# MSc Research Skills

# Topic: Citations and Reference List

D G Rossiter

University of Twente.
Faculty of Geo-information Science & Earth Observation (ITC)

April 17, 2014

---



---

UT/ITC Enschede

# Topics

1. **Citations**

2. **Reference list**

# Topic: Citations

Science is a **collective enterprise**; any thesis or paper is only one small building-block.

**Citations** to other's works are used for anything that is not the result of the author's own creative effort.

These appear two places in the document:

- **in-text** citation: next to the information it supports; refers to . . .
- . . . a **reference list entry**: in a list at the end of the text.

*Note*: The following examples mostly use a **numbered** citation style to link the in-text citation to the reference list entry, e.g. [1]

Other styles use an **author-date** system, e.g. (Jones 2001).

Still others use an **abbreviation** system, e.g. [Jon2001].

Any consistent style that presents the required information is acceptable at ITC; see second part of this lecture.

# Citations as part of the text

Citations form part of the text. They can either be **supporting** or **descriptive**.

**supporting** At the end of a sentence, clause, or word, supporting a statement just made.

- Example: "The Hungarian Environmental Monitoring System is a point-vector database containing 1236 soil profile descriptions [1]."
- Example: "Pilot projects have been carried out in Australia [1], China [2] and Vietnam [3]."

**descriptive** The reference is being discussed directly.

- The author's names or some substitute is directly mentioned in the text.
- Example: "The successful clustering of the profiles by principal components analysis matches the results of Gobin *et al.* [1], . . . "

The following slides have examples of both.

# Purpose of citations (1)

To present **definitions and concepts** proposed by others:

▷ Heuvelink [1] distinguishes two major conceptual models of soil spatial variability: the Discrete (DMSV) and Continuous (CMSV).

or . . .

▷ There are two major conceptual models of soil spatial variability: the Discrete (DMSV) and Continuous (CMSV) [1].

Entry in the list of references:

[1] Heuvelink, G. B. M. 1998. *Error propagation in environmental modelling with GIS*. Research Monographs in GIS. London: Taylor & Francis.

The first form is more explicit about Heuvelink's role in proposing these definitions.

# The same citation in an author-date style

Here, APA-6th:

▷ Heuvelink (1998) distinguishes two major conceptual models of soil spatial variability: the Discrete (DMSV) and Continuous (CMSV).

or . . .

▷ There are two major conceptual models of soil spatial variability: the Discrete (DMSV) and Continuous (CMSV) (Heuvelink, 1998).

Entry in the list of references:

> Heuvelink, G. B. M. (1998) *Error propagation in environmental modelling with GIS*. Research Monographs in GIS. London: Taylor & Francis.

# Purpose of citations (2)

To **present opinions** that are not yours, and allow the reader to go back to the original source and check if you correctly summarised it.

▷ McBratney *et al.* [1] argue that pedometric techniques are the future of soil survey.

Entry in the list of references:

[1] McBratney, A. B.; Odeh, I. O. A.; Bishop, T. F. A.; Dunbar, M. S.; & Shatar, T. M. 2000. *An overview of pedometric techniques for use in soil survey*. *Geoderma* **97**(3-4):293–327

Is that really a fair summary of their opinion?

# Purpose of citations (3)

To **present data and results** that are **not from your own research**, and allow readers of your work to find the original source if they wish.

▷ The Hungarian Environmental Monitoring System is a point-vector database containing 1236 soil profile descriptions [1].

Entry in the list of references:

[1] Dobos, E.; Micheli, E.; Baumgardner, M. F.; Biehl, L.; & Helt, T. 2000. *Use of combined digital elevation model and satellite radiometric data for regional soil mapping*. *Geoderma* **97**(3-4):367–391

# Purpose of citations (4)

To refer to **previous work on your topic**, which motivates your study and places it in context:

- ▷ The first systematic study of soil map quality was by Webster [5]. Somewhat later, a group at Cornell University worked for several years on aspects of soil survey adequacy, including accuracy assessment [1, 4]. At this same time, group at the Staring Centre in the Netherlands developed methods for quantifying map unit composition and thematic quality [2, 3].

# Entries in the list of references:

[1] Forbes, T. R.; Rossiter, D.; & Van Wambeke, A. 1982. *Guidelines for evaluating the adequacy of soil resource inventories*. SMSS Technical Monograph 4. Ithaca, NY: Cornell University Department of Agronomy, 1987 printing.

[2] de Gruijter, J. J. & Marsman, B. A. 1984. *Transect sampling for reliable information on mapping units*. In Nielson, D. R. & Bouma, J. (eds.), *Soil spatial variability: proceedings of a workshop of the ISSS and SSSA*, pp. 150–163. Wageningen: PUDOC.

[3] Marsman, B. A. & de Gruijter, J. J. 1986. *Quality of soil maps : a comparison of soil survey methods in a sandy area*. Soil survey papers 15. Wageningen: Soil Survey Institute.

[4] Soil Resources Inventory Group. 1981. *Soil resource inventories and development planning: Proceedings of workshops at Cornell University 1977-1978*. Soil Management Support Services (SMSS) Technical Monograph 1. Washington, DC: Soil Conservation Service, USDA

[5] Webster, R. & Beckett, P. H. T. 1968. *Quality & usefulness of soil maps*. *Nature* **219**:680–682

# Purpose of citations (5)

They refer to **standard methods**, so that you don't have to repeat them in your text. This is common in your 'Methods' chapter.

▷ Particle-size distribution was determined by the pipette method with pre-treatment for organic matter but not for carbonates [1].

Entry in the list of references:

[1] van Reeuwijk, L. P. 1995. *Procedures for soil analysis*. ISRIC Technical Paper 9. Wageningen: ISRIC

The cited reference should give a satisfactory explanation of the technical terms used here ("pipette method", "pre-treatment for organic matter", "pre-treatment for carbonates") so that the reader could reproduce your work. Otherwise you need to explain more.

# Purpose of citations (6)

They provide **detailed justification** of **mathematical or statistical** methods and formulas, so you don't have to derive or defend them.

▷ A formula for computing the variance $\sigma^2[\hat{k}]$ of the *kappa* map accuracy statistic was derived by Bishop *et al.* [1, §11.4.2] as: (*formula follows*)

Entry in the list of references:

[1] Bishop, Y.; Fienberg, S.; & Holland, P. 1975. *Discrete multivariate analysis: theory and practice*. Cambridge, MA: MIT Press

Note the courtesy reference to the section in this long book.

# Purpose of citations (7)

To refer to **other studies related to your results**, with which you should compare, in your 'Results' chapter.

▷ The successful clustering of the profiles by principal components analysis matches the results of Gobin *et al.* [1], who found that the first two components explained 64.7% of the total variance in a set of 72 pedons in southeastern Nigeria.

Entry in the list of references:

[1] Gobin, A.; Campling, P.; Deckers, J.; & Feyen, J. 2000. *Quantifying soil morphology in tropical environments: Methods and application in soil classification*. *Soil Science Society of America Journal* **64**:1423–1433

# Purpose of citations (8)

To allow the reader of your work material to go **deeper into a topic** than was necessary for your purposes.

▷ A detailed description of the theory of atmospheric correction is given in the ATCOR user's manual [1].

Entry in the list of references:

[1] Richter, R. 2006. *Atmospheric/Topographic correction for satellite imagery (ATCOR-2/3 User's Guide)*. Wessling (D): DLR, 6.2 edition

# When not to use a reference

1. If it's **your** idea or result:
   - ▷ On closer observation, it was obvious that the water samples all contained insect larvae . . .
2. If the fact is known to any person with a **relevant education** (for the intended audience):
   - ▷ Satellite remote sensing has an advantage over aerial photography: large areas are imaged all at once.
3. If the fact can be found in a standard **secondary-school** or **general reference**;
   - ▷ Since the area $A$ of a circle is $\pi r^2$, we can compute . . .
4. If the fact is **more or less fixed** and can be verified in many ways;
   - ▷ Cuba is a Caribbean nation . . .

# Citing material you can't read

- Always go back to **original sources** for facts that are established by them.
  - **Do not** cite a previous ITC thesis for anything except its **own results**.
- Reason: **do not trust** someone **else's interpretation**, you must read for yourself and make your own interpretation.
- Only two cases when you may cite something you haven't yourself read:

1. You **can't obtain** the original source; or
2. You **can't read** the original language.

but you need to cite some fact or result from them.

- It may be sufficient for your purpose to cite a **secondary source** (where you found the reference to these inaccessible sources).

# The “cited in” approach

Only if **absolutely necessary**, use the ‘cited in’ approach: cite the original author, but the bibliographic reference is to the source you yourself read.

▷ Kubiëna [2, cited in 1] was the first taxonomist to make the fundamental distinction between *terrestrial* and *aquatic* soils.

Entries in the list of references:

[1] Buol, S. W.; Hole, F. D.; & McCracken, R. J. 1989. *Soil genesis and classification*. Ames, IA: The Iowa State University Press, 3rd edition

[2] Kubiëna, W. L. 1948. *Entwicklungslehre des Bodens*. Wien: Springer-Verlag

In this case the author can not read the original German text [2], so is relying on the summary in an English-language textbook [1].

# Topic: Reference list

1. Purpose

2. What is included?

3. Reference style

# Purpose of the list of references

The **list of references** is:

- an **appendix** to a thesis or paper . . .
- . . . which **lists the sources** that are **cited** in the text.

This is not a **bibliography**, which is:

- a (usually categorised) list of **all sources consulted** (whether cited or not), or
- a **comprehensive list** of relevant sources for some topic.

# What items must appear in the list?

It's simple!

1. **Every reference in the text** must appear in the **reference list**.

2. **Every reference in the reference list** must appear in the **text**.

# Citation style in the reference list

There is **no ITC standard**.

This, **any consistent style** that presents the required information is acceptable. Some reasonable choices:

**Author-date** : *APA-6th* (American Psychological Association 6th)

**Numbered** : *IEEE*, *Advances in Applied Mathematics*

You could also select the style of a prominent journal in your field.

However, a minimum of information must be presented; see next slides. So some styles such as *Science* or *Nature* are not acceptable for an ITC thesis.

# What must appear in the citation? (1/3)

There must be sufficient information given for readers to **find the same source**. The rule is simple:

- Items in the list of references should be **easy for a professional librarian to find**.
- So: no **personal communications** or **unpublished materials** in the reference list (these are mentioned in the text only, if necessary).

▷ In 2008 the park office registered 4,120 visitors, of whom 1,120 were foreign nationals (Personal communication, Ms. Mary James, Park Liaison Officer, interview 12-Sept-2009).

# What must appear in the citation? (2/3)

1. **Minimum** information to find a source:

   **Journal article** Journal name or standard abbreviation; journal volume number; first page number
   **Book** Author (or editor); title; edition; publisher; city (if available)
   **Book chapter** Author of chapter; chapter number, further as for book
   **Digital resource** URL, **access date**

# What must appear in the citation? (3/3)

2. **Optional** information about a source:

   Other information (not necessary to find the source) may be added for the **reader's convenience**:

   **Journal article** title, authors,full page range, **DOI** (digital object identifier)
   **Book** number of pages, ISBN
   **Book chapter** chapter title, page range

   The DOI is used to locate the on-line article, via the DOI server dx.doi.org

# Examples: (1) journal article

*APA 6th:*

▷ Nijland, W., Addink, E. A., de Jong, S. M., & van der Meer, F. D. (2009). Optimizing spatial image support for quantitative mapping of natural vegetation. *Remote Sensing of Environment, 113*, 771-780. doi: 10.1016/j.rse.2008.12.002

*Geoderma*

▷ Nijland, W., Addink, E.A., de Jong, S.M. and van der Meer, F.D., 2009. Optimizing spatial image support for quantitative mapping of natural vegetation. Remote Sensing of Environment, 113, 771-780.

*Chicago Manual of Style, 15th edition*

▷ Nijland, W., E.A. Addink, S.M. de Jong, and F.D. van der Meer. "Optimizing Spatial Image Support for Quantitative Mapping of Natural Vegetation." Remote Sensing of Environment 113, no. 4 (2009): 771-780. doi:10.1016/j.rse.2008.12.002.

(continued . . . )

## *IEEE*

▷ [1] W. Nijland, E. A. Addink, S. M. de Jong, and F. D. van der Meer, "Optimizing spatial image support for quantitative mapping of natural vegetation," Remote Sensing of Environment, vol. 113, no. 4, pp. 771-780, 2009.

Note only APA and Chicago include the DOI.

# Examples: (2) books

*APA 6th:*

- Barrett, E. C., & Curtis, L. F. (1999). *Introduction to environmental remote sensing* (4th ed.). Cheltenham, Glos., UK: Stanley Thornes Publishers.

*Geoderma*

- Barrett, E.C. and Curtis, L.F., 1999. Introduction to environmental remote sensing. Stanley Thornes Publishers, Cheltenham, Glos., UK, xxi, 457 pp.

*Chicago Manual of Style, 15th edition*

- Barrett, E. C., and L. F. Curtis. Introduction to Environmental Remote Sensing. 4th ed. Cheltenham, Glos., UK: Stanley Thornes Publishers, 1999.

*IEEE*

- [1] E. C. Barrett and L. F. Curtis, Introduction to environmental remote sensing, 4th ed. Cheltenham, Glos., UK: Stanley Thornes Publishers, 1999.

# Examples: (3) chapter in an edited book

## *APA 6th:*

▷ Foody, G. M. (2004). Sub-Pixel Methods in Remote Sensing. In S. M. D. Jong & F. D. v. d. Meer (Eds.), *Remote Sensing Image Analysis: Including the Spatial Domain* (Ch 3). Dordrecht: Kluwer.

## *Geoderma*

▷ Foody, G.M., 2004. Sub-Pixel Methods in Remote Sensing. In: S.M.D. Jong and F.D. v.d. Meer (Editors), Remote Sensing Image Analysis: Including the Spatial Domain. Remote Sensing and Digital Image Processing, Vol. 5. Kluwer, Dordrecht, pp. Ch 3.

## *Chicago Manual of Style, 15th edition*

▷ Foody, G M. "Sub-Pixel Methods in Remote Sensing." In Remote Sensing Image Analysis: Including the Spatial Domain, edited by S. M. De Jong and F. D. Van der Meer, Ch 3. Dordrecht: Kluwer, 2004.

## *IEEE*

▷ [1] G. M. Foody, "Sub-Pixel Methods in Remote Sensing," in Remote Sensing Image Analysis: Including the Spatial Domain, S. M. D. Jong and F. D. v. d. Meer, Eds. Dordrecht: Kluwer, 2004, Ch 3.

# Examples: (4) web sites

*APA 6th:*

- NASA. (2008). TERRA, the EOS flagship. Retrieved 5 April 2013, from http://terra.nasa.gov/

*Geoderma*

- NASA, 2008. TERRA, the EOS flagship. Available at http://terra.nasa.gov/ (verified 5 April 2013).

*IEEE*

- [1] NASA, "TERRA, the EOS flagship", 2008. [Online]. Available: http://terra.nasa.gov/. [Accessed: 05-Apr-2013].

# Non-Latin scripts

Case 1: **Extended Latin**, e.g. Spanish, Portuguese, German, French, Polish, Turkish, Vietnamese . . .

- May be able to type on the keyboard and display/print in **extended typefaces**
- Or, can use standard **transliterations** to standard Latin: **follow a style guide**

Case 2: **completely non-Latin**, e.g. Cyrillic, Chinese, Persian, Arabic, Devangari, Thai . . .

- For an ITC thesis these references must be **translated** (scripts are considered unreadable)
- Many have English journal names, English translations of the title, and English abstracts

# Example – extended Latin script

- Helmes, T. (2004). Urbane Böden: Genese, Eigenschaften und räumliche Verteilungsmuster: Eine Untersuchung im Stadtgebiet Saarbrücken. Universität des Saarlandes, Saarbrücken.

Citation in an ITC thesis can be either the original (above) or translated by the thesis writer:

- Helmes, T. (2004). Urban soils: genesis, properties and spatial distribution pattern: an investigation in the urban area of Saarbrücken (in German). Saarland University, Saarbrücken.

The presence of this reference in the list implies that the ITC thesis author can read it in the original German.

# Example – non-Latin script

- 张春桂,潘卫华,陈惠,黄朝法. 2007. 利用多时相中分辨率卫星影像监测福建省植被覆盖变化. 遥感技术与应用 第22卷 第05期

Citation in an ITC thesis:

- Zhang, C.; Pan, W.; Chen, H.; Huang, C. 2007. Monitoring vegetation coverage change of Fujian using multi-temporal remote sensing image (in Chinese; English abstract). Remote Sensing Technology and Application **22**(5).

This journal has defined its own English name, and the article has an English title and abstract; if not you would have to translate all these. “In Chinese” tells the reader the article’s language.; “English abstract” tells the reader that there is an accessible abstract.

This reference implies the thesis author can read the Chinese original. **If only the English abstract was read**:

- Zhang, C.; Pan, W.; Chen, H.; Huang, C. 2007. Monitoring vegetation coverage change of Fujian using multi-temporal remote sensing image **(English Abstract)** (in Chinese). Remote Sensing Technology and Application **22**(5).

# Use of a bibliographic information manager

E.g., Mendeley[1], Zotero[2], EndNote[3],

Proper use ensures that:

1. All citations in the text are in the reference list, and vice-versa;
2. All citations in the text are formatted correctly;
3. All references in the reference list are formatted according to a consistent style.

But, the correct formatting is only as good as the **information in the bibliographic database**.

Recommended: ITC library's **Information Literacy Course**[4] module *"Mendeley"*

[1] http://www.mendeley.com/
[2] http://www.zotero.org/
[3] http://endnote.com/
[4] http://www.itc.nl/Pub/Home/library/Library-Guides/LiteracyCourse

# Bibliographic database tips

- Select the correct **reference type** (journal article, book, . . . )
- Don't trust any **import filter**. Review each imported record.
- Enter **corporate authors with a comma following**
  - "National Resources Conservation Service,"
- Enter **one author name per line**, as "LastName(s), First M."
  - Forbes, Terrence R.
  - Van Wambeke, Armand
- Enter non-European names **with a comma following**:
  - Gao Yan,
  - Atkilt Girma,

# Example – corporate author

- **Right**:

  Author name written as: **Food and Agriculture Organization of the United Nations,** (note the trailing comma)

  Reference formatted as:

  ▷ Food & Agriculture Organization of the United Nations. 1983. *Guidelines: land evaluation for rainfed agriculture*. Soils Bulletin 52. Rome, Italy: FAO

- **Wrong**:

  Author name written as: **Food and Agriculture Organization of the United Nations** (no trailing comma)

  Reference formatted as:

  ▷ Nations, F. . A. O. o. t. U. 1983. *Guidelines: land evaluation for rainfed agriculture*. Soils Bulletin 52. Rome, Italy: FAO

# Checking the list of references

The easiest way to see if you've got a correct list is to **read it yourself!**

Because, this readers will see and the information they will use to find the sources, if they wish.

If you see any problems:

1. **fix them in the bibliographic database**
2. **recompile the document**
3. **check again**

**Never** edit a citation or reference in the document!!

**Always** correct any problem in the bibliographic database and recompile!!