Overview

From an interest to a topic:

- What is a topic for research?
- How do you find one?
- From a broad topic to a focused one:
  - What rules of thumb help focus a topic?
  - Why do verb-derived nouns help in topic focusing?
- From a focused topic to questions:
  - Why do you need to have research questions?
  - What kinds of question guides can you use? (Typical questions: 5 Ws + H)
  - Four Kinds of Analytical Questions:
    - Composition; History; Categorization; Value
- From a question to its significance:
  - The ‘So What’ question
  - Steps to finding significance
    - Name topic; Add Question; Motivate Question

Discuss all these in the light of your own research interests

From an interest to a topic

What is a topic for research?

- How do you know a topic is worthy of research?
- What is the role of interest, significance and tractability in topic identification?

How do you find one?

- What is the role of literature, reading, and learning to topic finding?
From a broad topic to a focused one

What rules of thumb help focus a topic?

When might you think a topic is too broad?

How do you narrow a topic?

Why do verb-derived nouns help in topic focusing?

Try the exercise with some of your own topics of research

What is the role of a ‘claim’ for your research topic?

Narrowing a Topic

<table>
<thead>
<tr>
<th>Topic</th>
<th>Claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free will in War and Peace</td>
<td>The conflict of free will and historical inevitability in Tolstoy’s description of three battles in War and Peace</td>
</tr>
<tr>
<td>The history of commercial aviation</td>
<td>The crucial contribution of the military in the development of the DC-3 in the early years of commercial aviation</td>
</tr>
</tbody>
</table>

Use nouns derived from verbs: conflict, description, contribution, development, construction, etc.

From Topics to Claims

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<tr>
<th>Topic</th>
<th>Claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free will and historical inevitability in Tolstoy’s War and Peace?</td>
<td>There is free will and historical inevitability in Tolstoy’s War and Peace</td>
</tr>
<tr>
<td>The history of commercial aviation</td>
<td>Commercial aviation has a history.</td>
</tr>
<tr>
<td>The conflict of free will and historical inevitability in Tolstoy’s description of three battles in War and Peace</td>
<td>In War and Peace, Tolstoy describes three battles in a way that makes free will conflict with historical inevitability.</td>
</tr>
<tr>
<td>The crucial contribution of the military in the development of the DC-3 in the early years of commercial aviation</td>
<td>In the early years of commercial aviation, the military crucially contributed to the way the DC-3 developed.</td>
</tr>
</tbody>
</table>

Narrow the topic with specifics

Turn these into claims that can be researched.
Be Careful of Over Broad or Over Narrow

<table>
<thead>
<tr>
<th>TOO MANY DATA AVAILABLE</th>
<th>TOO FEW DATA AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The history of commercial aviation</td>
<td>The decision to lengthen the wingtips on the DC-3 prototype because the military wanted to use the DC-3 as a cargo carrier</td>
</tr>
</tbody>
</table>

From a focused topic to questions

- Why do you need to have research questions?
- What kinds of question guides can you use?
- Typical questions
  - 5 Ws + H
  - Four Kinds of Analytical Questions:
    - Composition: Identify the parts and how they interrelate?
      - How do parts of your topic interrelate?
      - How is your topic part of a larger system?
      - History: Trace its own history and its role in a larger history (What are the research threads?)
      - What is the topic's internal history?
      - How does it fit in a larger developmental context?
    - Categorization: Identify its characteristics and the categories that include it (How to contextualize within field?)
      - What kind of thing is your topic? Range of variations; How are instances similar to and different from each other?
      - Value: Determine its value (Why is this important?)
        - What values does your topic reflect? What does it support? Contradict?
        - How good or bad is your topic? Is it useful?

Evaluating Questions

- Questions to avoid:
  - Questions with obvious answers (e.g., Can you apply social cues to crowd simulations? vs How might the addition of social cues improve the perception of realism and believability in a crowd simulation?)
  - Speculative questions (e.g., Would WW2 have happened if Hitler were never born?)
  - Trivial questions with dead ends (e.g., How much beer did the Patriot fans drink before the Patriots last win?) — so what???

- Building on questions:
  - Might want to combine individual specific questions into a larger one

Some material from Craft of Research 3rd Ed.
Questions from sources

How to build on questions from your sources

If a source makes a claim you think is persuasive, ask questions that may extend its reach (e.g., Smith showed that therapeutic touch can ameliorate anxiety in autistic children. How might touch influence language development?)

Ask questions that might support the same claim with new evidence (e.g., I present new evidence from xxx that further supports Smith’s assertion...)

Ask questions analogous to those that your sources have asked on similar topics (e.g., Smith analyzes costumes from an economic point of view. What would an economic analysis of ceremonial masks turn up?)

Ask questions that reflect disagreement (e.g., Previous use of remote touch devices have focused on message passing. But is this the primary use of interpersonal touch?)

Material from Craft of Research 3rd Ed.

From a question to its significance

The ‘So What’ question (and its converse “so what if we don’t answer this question”) steps to finding significance

Name the topic

Can you describe your topic in a sentence?

I am studying X

Add a question

I am studying X because I want to find out Y

Motivate your question

I am studying X because I want to find out Y in order that (to help my reader understand how to) Z