

Chuẩn bị nền tảng cho chủ đề nghiên cứu (Phần 3)

Literature searching and literature reviews

Introduction

- Aims:
 - To introduce the skills needed to undertake **literature surveys**.
- Learning objectives: you should be able to:
 - Understand the process of literature surveys.
 - Define and conduct a literature search.
 - Manage information obtained during a literature search.
 - Understand how to conduct critical evaluation.
 - Write a literature review.

Introduction

- The initial foundation for your project is a *literature survey*.
- This survey has two main components:
 - a *literature search* and a *literature review*
- The literature search:
 - represents the mechanics of looking for, sorting, managing and digesting the available research material.
- The literature review:
 - represents your written understanding, critical evaluation, conceptualisation and presentation of the material you have obtained

Introduction

- A **literature survey** acts as an introduction to your project and serves a number of purposes:
 - **Justifies** your project
 - **Sets** your project within context by discussing and critically evaluating past and current research in your area
 - **Provides** other researchers with a starting point from which they can understand how your project evolved and
 - **Identify** what literature is relevant to your project in order that they can continue where you left off.

Justification

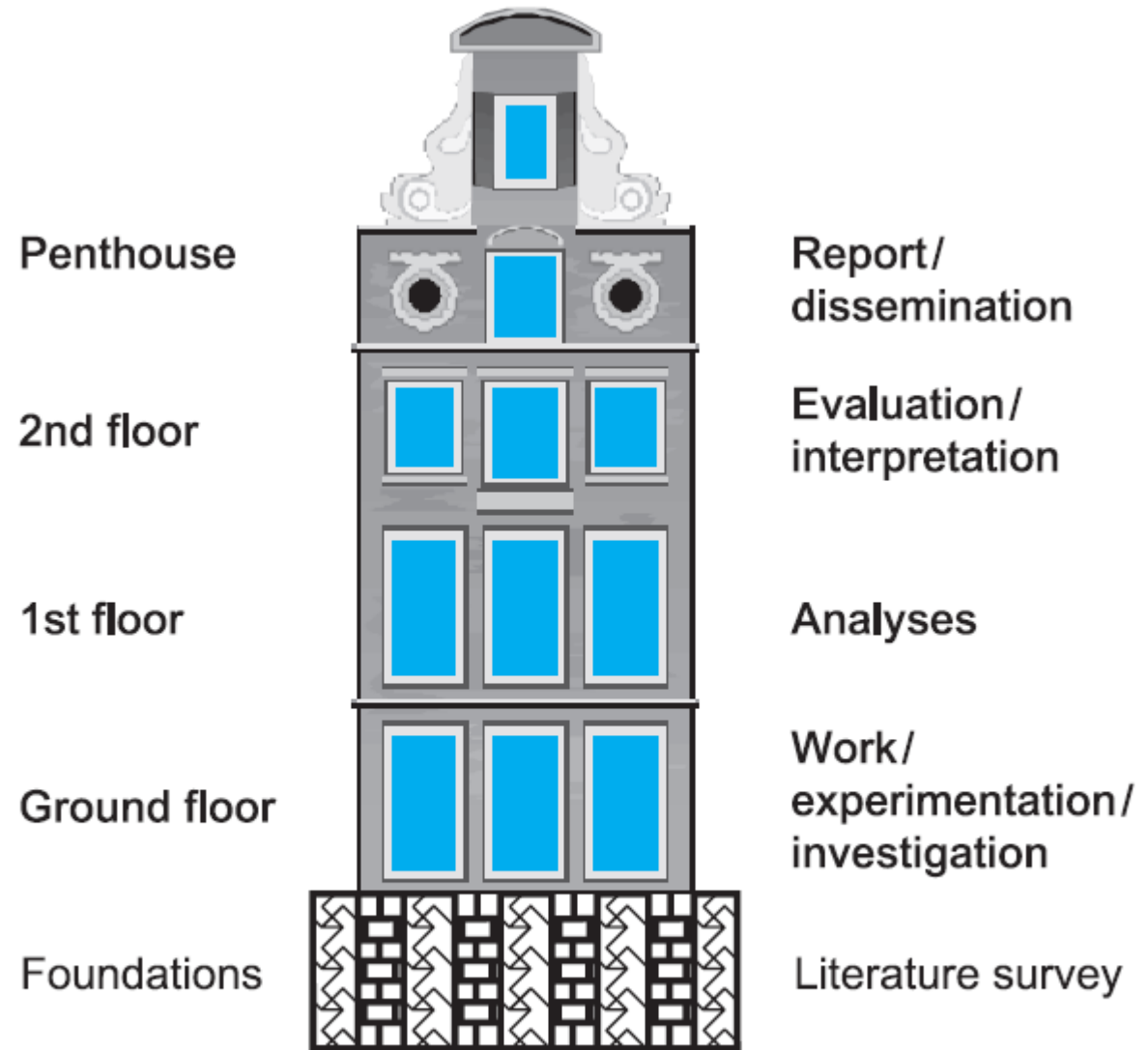


Figure 5.1 The importance of the literature survey

Context

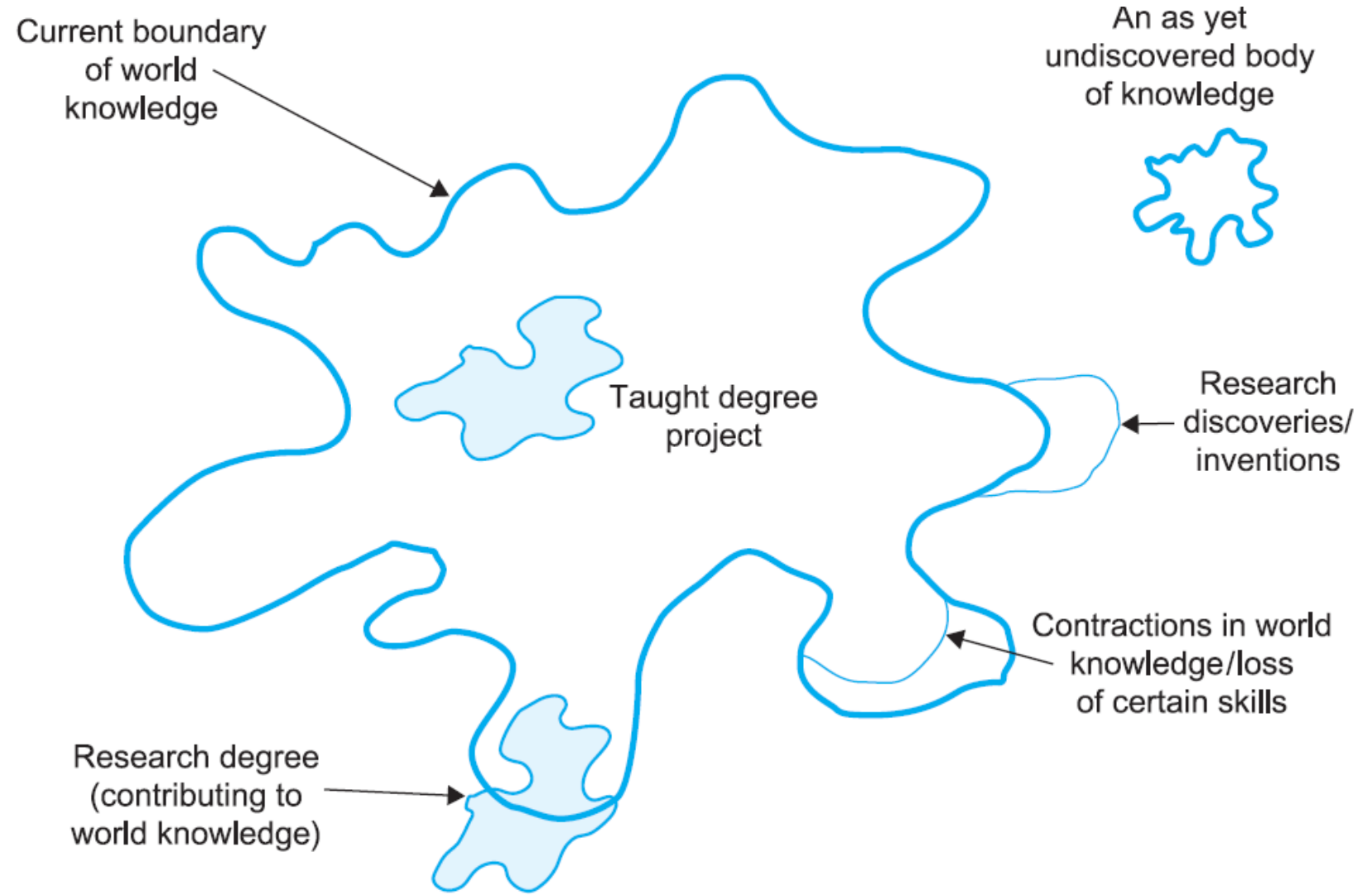


Figure 5.2 Projects within their wider context

Research degrees versus taught degree projects

- Completing a PhD *must* enhance world knowledge.
- An MPhil, on the other hand, would not necessarily make a major contribution to knowledge,
 - but it would be involved with an investigation into potential developments to world knowledge and be concerned with work at the boundaries
- At taught degree level: this would not be expected.
 - At this level you would be required to understand how your project fits into its wider context and have some appreciation of developments in that area

A starting point

- Your literature survey also enables other people interested in your work to see the grounds from which your project developed.
- A thorough literature survey will
 - provide other researchers with a starting point for their studies and
 - provide anyone wishing to develop your project work further with a comprehensive literature base

2. The literature survey process

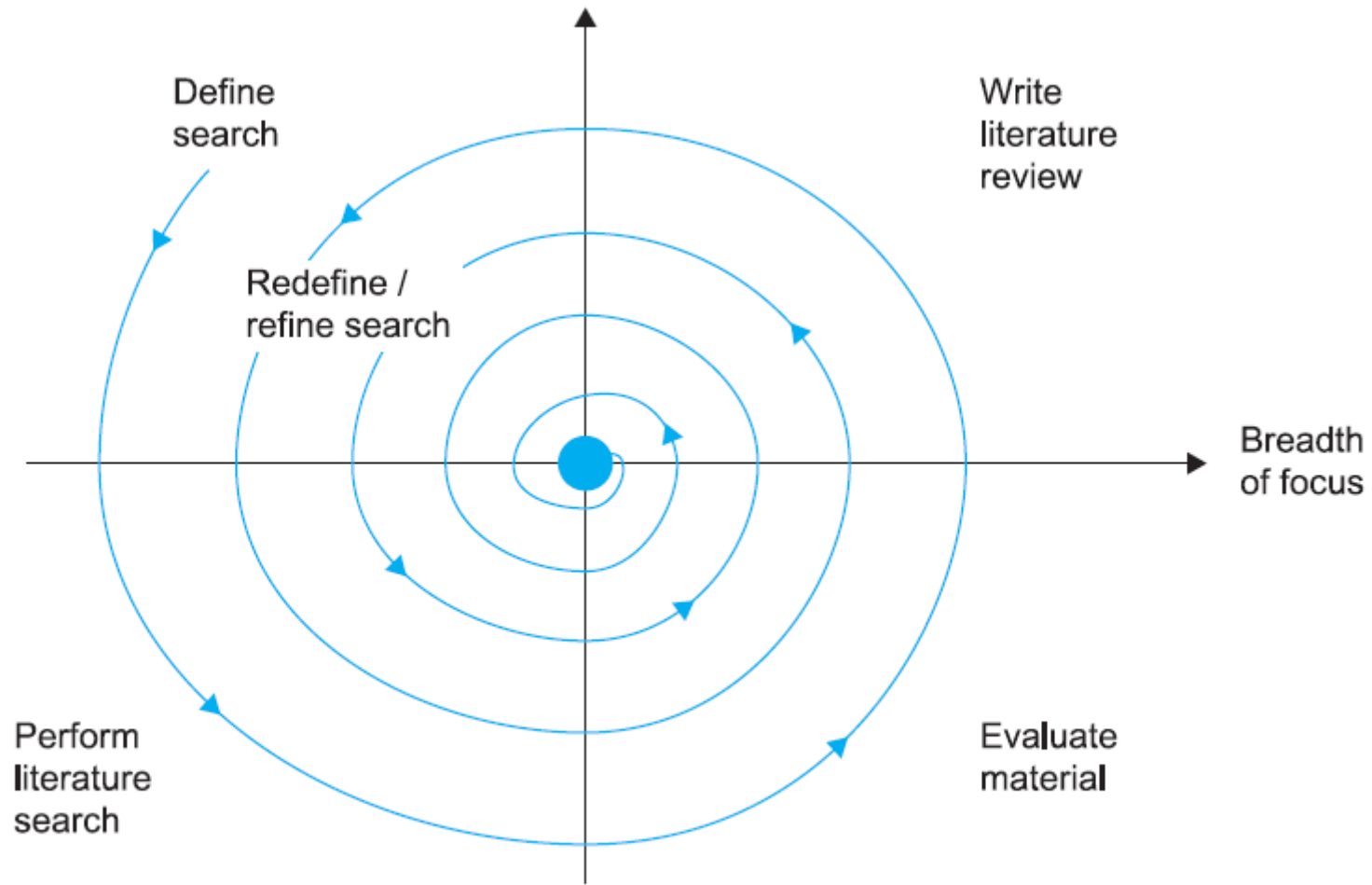


Figure 5.5 The literature survey process

2. The literature survey process

- This iterative process highlights the fact that:
 - the literature review is not something that you can write as a one-off having read everything you can get your hands on.
- It must develop over time.
- You will have to stop work on your literature survey at some point and move onto the main content of your project,
 - you may well find that you are making changes to your literature review right up to the end.
 - This will be inevitable as you should continue to gather and evaluate material throughout the lifetime of your project to keep your understanding of the field fresh and up-to-date

3. Literature searching

- A literature search is a '*systematic gathering of published information relating to a subject*'
- A literature search should not be performed in an *ad hoc* manner, but should be approached in a structured and professional way
- The second significant term within the definition is *published*.
 - This implies that the material which you trace should be *recognised*.
 - In other words, the material is not merely somebody's opinion you happened across through a conversation in a corridor, or a block of un-refereed text downloaded from the Internet.
 - Recognised works are those that have been suitably *refereed* before publication

Format of information

- Literature is presented in a number of different formats.
- Some forms are more accessible than others and some are recognised as being more 'academically' valuable and worthy
- *Books, Journals, Conference proceedings, CDs and DVDs, Company reports, Theses, manuals, software, the internet.*

Tracing the information

- The best place to start any literature search is in your own institution's library.
 - You should also make good use of the librarians who know the most efficient ways to trace particular sources of information within your institution.
- Internet, scholar,...

Inter-library loans

- In some cases, Your institution will be able to obtain material for you from other institutions using this system.

Some tips for performing a literature search

- Note interesting quotes and their **full** reference as you go along.
 - This will be invaluable later when you write your report and try to trace your references.
- Use review articles and books to help your search.
- Reference correctly from the start.
- Know when to stop – or at least when to move on to the next stage of your project.
 - You will know this from your project plan and the research boundaries, which you have set yourself.

Some tips for performing a literature search

- Have a system to organise and catalogue the material you read.
- Read recognised leaders and original theorists in your field.
- Start with a broad search before you focus; don't jump straight into the most complicated recent article on your subject.

4. Managing information

- The best way to begin managing your research is by using the conceptual model you have created of your subject area.
- Another important strategy to follow is to set up an index system of some sort that includes information on every article and book that you read
- Also, try to record references in the correct format from the start
- When you are reading articles
 - highlight key phrases, sentences and paragraphs by underlining or using a highlighter pen
- Another useful idea is to make brief notes on the front page of articles and within the papers themselves

5 Critical evaluation

- Critically evaluate an article means far more than looking for faults – this is certainly not the aim of critical evaluation
- The main point of critical evaluation is that you **think** about what you are reading

5 Critical evaluation: how

- What kind of article is it – a review paper, an evaluative paper, a theory paper, a practical paper, a case study, etc.?
- What can you gain from the article – ideas, techniques, useful quotes?
- Is the author well recognised in his/her field? Is the author an authority in this area?
- What contribution is the article making?
 - What kind of contribution is it? Can it make a contribution to your own project? If so, how?

5 Critical evaluation: how

- How does the article fit within its context?
 - How does the article fit into and support the context of your project? How important is the article in its field and your own? Does the paper classify and summarise its field in a clearer or more logical way than has been done before? How does it fit into your conceptual understanding of the field?
- Do conclusions follow logically from the work that has been presented?
 - Are the arguments logical? Do they follow one another? Are they supported or contradicted by the work of others? Are alternative conclusions consistent with the discussion?

5 Critical evaluation: how

- Can you differentiate fact from unsubstantiated opinion?
 - If there are opinions in the article do you agree with them? Are these opinions supported by logical arguments or other authors?
- What do you feel about what has been written?
 - Do you agree with statements that are made? Are there any counter-arguments?
- Does the article contradict other viewpoints or support the status quo? How does the article relate to other literature in the field?

5 Critical evaluation: how

- What references does it use?
 - Are these appropriate, relevant and up-to-date? Which references can you use? Is the article referenced by other authors?
- Are there limits to what the author is suggesting? Is his/her argument applicable only in certain cases?
- Can you use the results from the article in your own work? How do these results contribute and fit into their field and your own?

Other points

- What is the major problem or issue being investigated?
- How clearly are the major concepts defined/explained?
- Is there a clear research question/hypothesis that can be, and is, tested?
- What type of research design/methodology is employed? Is it suitable and reliable?
- Have algorithms and statistical techniques been used appropriately?
 - Can you apply them in your own work? What are the limitations of these techniques?

Other points

- Is the choice of measures, sample sizes and data appropriate? Have extraneous factors/variables been considered?
- Can generalisations be made from these results? What are the limitations of these generalisations?
- Are the implications of the results discussed?
- What is your overall assessment of the study – in terms of its adequacy for explaining the research problem and the contribution it is making?

6 Writing literature reviews

- The purpose of LR
 - to refine your research question and objectives;
 - to highlight research possibilities that have either been explicitly identified by other authors or have possibly been overlooked in the past;
 - to avoid repeating the work of others;
 - to identify research methods and strategies that may be usefully applied in your own research.

6 Writing literature reviews

- A better way of presenting this material is to view the field as a series of inter-related subtopics
 - Book A: Covers . . . ,
 - Book B: Discusses . . . ,
 - Paper A: Introduces . . . ,
 - Person A: Thinks . . . , and so on.
- References should, therefore, be used to support your arguments **where appropriate**

6 Writing literature reviews

- There are no specific, infallible rules you can apply to write the perfect literature review.
- It is something that improves with practice and something that you can get a feel for by reading examples within the varied literature you will come across.

6 Writing literature reviews

- At a 'mechanistic' level within project reports, three common ways for presenting literature reviews:
 - **1.** as a single chapter;
 - **2.** as a series of chapters;
 - **3.** subsumed within the report as various issues are tackled

Summary

- A literature survey will help to place your project within a wider context and justify its presence within a particular field (or fields) of study.
- Your literature survey consists of two main components: **the literature search** (supported by an ability to manage the information you gather) and **the literature review** (which requires a critical understanding of material that you obtain).
 - These components are performed repetitively over a period of time and (probably) in parallel with one another.
- Although you will eventually need to move on to the main investigation/development part of your project, your literature survey will continue to be performed throughout the lifetime of your project to some extent,
 - as you refine and consolidate the information you gather ensuring that your project remains up-to-date.

Questions