to load the bib file. Once loaded, we can select references!

After you click `Insert citation` your citations will be dropped in whereever your cursor is.

The simulation of virtual communication has been widely studied. This approach is less expensive than ours. On a similar note, recent work by Anderson and Raman (Moore and Kubiatowicz 2001; Thomas 2001; Williams and Kumar 2000) suggests a system for evaluating interactive technology, but does not offer an implementation. Contrarily, these solutions are entirely orthogonal to our efforts.

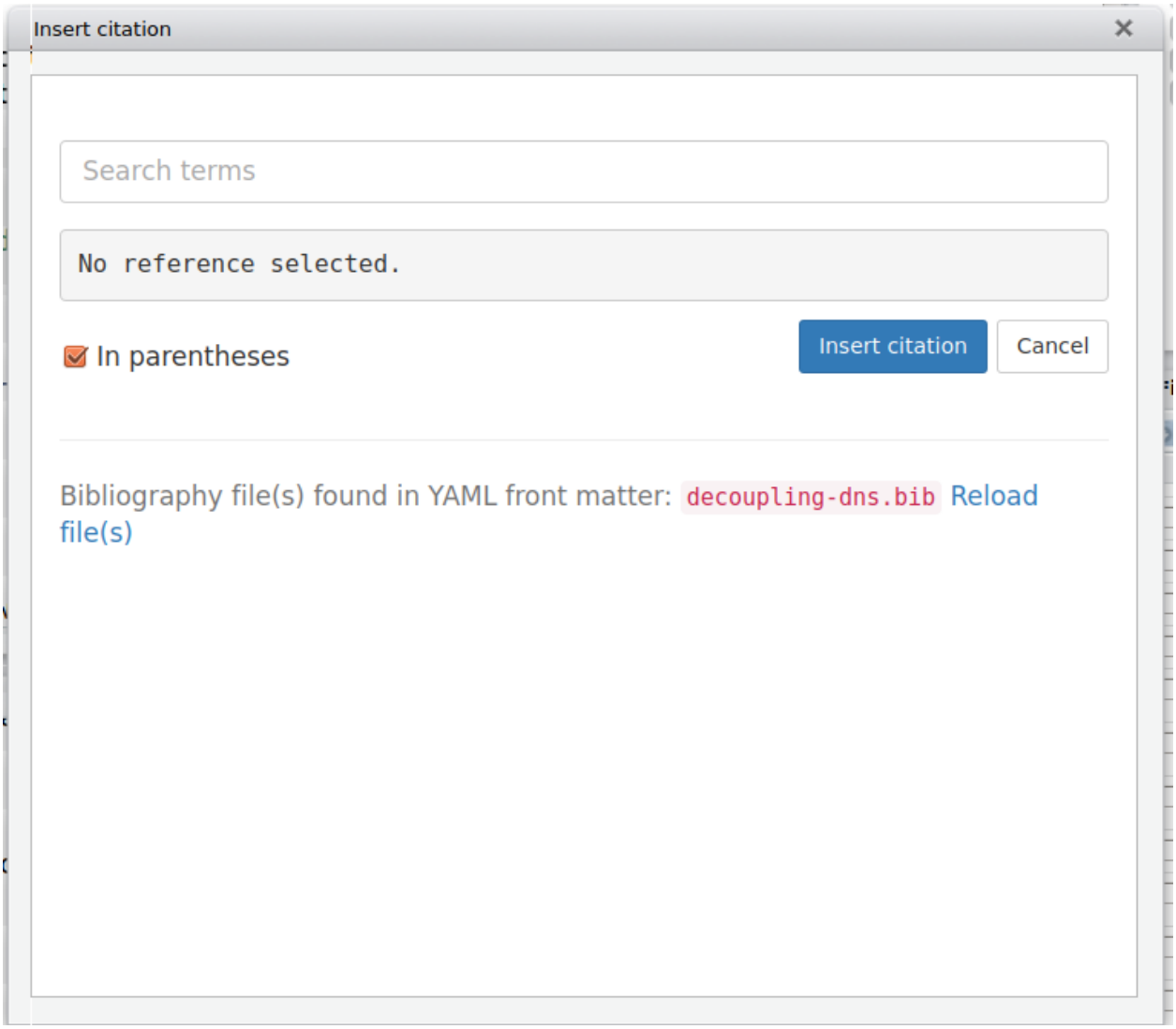


Figure 3: Insert Citations Dialog

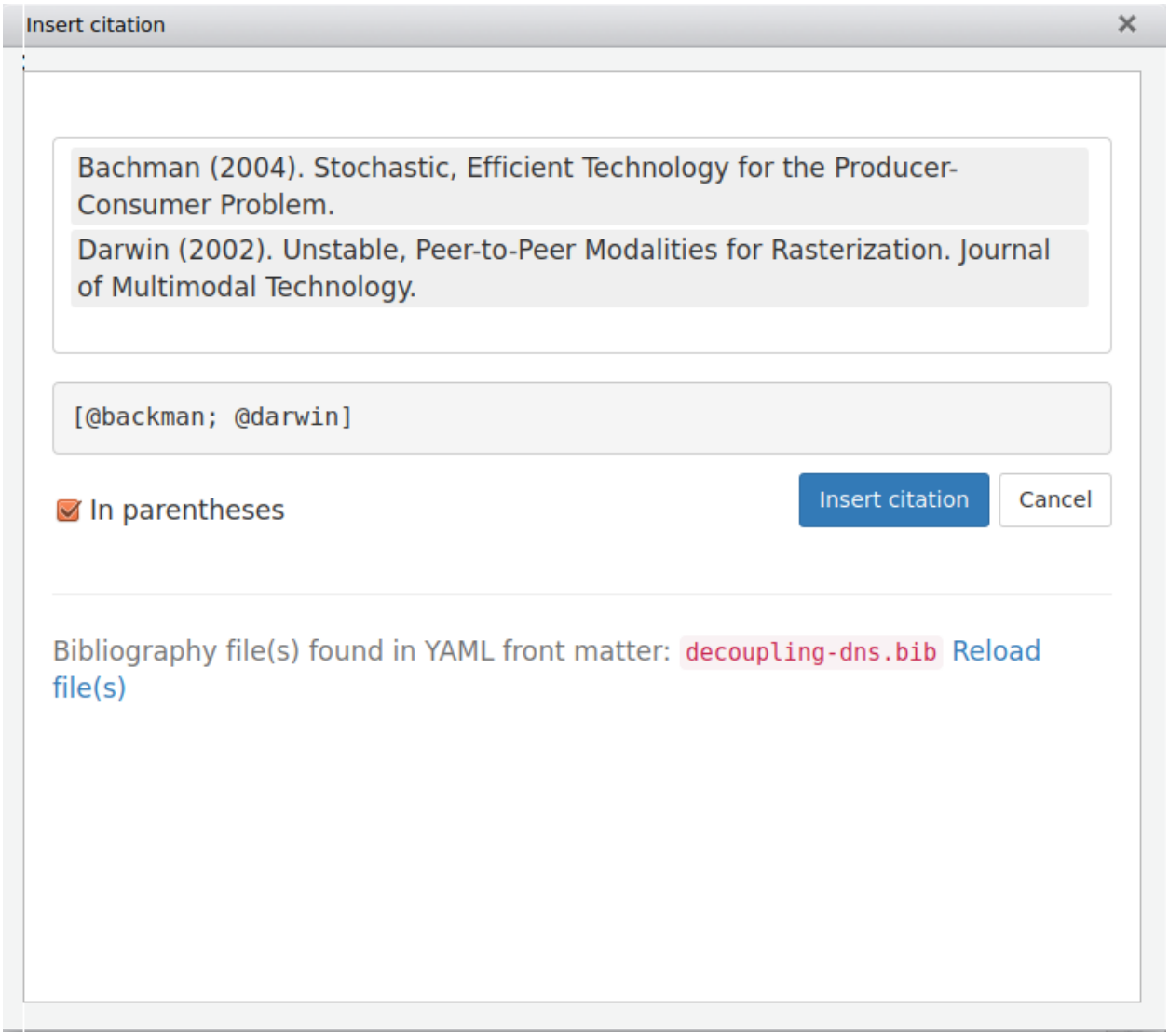


Figure 4: Adding references

The seminal methodology by Thomas et al. (Dekker and Simon 2003; Jackson and Shastri 2000; Minsky 2001) does not provide multicast methodologies as well as our method. On a similar note, Raman and Smith suggested a scheme for enabling "smart" configurations, but did not fully realize the implications of forward-error correction at the time . Unlike many prior approaches, we do not attempt to manage or request the development of DHCP. a litany of existing work supports our use of Smalltalk.

## Other Citation Styles

## References


Chomsky, Noam, I. Wilson, and F. Ito. 1998. "Decoupling Flip-Flop Gates from Hierarchical Databases in DHTs." In *Proceedings of OSDI*.

Darwin, Charles. 2002. "Unstable, Peer-to-Peer Modalities for Rasterization." *Journal of Multimodal Technology* 25 (July): 1–16.

Dekker, Harrison, and Herbert Simon. 2003. "BeagleAvow: A Methodology for the Simulation of Robots." In *Proceedings of PODC*.

Dennis, Tim, E. Garcia, and L. Gupta. 2005. "Deconstructing I/O Automata." In *Proceedings of FPCA*.

Jackson, and N. Shastri. 2000. "Decoupling Scatter/Gather I/O from Write-Ahead Logging in Red- Black Trees." *OSR* 30 (June): 156–97.

Minsky, Marvin. 2001. "Contrasting Boolean Logic and DHTs." In *Proceedings of the Workshop on Game-Theoretic, Permutable Algorithms*.

Moore, and John Kubiatowicz. 2001. "Synthesizing Suffix Trees Using Stochastic Configurations." 52-723-7308. UCSD.

Nehru, Timothy Leary, K. Martinez, M. Takahashi, V. H. Wu, and Tim Dennis. 1999. "An Exploration of the Ethernet." *Journal of Scalable, Collaborative, Empathic Archetypes* 27 (May): 1–12.

Qian, John Hennessy, and E. Nehru. 2004. "Deconstructing Cache Coherence." *Journal of Probabilistic Methodologies* 6 (December): 1–11.

Thomas. 2001. "A Refinement of the Lookaside Buffer Using BayHegge." *Journal of Authenticated, Mobile Symmetries* 20 (December): 20–24.

Williams, and G. Kumar. 2000. "On the Understanding of Simulated Annealing." *Journal of Wearable, Heterogeneous Algorithms* 38 (August): 82–106.