In our experience, encountering a poorly constructed and generally uncritical literature review remains an all too common flaw in postgraduate theses and research dissertations. The norm appears to be one of supervisors, wisely in our view, advising candidates to peruse ‘the literature’ in order to discover what, if anything, others have written about the topic area that the student is contemplating for their investigation. Typically, students then begin to amass discursive data which they then report upon in preparing an uncritical but generally fastidiously detailed literature chapter. They work hard at what they do.

And then, sometime before their *opus magnificus* is to be submitted for final examination, the postgraduate candidate discovers that their work is not considered by their supervisor to be of a satisfactory standard and they, along with their supervisors, are left feeling frustrated and bewildered. Rightly or wrongly, candidates feel perturbed and perplexed that their supervisor has not provided earlier sound guidance about the literature review; rightly or wrongly, supervisors are bothered and baffled that their protegé has not performed to an examinable standard!

There almost seems to be an inevitability about this phenomenon and while these notes are unlikely to arrest all but the rarest of instances of frustration about developing a critical literature review, it is hoped that they can begin to help postgraduate candidates appreciate the importance of developing a critical literature review. After all, it remains true that literature which initially informs, challenges or extends research, in turn becomes a part of the literature of future research. So it is worth doing well.
Our objectives for this workshop sessions are quite straightforward and need no amplification. We reason that at this level, it is fair to expect you to assume a professional approach to honing your scholastic skills. We’d like you to take up three challenges, each of which will help you to achieve our aims for this session.

The first is to critically examine literature reviews that have been completed by other writers so that you may discern what the characteristics of a sound literature review might be. You should inspect what others have written with a critical eye so that you learn to distinguish between a well crafted and critical review and an engagingly written but uncritical report on who said what and when. Emulate the first and become informed by the second.

The second challenge is to trawl selectively through the masses of resources that have been developed on this matter by armies of academics at countless universities across each of the continents. There are far too many to ever read fully but there is merit in superficially casting discerning eyes and an enquiring mind over a sample of resources. That way, you might pick up ideas about common threads and you might even discover a site or three that is worthy of a detailed rummage!

The third challenge is to become a discerning collector of well constructed turns of phrase. The test is to recognise when something has been unambiguously and simply written so it conveys a message with precision and intensity. The challenge is not to copy such morsels, but to emulate the manner in which they were presented. A well crafted and critical literature review requires you to demonstrate clear and careful thinking about dialogues pertaining to your investigation. You must captivate your reader when you share your engagement with ideas, thoughts and understandings in your critical literature review.
Ponder these points…

- What does critiquing the literature mean?
- What processes are involved?
- What criteria/arguments will you advance for your critical literature review?
- How do you know that your reading of the material of others, is reliable?
- How do you know their work is sound?
- How do you know you have achieved a critical literature review?

The questions in this slide are neither exhaustive nor are they hugely deep. They do, however, span what we consider to be some essential questions that you need to think about whilst you are developing a critical literature review. Irrespective of the issue, or question or hypothesis that you are contemplating an exploration of, the fact remains that there are some fundamental scholastic processes that you will have to complete. You will need to gather, manage, analyse, and think about the data you work with. You will also need to formulate effective ways of presenting your work.

But remember that although the theoretical parameters of your chosen topic hold at least some jurisdiction over the shape of the arguments you will address, whatever you eventually propose when you develop your critique of work that has been completed (or overlooked) by others, remain uniquely yours. So our advice to you is to aim to make your work clear, simple and insightful, and to make it memorable because of the simplicity, the clarity and the astuteness you have achieved in your critique.
The first claim in this slide blithely proposes that if all research answers were able to be found in the literature, there would be little incentive to conduct further research. But just how reasonable is such a claim?

We contend that there are some difficulties to sort out here. First, it should be noted that it is most unlikely that all research answers will ever be found in the literature – achieving such a state of knowledge would be on a par to demonstrating metaphysical assumptions! Second, we note that not knowing everything, and realising that we do not know everything, provides a thrilling aspect of research. And of course we don’t always know what we don’t know … and finding out about that is in itself an incentive to conduct research whether we are novices or experienced...

Which leads us to comment on the second conjecture in this slide – namely that literature has the potential to inform both novice and veteran investigators about aspects of the issue to be explored. Providing, that is, that they are critical! Any investigator who unquestioningly accepts whatever the literature says is, frankly, unlikely to succeed in scholarship. Ideas are dynamic. They evolve as knowledge and understanding compound. If they did not, we would probably still think that the earth was flat and that the sun travels in a circle around the world. Our point is made.

Finally, we note that informative data may be mined from many sources. But it may also be necessary to make inferences from other data, or even, from the absence of data. Research is seldom linear and qualitative research in particular is a messy business; it acknowledges many, many, often interacting, variables. Hence, it stands to reason that literature about messy research is unlikely to be neat and tidy even if it reads in an orderly fashion. Thus for qualitative research, just as with quantitative research, our advice to you is to mine literature from any source you can tap into but take nothing for granted.
This slide nominates some essential skills that you should seek to develop if you are to become a competent researcher. But, remember that even though we can identify skills which we believe you need, we cannot teach you how to develop them. In any course such as this, you must remember that we can only ever teach you about the skills. Developing them depends upon your own efforts – you have to do the work to gain the experience needed to understand!

We will resist the temptation to suggest ways of finding literature – librarians can do that far more effectively than we can. We will also skate around discussions on managing your literature because in other sessions, we have considered, or will examine, documentary analysis and other forms of data analysis. But for now, we will briefly reiterate the importance of infusing a critical perspective into your literature review.

Remember that you do not have to report literature by providing a blow-by-blow account (e.g. that Lewin was the father of action research; that Elliot did this, that and the other; and that others developed cyclical models a, b, and c, etc.). Instead, you might usefully develop your discussion around issues and/or themes or proven data and ensuing implications. You might be effusive about some aspects of literature but critical of others. You might identify trends and point out omissions as well. The key point is to share your own logical but critical thinking about the literature rather than just telling your examiner/reader/reviewer about what somebody else once wrote. Note that we stressed the term logical. Your critique may be about the logic of materials that are inductive which report mainly qualitative data that, when interpreted, give rise to themes and theory. Alternatively it may be about the logic of deductive research which reports on proofs stemming from mainly quantitative measures. Indeed, your critique may be about both but what you write should not be platitudinous (i.e. this is right just because I think it is).

We all have pet theories and we all have preferred approaches to explaining researchable puzzles and we also all know that hunches are important (just think what might not have happened if Alexander
Fleming had kept his laboratory tidy!). We should, therefore, remember to note down hunches and feelings as we prepare a literature review but we must also remember that despite the importance of subjectivity, we need to apply reason, not platitudes to the critical review we present for final examination. To do otherwise is to invite failure.
Davidson & Tolich (2003, pp. 94 - 95) suggest these questions

- What have others said about this topic?
- What theories address this topic?
- What do those theories say?
- What research has been done previously?
- Is the existing research in agreement, or is there disagreement?
- Are there flaws in the existing literature?

In this slide we have moved, courtesy of Carl Davidson and Martin Tolich, from the broad realm of general principles of critical literature reviews to a more narrow focus on specific questions to address in order to generate a comprehensive but critical review. In our view, the book by Davidson and Tolich provides a signal service to New Zealand researchers. Moreover, the section on the literature review is but one of many outstanding sections to this volume and the puzzles that Davidson and Tolich pose are especially informative. But let us venture further…

On a piece of paper draw five columns with six rows. In the first column, jot down the questions that Davidson and Tolich pose. In the cells of the second column, identify possible steps to take in order to answer each question with specific reference to your contemplated research project. And in a third column, jot down what you think you will find. Now, in a fourth column, examine your jottings and try to nominate three (or more) possible areas of critique that you might develop. Finally, in the fifth column, try to identify both aids to and barriers to progress.

What have you learnt? What do you still need to learn in order to develop a critical literature review?
Idaho University folk suggest asking these questions...

- What are the strengths & weaknesses of the research approach?
- How well are interpretations & conclusions supported by presented data?
- Can findings be extrapolated/generalised?
- How do conclusions drawn compare/contrast with the work of others?
- What issues/questions emerge that warrant further research?

(Source: www.its.uidaho.edu/landscape_ecology/critiques, 18/9/01)

This slide is pretty much a variation on the previous one but a few new pointers emerge. First, what, if anything, is the difference between an interpretation and a conclusion? Does it matter and why? Second, what does it mean to *extrapolate* findings and how, if at all, is that different to *generalising* findings? What is most likely to have been done to the data in which you have an interest? Again, does it matter and why?
Intuitively, you know all that… But...

- The critique is neither a summary of papers perused nor is it reporting on books read;
- So if a LR stems from the application of integrated skills, how do you extend beyond reporting into critiquing?
- The answer resides in your head and is based on your capacity to frame questions whilst engaging with literature and ideas;
- Ongoing critical reflection is pivotal.

Given that this is the half-way point in this presentation, and given the above points, what are the three key things that you have learnt thus far and what three things would you most like to learn about in the second half?
In any research, the investigator typically is required to critically review literature that pertains to the topic/area/questions/issue being studied;

Moreover, the review must be pertinent;

In other words, rather than reporting on positively everything, confine yourself to critiquing key themes and issues;

YOUR STORY WILL BECOME ALL THE RICHER FOR BEING VALID, FOCUSED …and THOUGHT PROVOKING!

The final point in this slide captures, for us, the nub of the matter because once you have gathered and processed all of the literature, all that remains is for you to do is to tell others the story of your thinking. It is an easy matter, however to say ‘all’ but, as most of us know, it is not necessarily an easy matter to be a story teller. We believe, however, that you might usefully think about the points that precede the final one and we urge you, if you have angst about writing, to remember that when Charles Dickens wrote the opening paragraph to ‘Bleak House’, it was full of crossings out, insertions, smudged ink, alterations, and other snippets of evidence that showed us that Dickens had, like most of us, to work hard at his writing. We contend that writing well is hard work and that working hard at your writing is always going to be challenging. We also know that confining your story to the essentials, and eliminating waste-words and/or weasel-words is difficult. But if you have a story to tell, you will, in all probability, enjoy the hard work you have to do.
A non-critical review may involve

- Defining key terms;
- Identifying and summarising key approaches;
- Trawling through the work of key theorists who have written on the topic area;
- Summarising their prior research and their theories;
- Suggesting that your topic is important just because you say it is.

It does not require rocket science to work out why we have included this slide and the next one. If you are honest, you will probably identify more with the first slide and in all probability, much of your work to date will have conformed to this model. But the point here is that we want you to be able to move beyond this and into the realm of actually practising the ideals espoused in the next slide. As an early step to achieving that, think carefully about the above points and work out for yourself those areas that you need to work on. Also, try to determine for yourself precisely what it is that you have to achieve in order to make that transition. Obviously you will need to flick back and forth between the two slides but do go to that bother as the exercise is intended to be helpful for you.
A critical literature review …

- Arrives at a position concerning debates about key terms & key issues;
- Identifies, for engagement, key elements & themes to be mooted;
- Nominates & critiques key theories that pertain to mooted key elements & themes;
- Summarises & critiques relevant & important prior research;
- Explains how your critical commentary frames & informs the project/case study.

So having looked at the previous slide and at this one, what do you have to do to change? When you have worked out what you have to do to change what you do, tell the person next to you. Tell them how you think you might make the change from being a non-critical literature reviewer to becoming a critical reviewer of literature. Then get them to tell you about their strategy and remember to be positively critical of each other.

More specifically, just what debates are there about key terms and issues and where do you stand in relation to those matters? What are the key elements of your topic and what are the primary themes? As a commentator, how will you become engaged in a manner that will enable you to, in turn, engage your reader? In other words, how will you make sure that they know about your thinking and the points you want to advance irrespective of whether or not they agree with you? And will they be able to discern the logic of your commentary or will they be confronted by platitudes? Finally, how do you intend to ensure that your readers can make the link between your views on the literature and the approach you, therefore, propose to adopt in completing your study?
A critical literature review is actually an integrated qualitative research project ...

- Data are assembled throughout your research;
- Data are (continuously) sorted by categories (themes);
- Concise reporting of those themes occurs;
- Critical commentary is integrated with the reporting;
- Cross-tabulation (cross-referencing) of primary data with the literature (discursive or secondary data) occurs throughout the investigation.

Traditionally, many supervisors have required research candidates to begin with a literature review. That review, or more accurately, that *assaying* of the literature, is often written in draft form and it is then left to languish until much later in the piece. In our view, however, the process is a continuous and dynamic one and the above pointers amplify that belief. In fact, we would go so far as to claim that a literature review worth its salt will have been examined and adjusted at the end of each chapter of your dissertation or thesis or study and yet again at the very end of the research endeavour before you hang up your keyboard. (Of course, the introduction and the conclusion are re-examined before then as well.)
As with all research projects … quality processing is important

- Choose resource data carefully - check it out before including it. *(How will you do this?)*
- Actively process read the data. *(How will you do this?)*
- Evaluate what you’ve read. *(How will you do this?)*

(Source: [www.wisc.edu/writing/Handbook/CriReadingBook 18/9/01](http://www.wisc.edu/writing/Handbook/CriReadingBook 18/9/01))

We have added the questions in italics and we invite you to generate answers to each question in the spaces below.

*How will you choose and check your literature?*

*How will you process read the data you have selected?*

*Against what criteria will you judge the worth of the literature you have examined?*

*In the end, what will your story conclude?*
The Introduction

- Defines general topic/issue;
- *is concerned with establishing context of review*
- Traverses prior topic work;
- *looks at history, debates, issues, gaps, problems*
- Establishes reasons for tackling topic & defines focus.
- *justifies reason for reviewing literature, explains criteria for analysis & justifies literature exclusions*

These final three slides tell you about what you might include in the beginning the middle and the end. Use the space available to you to add your own notes about what you must do to make your introduction the best piece of work you can possibly achieve.
What are the key themes to your topic and what are the minor themes? In what order will you discuss them and how do you justify that sequence? How will you link them together and how will they be linked to the introduction and to the conclusion that you have yet to develop?

One approach to sorting this out is to draw an arrow head (>) and to use the big space at the base of the arrow head to make notes about big themes, and to use the much smaller space at the tip of the head to note smaller themes.
In the end, what will your critical literature review achieve? Has it actually told the examiner/reader/reviewer what you think or has it merely reported on what others think? How well will your work stand up to the critical scrutiny of others? Was there a golden thread of connectivity between each of the sections in your review and between each of the paragraphs within each section? If you were an editor, what changes would you make to this submission and what excess words would you cut from the review? And if you were the examiner, what would you praise and what would you question?

That battery of questions serves an obvious intent. Quite simply, we want to conclude these notes by proposing that when you write, you assume a writer’s voice that is targeted at conveying your message at a targeted audience. Equally, when you critically read, we suggest that you assume, in an iterative fashion, the stance and voice of a critical reader, an editor and an examiner. By doing this, you will have put your work through a range of critical reviews and if it emerges with nothing taken for granted and as a clear and simple piece of writing, it will probably have made the grade. But beyond that, the litmus test is to be found in the message – what – in the end, has your critical literature review achieved?

Good luck

Dr. Jens J. Hansen
Dr. Richard J. M. Smith