

Chapter 2 - The Problem: The Heart of the Research Process

Practical Research: Planning and Design
Presentation

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Overview of Chapter

- What is a research problem?
- How to find a good problem
- Parts of a research proposal

The Problem

- The problem is what all of your research will hinge on.
- Step one of research is to clearly state the problem.

Finding Research Projects

Types of Research Problems

- Basic Research
- Applied Research

Potential Research Criteria

- Should address an important question
- Should advance the interpretation of knowledge

Potential Research to Avoid

- A means to learn about the topic yourself
- Comparing two sets of data
- Calculating statistics about data
- Problems that result in a yes or no answer

Look for **significant** problems.

Identifying and Describing the Research Problem

Tips for Finding a Legitimate Problem

- Look around you
- Read the literature
- Seek the advice of experts
- Attend conferences
- Choose a topic you're interested in
- Choose a topic others are interested in

Tips for Stating the Problem

- Clear and complete
- Feasible
- Precise and concise
- Open-minded
- Edited

Dividing the Research Problem into Subproblems

Subproblems

Research problems are too big to solve as a monolith.

Therefore, divide and conquer!

Subproblems vs. Pseudo-Subproblems

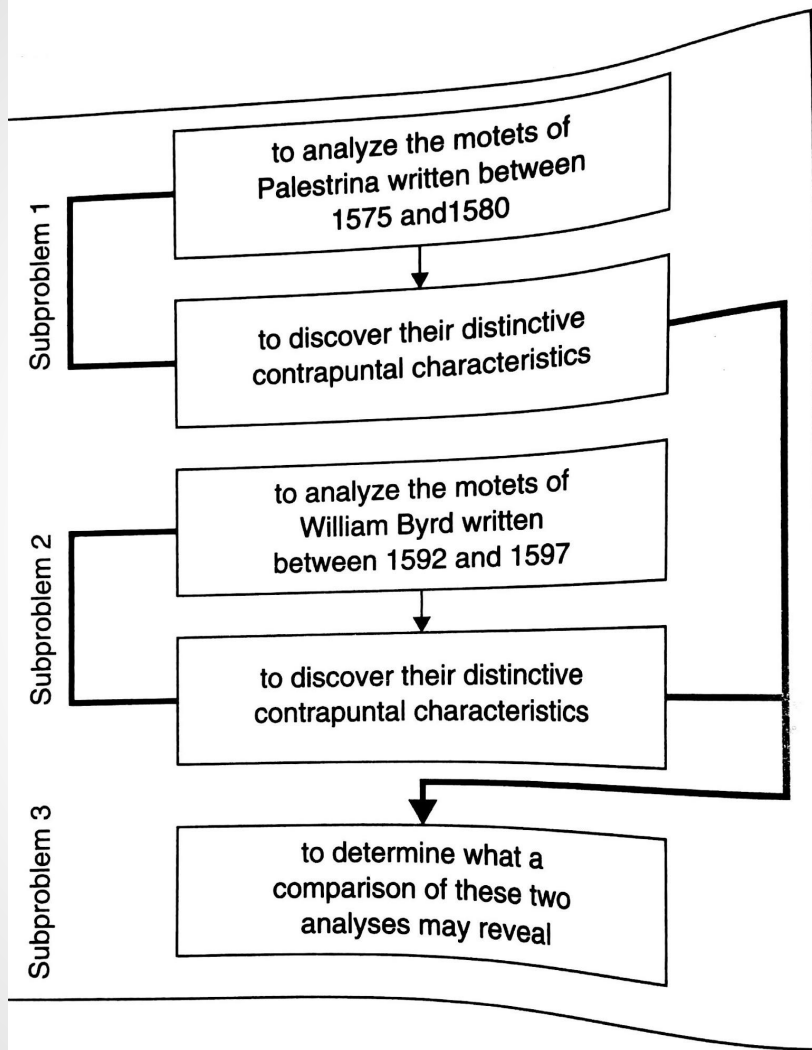
Pseudo-subproblems are procedural issues that don't get at the main problem.

Characteristics of Subproblems

- Completely researchable unit
- Tied to the interpretation of data
- Add up to the totality of the problem
- Small in number

Steps for Identifying Subproblems

1. Write down the problem statement
2. Read the problem critically, looking for subproblems
3. Make sure each subproblem you've identified has a word that indicates the necessity of interpreting the data
4. Arrange the problem and subproblems into a graphic



Further Delineation of the Problem

The Setting of the Problem

- Hypotheses/research questions
- Full research plan
- Term definitions
- Assumptions

Hypotheses and Research Questions

Difference between a hypothesis and a research question?

Null Hypothesis vs. Research Hypothesis

Difference between a null hypothesis and a research hypothesis?

Can you prove a research hypothesis is true?

Identifying Variables

What is a variable?

- Dependent variables
- Independent variables
- Mediating variables (intervening variables)
- Moderating variables

Delimiting the Research

Delimitation - What the researcher is **not** going to do.

Defining Terms

Terms should be defined as they will be used in the research project.

- operational definition

Stating the Assumptions

State all assumptions that the research relies on.

Importance of the Study

State the importance of the study.

Research Proposal Overview

1. Problem statement
2. Subproblems
3. Hypotheses
4. Research questions
5. Delimitations
6. Definitions
7. Assumptions
8. Importance
9. Literary review

Fine-Tuning Your Research Problem

1. Conduct a lit review
2. Try to see the problem from all sides
3. Think through the process
4. Use all available tools and resources at your disposal
5. Discuss with others
6. Show the first draft of your proposal to others
7. Remember the project will take lots of time
8. Remember the first draft of your proposal will not be your last