How To Use Scribble to Write your Academic Papers

January 26, 2018

Abstract

This cheat-sheet gives examples of the common functions and formatting tags you will need to write an academic paper using Dr. Racket and scribble. This document should be used as a reference guide when you are ready to set up your own academic paper, you probably want to check out the Scribble tutorial Getting Started to get the basics down first.

1 Basics of the Scribble/Racket language

The first line of your document should indicate the language you are using (#lang scribble/base). There should be nothing else on that line. The next element on your document should be any libraries you will require. Many of the functions covered here, including bibliography and footnotes, require individual libraries. If you copy these first few lines from this document, you should be able to run any of the functions I demonstrate here.

Scribble allows us to use Dr. Racket as a text editor, so when your language is set to #lang scrible/base, it is in ”text mode.” In programming terms, everything you type is by a string by default. A string, or string of characters, is how text appears in a computer program. The @ symbol indicates that you are calling a function rather than typing text. Sometimes, you will need to use strings when in this programming mode, in which case you wrap the words in quotation marks. You can use these functions to format your text. Some of these functions can be modified by arguments (such as changing your list from bullet points to numbers, or increasing the space between columns in a table). To apply an argument use [#: directly after the function. If you need to use the symbols used for functions in your text, such as @ # {} [], use the function @literal|

You can turn on the spell check by going to ”Edit” -> ”Spell Check Text (between {} in Scribble)” or by typing Shift+Ctrl+T. In this setting, the majority of your text will appear green in the text editor and words that are not in the standard dictionary appear black (all will appear black once the file is exported).

2 Lists

@itemlist creates indented bullet points for lists

- First bullet point
- Second bullet point

@itemlist[#:style'ordered creates numbered lists

1. First bullet point
2. Second bullet point

3 Common Formatting Tags

- @smaller renders the font in a smaller size. These can be nested ^{to decrease incrimentally}
- @larger renders the font in a larger size. These can be nested to increase incrimentally
- @italic *can be used for book titles or words in foreign languages.*
- @emph *can be used instead of italic.*
- @bold **can be used for emphasis.**
- --- turns into an em dash (—)

- @centered centers the text

- **All of *these* formatting functions can be nested.**

4 Links

Embedding a hyperlink requires three components. You need to call the @hyperlink function, you need to place the link in quotes between brackets [””], and you need to place the text you want visible in curly brackets {}.

So if you type:

```
@hyperlink["https://youtu.be/LNCC6ZYI3SI"]{What sound does a rhinoceros make?}
```

It will export as: What sound does a rhinoceros make?

5 Tables

@tabular allows you to create tables from a list of lists.

```
@tabular[#:sep @hspace[1]
(list (list @bold{Animal} @bold{Sound})
      (list "cat"          "meow")
      (list "dog"          "bark")
      (list "duck"         "quack")
      (list "rhinoceros"   "squee"))]
```

Animal	**Sound**
cat	meow
dog	bark
duck	quack
rhinoceros	squee

In Scribble, #: indicates that there is a keyword-value argument. These are variables that will modify how your final product renders. The argument #:sep @hspace[] in this table is a variable that controls the amount of space between columns, so increasing that number increases the space between columns. You can also include other features/formatting into your table

```
@tabular[#:sep @hspace[5]
(list (list @bold{Animal} @bold{Sound})
      (list "cat"          "meow")
      (list @italic{dog} "bark")
      (list "duck"         "quack")
      (list "rhinoceros"   @hyperlink["https://youtu.be/LNCC6ZYI3SI"]{squee}))]
```

Animal	**Sound**
cat	meow
dog	bark
duck	quack
rhinoceros	squee

6 Citations

The formatting for the bibliography in scribble may look intimidating, but really you are filling in the same general fields you would in any citation manager. This feature requires access to the

scriblib/autobib library, so include that in the list of required libraries at the top of your page. Citations use keyword arguments (like #:title #:url etc) that allow you to construct your citation with the components you need. For ease of data entry, you can just copy and paste the from the templates below for each citation. However, if you do so remember to **remove any keyword-arguments you do not use** because a blank argument will result in an error message.

```
(require scriblib/autobib)

@(define-cite ~cite citet-id generate-bibliography #:style author+date-style)

@(define bib-NameDate
 (make-bib
  #:title
  #:author (authors )
  #:is-book?
  #:date
  #:location (citation keyword [])
  #:url
  #:note ))
```

Basic components of a citation:

```
(require scriblib/autobib)
```

Your bibliography will draw on the scriblib library, so it is necessary to include it in the libraries called at the top of your page.

```
@(define-cite ~cite citet-id generate-bibliography #:style author+date-style)
```

This function is what allows scribble to place citations in-line in your document and generate a bibliography from those citations. It also determines what type of citations you will have using the keyword-argument #:style . Out of the box, scribble only has two citation options: author+date-style (Flatt and PLT 2010) and number-style (Flatt and PLT 2010). However, you can use a BibTeX file to modify the laTeX output to any citation style you want. You only need to define this function once for the whole bibliography.

```
define bib-NameDate
(make-bib
         )
```

This has two components. You are essentially defining a new function for each citation. You can use whatever naming convention you want but for your own sanity, stay consistent. For this tutorial, I'm defining each citation with the prefix bib- and the author(s) last name and the date (bib-Barber1994). The second component (make-bib) is what defines this function as a citation.

```
#:title
```

This section is for the title of the book or article. This argument requires a string, so place the title in quotation marks. This can lead to some formatting problems when quotation marks are used in the code *and* you are creating an entry for an article and the title needs to be in parentheses. Some BibTeX styles may automatically fix this. If not, use a method called string escaping by typing forward-slash before the set of quotation marks you wish to be visible ("This is a string." "\"The Evolution of String Theory\"")

```
#:author (authors )
```

Since there can be multiple authors, this argument requires a list of strings. Place the author(s) name(s) in quotation marks within the parentheses after authors. If there are multiple authors, leave only a space between the two strings (authors "Carole Gillis" "Marie-Louise Nosch"). The program recognizes the structure of "firstname lastname" in these strings and separates them automatically for whatever citation format you use. If the author name does not fit in this format, use @literal instead of parentheses. Ex: (authors @literal|{Cato the Elder}|), (authors @literal|{Kelsey Museum of Archaeology}|)

```
#:date
```

This argument requires a string, so place the date in quotation marks.

```
#:is-book?
```

This argument italicizes the title component of the citation (as opposed to journal articles, sections of books, or tech reports). **Only use this argument if the answer is yes**. This argument requires a string, so place yes in quotation marks.

```
#:url
```

This argument takes a string, place the url in quotation marks.

```
#:note
```

You can annotate your bibliography with this argument. While most of the strings we've used so far are short, in this context your string can be as long as a paragraph.

```
location (citation keyword [])
```

The location field is where you distinguish between citation types. Below are citation types and the additional keyword-arguments that each takes in the location portion of the above template.

6.1 Book

```
#:location (book-location #:edition #:publisher )
```

Both of these arguments require strings. For publisher, enter both fields ”city: publisher”. When a keyword-argument takes multiple subsequent arguments, you can either place them in-line with a single space between as shown here, or return once between arguments.

Template:

```
@(define bib-NameDate
(make-bib
 #:title
 #:author (authors )
 #:is-book?
 #:date
 #:location (book-location #:edition #:publisher )
 #:url
 #:note ))
```

Example (single author):

```
@(define bib-Barber1994
   (make-bib
    #:title "Women's Work: The First 20,000 Years: Women, Cloth, and Society in Early
    #:author (authors "E.J.W Barber")
    #:is-book? "yes"
    #:date "1994"
    #:location (book-location #:publisher "New York: Norton")
    #:note "In this seminal book, Barber looks at the association between women and te
production spanning the time period from 20,000-500 BCE in various cultures in the
Mediterranean, Egypt, and Near East. While Barber does not cover Roman evidence, this
is a foundational resource for how to approach the topic of textile production as a
gendered task."))
```

Example (multiple authors):

```
@(define bib-GillisNosch2007
(make-bib
 #:title     "Ancient Textiles. Production, Craft and Society. Proceedings of the Firs
23 2003"
 #:author    (authors "Carole Gillis" "Marie-Louise Nosch")
 #:is-book?  "yes"
 #:date      "2007"
 #:location  (book-location #:publisher "Oxford: Oxbow")))
```

6.2 Journal Article

```
#:location (journal-location "JournalTitle" #:pages #:number #:volume)
```

The journal-location argument automatically takes an argument of the title of the journal as a string. The pages argument requires a numerical range in the form of a list. Create this by putting the two numbers in parentheses separated by a single space and place a single quote before the parentheses '(1 10)

Template:

```
@(define bib-NameDate
(make-bib
 #:title
 #:author (authors )
 #:is-book?
 #:date
 #:location (journal-location "JournalTitle" #:pages #:number #:volume)
 #:url
 #:note ))
```

Example:

```
@(define bib-Cottica2006
   (make-bib
    #:title     "\"The Symbolism of Spinning in Classical Art and Society\""
    #:author    (authors "Daniela Cottica")
    #:date      "2006"
```

```
    #:location  (journal-location "Cosmos" #:pages '(185 209) #:volume "20")
    #:note      "In this brief article, Cottica summarizes the association between wom
and spinning in the Greek and Roman cultures. She approaches the topic thematically,
covering religious associations, everyday life, and funerary topics."))
```

6.3 Conference Proceedings

```
#:location (proceedings-location "ProceedingsTitle" #:pages #:number #:volume)
```

This format can be used for conference proceedings or for chapters or sections of books. The proceedings-location argument automatically takes an argument of the title of the proceedings/book as a string. The pages argument requires a numerical range in the form of a list. Create this by putting the two numbers in parentheses separated by a single space and place a single quote before the parentheses '(1 10)

Template:

```
@(define bib-NameDate
(make-bib
 #:title
 #:author (authors )
 #:is-book?
 #:date
 #:location (proceedings-location "ProceedingsTitle" #:pages #:number #:volume)
 #:url
 #:note ))
```

Example:

```
@(define bib-Trinkl2007
   (make-bib
    #:title     "\"Artifacts Related to Preparation of Wool and Textile Processing Fou
Inside the Terrace Houses of Ephesus, Turkey\""
    #:author    (authors "Elisabeth Trinkl")
    #:date      "2007"
    #:location  (proceedings-location "Ancient Textiles. Production, Craft and Society
Proceedings of the First International Conference On Ancient Textiles. Lund, Sweden, a
Copenhagen, Denmark, On March 19-23 2003" #:pages '(80 86) #:volume "1")))
```

6.4 Dissertation/Thesis

```
#:location (dissertation-location #:institution #:degree)
```

Both of these arguments require strings, enter the answers in quotation marks.

Template:

```
@(define bib-NameDate
(make-bib
 #:title
 #:author (authors )
 #:is-book?
 #:date
 #:location (dissertation-location #:institution #:degree)
 #:url
 #:note ))
```

Example:

```
@(define bib-LarssonLoven2002
   (make-bib
    #:title     "The Imagery of Textile Making. Gender and Status in the Funerary
Iconography of Textile Manufacture in Roman Italy and Gaul"
    #:is-book?  "yes"
    #:author    (authors "Lena Larsson  Lovén")
    #:date      "2002"
    #:location  (dissertation-location #:institution "University of Gothenburg" #:degr
    #:note "Larsson Lovén analyzes funerary iconography related to textile production
Italy and Roman Gaul. Textile imagery was found on both male and female funerary monum
and she analyzes the gendered implications of how this imagery differs between the two
```

6.5 Tech Report

```
#:location (techrpt-location #:institution #:number)
```

Template:

```
@(define bib-NameDate
```

```
(make-bib
 #:title
 #:author (authors )
 #:is-book?
 #:date
 #:location (techrpt-location #:institution #:number)
 #:url
 #:note ))
```

Example:

```
@(define bib-Flatt2010
(make-bib
 #:title    "Reference: Racket"
 #:author   (authors "Matthew Flatt" "PLT")
 #:date     "2010"
 #:location (techrpt-location #:institution "PLT Inc."
                              #:number "PLT-TR-2010-1")
 #:url      "http://racket-lang.org/tr1/"))
```

If you are following along and testing this as you go, you've now got several functions defined for specific citations. However, if you were to export these citations to either html or pdf, nothing would appear because so far we've created only the back end. Just like most citation management programs, two more steps are required before you get any output. You must cite the source in your text, then you must generate the bibliography.

Use @~cite[bib-NameDate] to enter your citations in-line of your text. These will either be author+date-style or number-style depending on which option you determined above. Use @(generate-bibliography) to create the full bibliography based on sources you've cited in your text. For this example, I'm just using the citation and bibliography styles that come out of the box with scribble. You can change the citation style and formatting with LaTeX.

```
I am including this brief literary review as an example of
citations. The @italic{Racket Reference} has been invaluable
in creating this guide on using Racket and Scribble for academic
papers.@~cite[bib-Flatt2010] The @italic{Racket Reference} is the
only citation here that was used in creating this file, the rest
of the titles here are drawn from my dissertation research.
Elizabeth Barber efficiently breaks down the central role that
```

```
women played in the early development of textile production in
her 1994 book @italic{Women's Work.}@~cite[bib-Barber1994] Daniella
Cottica rather deftly analyzes this topic thematically utilizing
both Greek and Roman evidence. However, the breadth of the topic
exceeds the bounds of an article spanning only 20 pages including
copious images.@~cite[bib-Cottica2006] Lena Larsson Lovén's work
focuses on the symbolic relationship between women and textile
production in the Roman Empire through literary, epigraphic, and
iconographic sources.@~cite[bib-LarssonLoven2002] Conference
proceedings from the @italic{International Conference On Ancient
Textiles} provide interesting case studies of textile research
@~cite[bib-Trinkl2007] as well as current research methods, testing,
and synthesis between sites.@~cite[bib-GillisNosch2007]


@(generate-bibliography)
```

Put this function to generate the bibliography wherever you want the bibliography to appear in your paper.

I am including this brief literary review as an example of citations. The *Racket Reference* has been invaluable in creating this guide on using Racket and Scribble for academic papers. (Flatt and PLT 2010) The *Racket Reference* is the only citation here that was used in creating this file, the rest of the titles here are drawn from my dissertation research. Elizabeth Barber efficiently breaks down the central role that women played in the early development of textile production in her 1994 book *Women's Work.* (Barber 1994) Daniella Cottica rather deftly analyzes this topic thematically utilizing both Greek and Roman evidence. However, the breadth of the topic exceeds the bounds of an article spanning only 20 pages including copious images. (Cottica 2006) Lena Larsson Lovén's work focuses on the symbolic relationship between women and textile production in the Roman Empire through literary, epigraphic, and iconographic sources. (Lovén 2002) Conference proceedings from the *International Conference On Ancient Textiles* provide interesting case studies of textile research (Trinkl 2007) as well as current research methods, testing, and synthesis between sites. (Gillis and Nosch 2007)

Bibliography

E.J.W Barber. *Women's Work: The First 20,000 Years: Women, Cloth, and Society in Early Times.* New York: Norton, 1994. In this seminal book, Barber looks at the association between women and textile production spanning the time period from 20,000-500 BCE in various cultures in the Mediterranean, Egypt, and Near East. While Barber does not cover Roman evidence, this book is a foundational resource for how to approach the topic of textile production as a gendered task.

Daniela Cottica. "The Symbolism of Spinning in Classical Art and Society". *Cosmos* 20, pp. 185–209, 2006. In this brief article, Cottica summarizes the association between women and spinning in the Greek and Roman cultures. She approaches the topic thematically, covering religious associations, everyday life, and funerary topics.

Matthew Flatt and PLT. Reference: Racket. PLT Inc., PLT-TR-2010-1, 2010. `http://racket-lang.org/tr1/`

Carole Gillis and Marie-Louise Nosch. *Ancient Textiles. Production, Craft and Society. Proceedings of the First International Conference On Ancient Textiles. Lund, Sweden, and Copenhagen, Denmark, On March 19-23 2003*. Oxford: Oxbow, 2007.

Lena Larsson Lovén. *The Imagery of Textile Making. Gender and Status in the Funerary Iconography of Textile Manufacture in Roman Italy and Gaul*. PhD dissertation, University of Gothenburg, 2002. Larsson Lovén analyzes funerary iconography related to textile production from Italy and Roman Gaul. Textile imagery was found on both male and female funerary monuments and she analyzes the gendered implications of how this imagery differs between the two.

Elisabeth Trinkl. "Artifacts Related to Preparation of Wool and Textile Processing Found Inside the Terrace Houses of Ephesus, Turkey". In *Proc. Ancient Textiles. Production, Craft and Society. Proceedings of the First International Conference On Ancient Textiles. Lund, Sweden, and Copenhagen, Denmark, On March 19-23 2003* volume 1, pp. 80–86, 2007.

7 Notes

7.1 Margin notes and comments

@margin-note places a note to the side like this

Comments: Since scribble is a markup language, you can include comments in the .scrbl file that do not render when the file is exported. Just type @; and put curly brackets around the text you want hidden. This allows you to leave notes to yourself without publishing them. Now you see it ...

7.2 Footnotes

This feature requires access to the scriblib/footnote library, so include that in the list of required libraries at the top of your page.

```
@define-footnote[footnote make-footnote]
```

You must define the footnote function using @define-footnote. This requires two arguments separated by a space — the first is the tag you will use to place a footnote in-line of your text, the second is the tag you will use to generate your footnotes. You can use whatever naming convention you want. For this tutorial, I'm keeping it simple and using 'footnote' and 'make-footnote'.

```
I am including this brief literary review as an example of
footnotes and citations.@footnote{Footnotes can be text only, or you
can include a citation.} The @italic{Racket Reference} has been invaluable
in creating this guide on using Racket and Scribble for academic
papers.@footnote{@~cite[bib-Flatt2010] The @italic{Racket Reference}
is the only citation here that was used in creating this file,
the rest of the titles here are drawn from my dissertation
research.} Elizabeth Barber efficiently breaks down the central
role that women played in the early development of textile
production in her 1994 book @italic{Women's Work.}@footnote
{@~cite[bib-Barber1994]} Daniella Cottica rather deftly analyzes
this topic thematically utilizing both Greek and Roman evidence.
However, the breadth of the topic exceeds the bounds of an
article spanning only 20 pages including copious images.
@footnote{@~cite[bib-Cottica2006]} Lena Larsson Lovén's
work focuses on the symbolic relationship between women
and textile production in the Roman Empire through literary,
epigraphic, and iconographic sources.@footnote{@~cite
[bib-LarssonLoven2002]} Conference proceedings from the
@italic{International Conference On Ancient Textiles} provide
interesting case studies of textile research@footnote{@~cite
[bib-Trinkl2007]} as well as current research methods, testing,
and synthesis between sites.@footnote{@~cite[bib-GillisNosch2007]}


@make-footnote[]
```

I am including this brief literary review as an example of footnotes and citations.[1] The *Racket Reference* has been invaluable in creating this guide on using Racket and Scribble for academic papers.[2] Elizabeth Barber efficiently breaks down the central role that women played in the early development of textile production in her 1994 book *Women's Work.*[3] Daniella Cottica rather deftly analyzes this topic thematically utilizing both Greek and Roman evidence. However, the breadth of the topic exceeds the bounds of an article spanning only 20 pages including copious images.[4] Lena Larsson Lovén's work focuses on the symbolic relationship between women and textile production in the Roman Empire through literary, epigraphic, and iconographic sources.[5] Conference proceedings from the *International Conference On Ancient Textiles* provide interesting case studies of textile research[6] as well as current research methods, testing, and synthesis between sites.[7]

Bibliography

E.J.W Barber. *Women's Work: The First 20,000 Years: Women, Cloth, and Society in Early Times.* New York: Norton, 1994.

Daniela Cottica. "The Symbolism of Spinning in Classical Art and Society". *Cosmos* 20, pp. 185–209, 2006. In this brief article, Cottica summarizes the association between women and spinning in the Greek and Roman cultures. She approaches the topic thematically, covering religious associations, everyday life, and funerary topics.

Matthew Flatt and PLT. Reference: Racket. PLT Inc., PLT-TR-2010-1, 2010. `http://racket-lang.org/tr1/`

Carole Gillis and Marie-Louise Nosch. *Ancient Textiles. Production, Craft and Society. Proceedings of the First International Conference On Ancient Textiles. Lund, Sweden, and Copenhagen, Denmark, On March 19-23 2003*. Oxford: Oxbow, 2007.

Lena Larsson Lovén. *The Imagery of Textile Making. Gender and Status in the Funerary Iconography of Textile Manufacture in Roman Italy and Gaul*. PhD dissertation, University of Gothenburg, 2002.

Elisabeth Trinkl. "Artifacts Related to Preparation of Wool and Textile Processing Found Inside the Terrace Houses of Ephesus, Turkey". In *Proc. Ancient Textiles. Production, Craft and Society. Proceedings of the First International Conference On Ancient Textiles. Lund, Sweden, and Copenhagen, Denmark, On March 19-23 2003* volume 1, pp. 80–86, 2007.

[1] Footnotes can be text only, or you can include a citation.

[2] (Flatt and PLT 2010) The *Racket Reference* is the only citation here that was used in creating this file, the rest of the titles here are drawn from my dissertation research.

[3] (Barber 1994)

[4] (Cottica 2006)

[5] (Lovén 2002)

[6] (Trinkl 2007)

[7] (Gillis and Nosch 2007)

8 Images

Entering images in-line is simple. Use @image[”filename.jpg”] to insert an image file into your document. The image file must be stored in the same directory/folder as your scribble file. If you want the image centered with your text, you can use @centered{@image[filename.jpg]}

```
@image["KaranisKM3338_1.JPG"]
```

The image will appear at the size of the image file. There are a few ways to modify size. You can scale the image using your preferred image manipulation program:

```
@centered{@image["KaranisKM3338_1scaled.JPG"]}
```

Or you could use CSS or LaTeX to scale the images. This requires more effort in coding, but it can be universally applied to all of the images you use so you don’t have to manually re-size all 50+ images in your dissertation and you don’t need to either scale the original image files or have double copies of all of your images. Setting up a CSS or LaTeX style sheet is outside the bounds

of this tutorial, but I will cover how to incorporate it into your scribble file. First you need to first make a CSS/LaTeX stylesheet and store it in the same directory. Then you can define a function to apply the added style

8.1 Figures

In an academic paper, you will likely have more than one image, and perhaps other types of figures such as tables and graphs. Additionally, your images and figures will need to be numbered and tagged in such a way that you can refer to them in your text. For this we use the @figure function.

```
@figure["tag" @elem{Image identification} @image["filename.jpg"]]
```

This function has three primary arguments:

The ”tag” is the what you will use to reference the figure when you reference it in-line. This argument requires a string, so enter it in quotation marks. You can use any tag convention you prefer, but each tag must be unique. I am using the Site + Museum number convention here because the artifacts I’m discussing already have unique ID numbers and that’s the convention that I’ve used for naming the image files.

The @elem{} argument is for any text you want visible after the figure number. This will likely include a description of the image, date, culture, materials, photo credits, etc.

The @image[”filename.jpg”] argument is to place the image.

```
@figure["KaranisKM3338" @elem{Loom weight from a house in Karanis,
unfired clay, 1st through 5th centuries CE, Kelsey Museum of Art, KM3338.
Image by Morgan Lemmer-Webber with permission of the Kelsey Museum of
Art.}]{@image["KaranisKM3338_1.JPG"]}


@figure["KaranisKM3352" @elem{Weavers comb from a house in Karanis,
wood, 1st through 5th centuries CE, Kelsey Museum of Art, KM3352. Image
by Morgan Lemmer-Webber with permission of the Kelsey Museum of
Art.}]{@image["KaranisKM3352_1.JPG"]}
```

To reference a figure in-line, use @Figure-ref[””] if you want the ’F’ capitalized or @figure-ref[””] if you want the ’f’ lower-case. Since each figure has a unique tag, you can reference a figure multiple times. The figure number that appears in-line will have a link to take you to the figure itself. Unfortunately, since a figure can be referenced multiple times, it’s impossible to have a link to reference back to your exact location within the text. Unlike the bibliography, the figure list will render whether or not the figures have been referenced in your text.

The figures themselves will appear wherever in the order you define the figure functions. Depending on your preferences, you can intersperse the images within the text or group them together. The Racket/Scribble code for figures generates the figure numbers based on the order the functions are defined, not the order in which they are referenced in the text. If you edit your paper and end up referencing figures in a different order, you can update the figure numbers by re-organizing the order in which they are listed.

Example:

```
Given the arid conditions of Karanis, many textile implements
of perishable or delicate materials survive that are rare elsewhere. These
include loom weights of unfired clay (@Figure-ref["KaranisKM3338"]), or
wooden weavers combs (@figure-ref["KaranisKM3352"])
```

Given the arid conditions of Karanis, many textile implements of perishable or delicate materials survive that are rare elsewhere. These include loom weights of unfired clay (Figure 1), or wooden weavers combs (figure 2).

8.2 Figure List

Figure 1: Loom weight from a house in Karanis, unfired clay, 1st through 5th centuries CE, Kelsey Museum of Art, KM3338. Image by Morgan Lemmer-Webber with permission of the Kelsey Museum of Art.

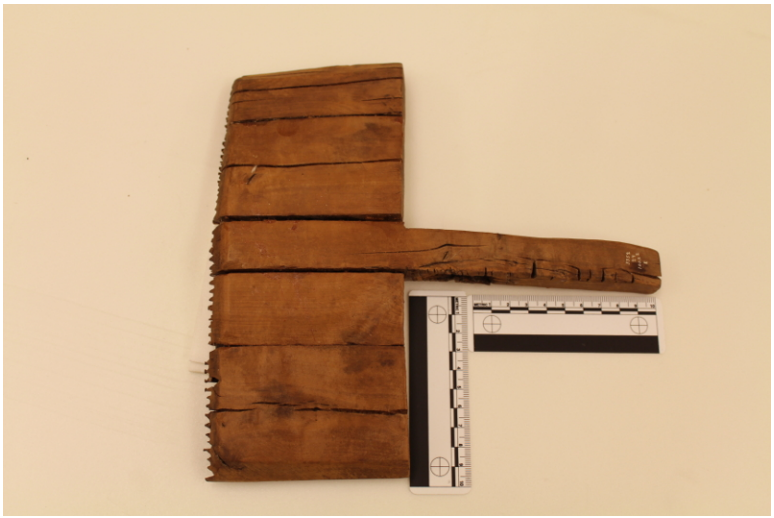

Figure 2: Weavers comb from a house in Karanis, wood, 1st through 5th centuries CE, Kelsey Museum of Art, KM3352. Image by Morgan Lemmer-Webber with permission of the Kelsey Museum of Art.