Writing

Literature Review

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What is Literature Review

In terms of a literature review, "the literature" means

the works you consulted in order to understand and investigate your research problem.

http://web.pdx.edu/~bertini/pdf/literature_review.pdf

- The literature review is a critical look at the existing research that is significant to the work that you are carrying out.
- Some people think that it is a summary: This is not true.
- Although you need to summarize relevant research, it is also vital that you evaluate this work, show the relationships between different work, and show how it relates to your work.

http://web.pdx.edu/~bertini/pdf/literature_review.pdf

- You cannot simply give a concise description of, for example, an article: you need to select what parts of the research to discuss (e.g. the methodology), show how it relates to the other work (e.g. What other methodologies have been used? How are they similar? How are they different?) and show how it relates to your work (what is its relationship to your methodology?).

  http://web.pdx.edu/~bertini/pdf/literature_review.pdf

Sources

- Journal articles
- Books
- Conference proceedings
- Government/corporate reports
- Newspapers
- Theses and dissertations
- Internet
- Magazines

Be careful. Select the right sources!

Purpose of the Literature Review

A good literature review shows

- that you are aware of what is going on in the field, and thus your credentials
- that there is a theory base for the work you are proposing to do
- how your work fits in with what has already been done
  (it provides a detailed context for your work)
- that your work has significance
- that your work will lead to new knowledge

http://library.cput.ac.za/library_pdf/literature_review.pdf

Good Literature Review

According to Caulley (1992) of La Trobe University, the literature review should:

- compare and contrast different authors' views on an issue
- group authors who draw similar conclusions
- criticize aspects of methodology
- note areas in which authors are in disagreement
- highlight exemplary studies
- highlight gaps in research
- show how your study relates to previous studies
- show how your study relates to the literature in general
- conclude by summarizing what the literature says

http://library.bcu.ac.uk/learner/writingguides/1.04.htm

Organization of a Literature Review

- By subject (if lit review covers more than one subject)
- Chronologically
- By theme, idea, trend, theory, or major research studies
- By author
- By argumentative stance In all methods, relationships between elements (e.g., subject, theme, author, etc.) must be shown.

Beginning the Writing

Introduce your lit review by

- Defining or explaining the primary problem addressed by the thesis and thus, by the sources you choose, or
- Explaining main conflict(s) in the literature, or
- Explaining the time frame you will review, or
- Offer a rationale for your choice of source material, or
- Using all or some of the points above.

*A Lit Review must have **its own thesis** (e.g., More and more cultural studies scholars are accepting popular media as a subject worthy of academic consideration; others scoff at the very idea).*

Body of the Literature Review

- Use subheadings if dividing the lit review topically, thematically, according to argumentative perspective, or according to time period.
- Be sure to show relationships between sources.
- Make explicit connections between reviewed sources and thesis.
- Discuss source's significant contributions.
- Do not develop ideas or use sources that are irrelevant to your thesis overall.
- References to prior studies should be in past tense; references to narrative or text other than studies should be in present tense.
- **Avoid plagiarizing** your sources

Concluding the Literature Review

- Summarize ideas, conflicts, themes, or historical (or chronological) periods.
- Contextualize your thesis topic within the summary.
- Point out gap(s) in scholarship and, show how your research helps fill the gap(s).
- (Transition to your next chapter.)

Recommendations

- You should group together and compare and contrast the varying opinions of different writers on certain topics.
- What you must not do is just describe what one writer says, and then go on to give a general overview of another writer, and then another, and so on.
- Your structure should be dictated instead by topic areas, controversial issues or by questions to which there are varying approaches and theories.
- Within each of these sections, you would then discuss what the different literature argues, remembering to link this to your own purpose.
- Linking words are important. If you are grouping together writers with similar opinions, you would use words or phrases such as: *similarly, in addition, also, again*
- More importantly, if there is disagreement, you need to indicate clearly that you are aware of this by the use of linkers such as: *however, on the other hand, conversely, nevertheless*
- At the end of the review you should include a summary of what the literature implies, which again links to your hypothesis or main question.

Revising the Literature Review

Questions to Ask Yourself

- Have I accurately represented the author's views?
- Is source material research current and relevant to thesis topic?
- Have I shown relationships between sources?
- Is there a clear connection between thesis topic and the LR?
- Are all sources documented accurately?
- Have I used effective transitions from idea to idea, source to source, paragraph to paragraph?
- Is my analysis of sources well developed?
- Have I represented all conflicts or argumentative sides fairly?

Example 1

Automated storage and retrieval systems (AS/RS) are being introduced into the industry and warehousing at an increasing rate. Forecasts indicate that this trend will continue for the foreseeable future (see [1]). Research in the area of AS/RS has followed several avenues. Early work by Hausman, Schwarz and Graves [6, 7] was concerned with storage assignment and interleaving policies, based on turnover rates of the various items. Elsayed [3] and Elsayed and Stern [4] compared algorithms for handling orders in AR/RS. Additional work by Karasawa et al. [9], Azadivar [2] and Parry et al. [11] deals with the design of an AS/RS and the determination of its throughput by simulation and optimization techniques. Several researchers addressed the problem of the optimal handling unit (pallet or container) size, to be used in material handling and warehousing systems. Steudell [13], Tanchoco and Agee [14], Tanchoco et al. [15] and Grasso and Tanchoco [5] studied various aspects of this subject. The last two references incorporate the size of the pallet, or unit load, in evaluation of the optimal lot sizes for multi-inventory systems with limited storage space. In a report on a specific case, Normandin [10] has demonstrated that using the 'best-size' container can result in considerable savings. A simulation model combining container size and warehouse capacity considerations, in an AS/RS environment, was developed by Kadosh [8]. The general results, reflecting the stochastic nature of the flow of goods, are similar to those reported by Rosenblatt and Roll [12]. Nevertheless, container size was found to affect strongly overall warehousing costs. In this paper, we present an analytical framework for approximating the optimal size of a warehouse container. The approximation is based on series of generalizations and specific assumptions. However, these are valid for a wide range of real life situations. The underlying assumptions of the model are presented in the following section.

Notice that the writer has

- Grouped similar information: "Steudell [13], Tanchoco and Agee[14], Tanchoco et al. [15] and Grasso and Tanchoco [5] studied various aspects of this subject."
- Show the relationship between the work of different researchers, showing similarities/differences: "The general results, reflecting the stochastic nature of the flow of goods, are similar to those reported by Rosenblatt and Roll [12]."
- indicated the position of the work in the research area history: "Early work by Hausman, Schwarz and Graves [6, 7] . . . "
- Moved from a general discussion of the research in AS/RS to the more specific area (optimal container size) that they themselves are researching i.e. they relate previous work to their own to define it, justify it and explain it.

Example 2

Early works have addressed some of the problems and issues discussed in video retrieval. Researchers have developed ideas and tools for supporting video editing, for example in [8]. They have defined a seamless video editing in the gradient domain. The spatio-temporal gradient fields of target videos are modified or mixed to generate a new gradient field, which is usually not integratable. They have also described how semantic information about video can be structured and used for content-based access. From a general video archive point of view, the problem with this tool is the lack of support for managing video document structures. A digital video archive serving different categories of users should offer a more structured way of describing video contents.

Example 3

Hidden Markov Models (HMMs) are statistical tools that have been used successfully in modeling difficult tasks such as speech recognition [15] or biological sequence analysis [16]. Inspired by a similar speech application, Hidden Markov model (HMM) has also been applied to activity recognition. The first approach for the human movements based on HMMs was described in [13]. It distinguished between six different tennis strokes. This system divided the image into meshes and counted the number of pixels representing the person for each mesh. The numbers were composed to a feature vector that was converted into a discrete label by a vector quantizer. The labels were classified based on discrete HMMs. In [8], an HMM is used as a representation of simple actions which are recognized by computing the probability that the model produces the visual observation sequence. In [14], layered HMMs were proposed to model single person office activities at various time granularities.

Example 4

Most of the existing work relies on using only a single source of information (example, either audio or visual track data alone). In [4], the average video shot activity and the duration are used as features for the categorization of movies according to the actions. An action scene was characterized by temporally localized properties of video shots which have little or no recurring similar visual contents [5]. Although these visual characters are undoubtedly good indicators of rapidly evolving action contents, they are not enough to determine the desired action. On the other hand, audio-based action detection was independently performed on the sound track in [6]. However, this audio alone method may lead to many potential false detected cases because many sounds often mix different noises and other similar background sound.

Example 5

Until recently many researchers have shown interest in the field of coastal erosion and the resulting beach profiles. They have carried out numerous laboratory experiments and field observations to illuminate the darkness of this field. Their findings and suggestions are reviewed here.

JACHOWSKI (1964) developed a model investigation conducted on the interlocking precast concrete block seawall. After a result of a survey of damages caused by the severe storm at the coast of USA, a new and especially shaped concrete block was developed for use in shore protection. This block was designed to be used in a revetment type seawall that would be both durable and economical as well as reduce wave run-up and overtopping, and scour at its base or toe. It was proved that effective shore protection could be designed utilizing these units.

HOM-MA and HORIKAWA (1964) studied waves forces acting on the seawall which was located inside the surf zone. On the basis of the experimental results conducted to measure waves forces against a vertical wall, the authors proposed an empirical formula of wave pressure distribution on a seawall. The computed results obtained by using the above formula were compared well with the field data of wave pressure on a vertical wall.

SELEZOV and ZHELEZNYAK (1965) conducted experiments on scour of sea bottom in front of harbor seawalls, basing on the theoretical investigation of solitary wave interaction with a vertical wall using Boussinesque type equation. It showed that the numerical results were in reasonable agreement with laboratory experimental data.

How to Write a Literature Review in 30 Minutes or Less

https://www.youtube.com/watch?v=TdJxY4w9XKY&t=4s