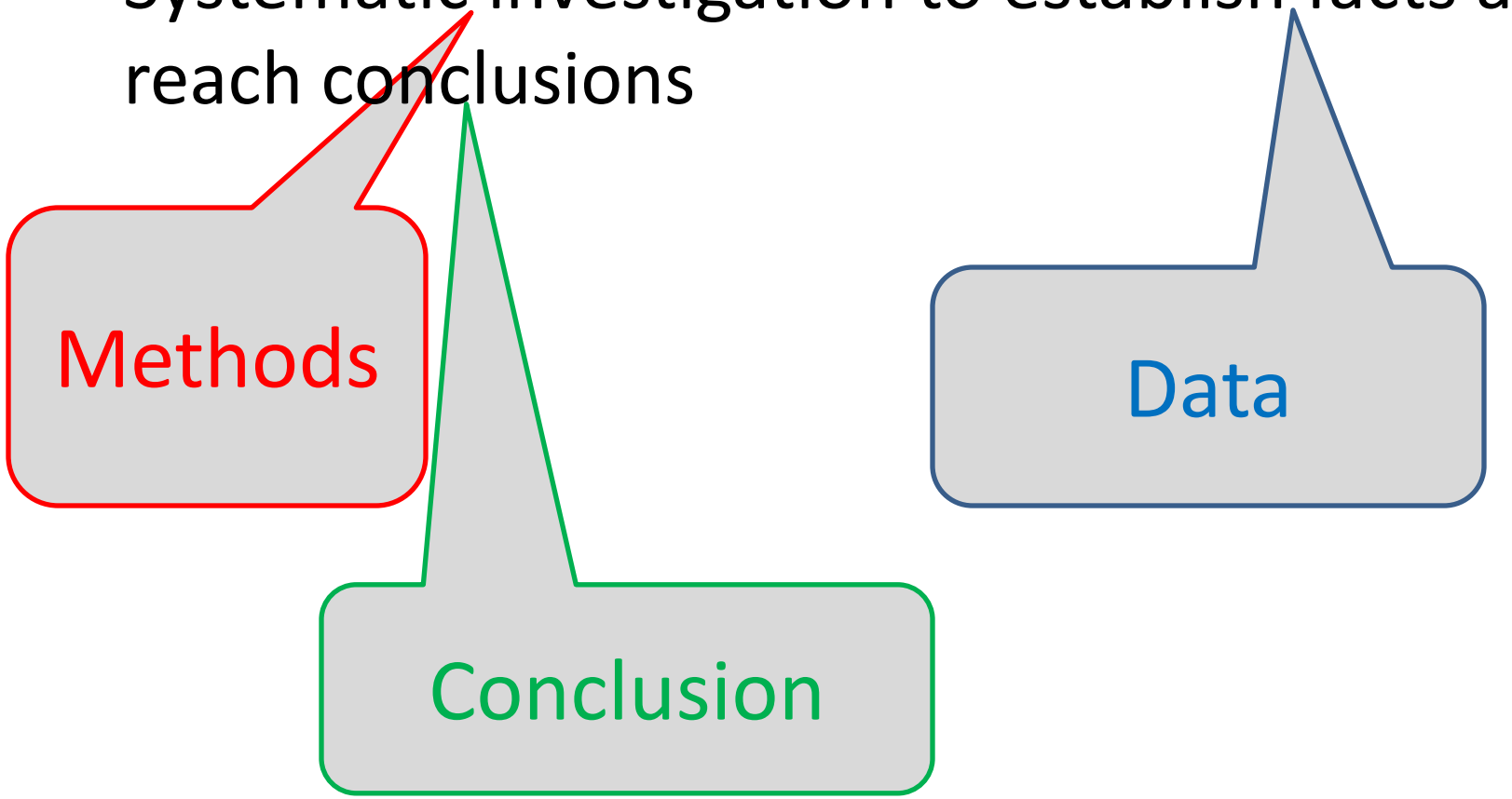
What is a research question?

Fundamentals of Academic Writing

Research

- Systematic investigation to establish facts and reach conclusions



Research question

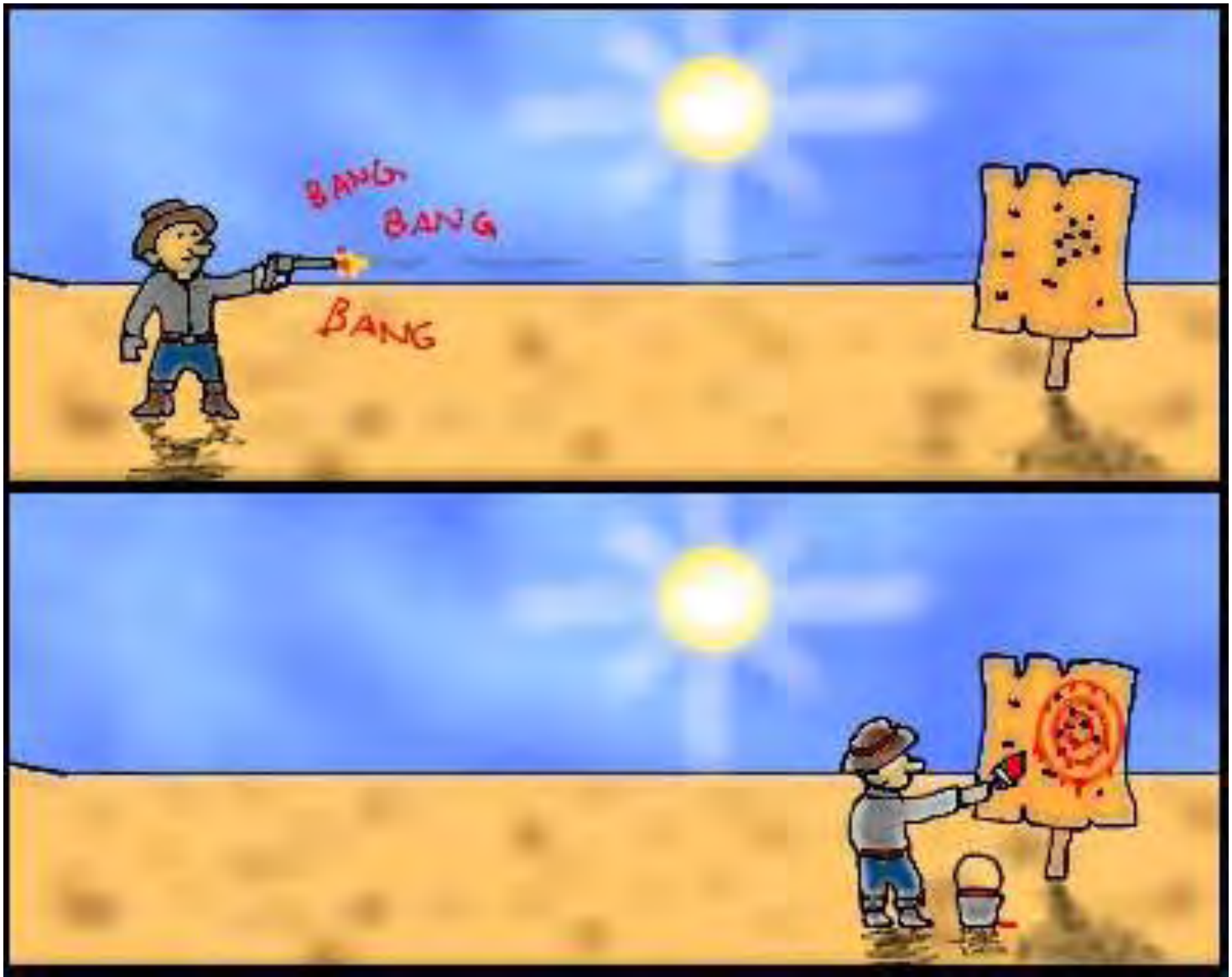
- Helps determine appropriate methods
- Helps define valuable data
- Gives a goal to work toward, and makes the conclusion sensible and worthwhile

Life, the Universe, and Everything

- The ultimate answer to life, the universe, and everything is: 42.

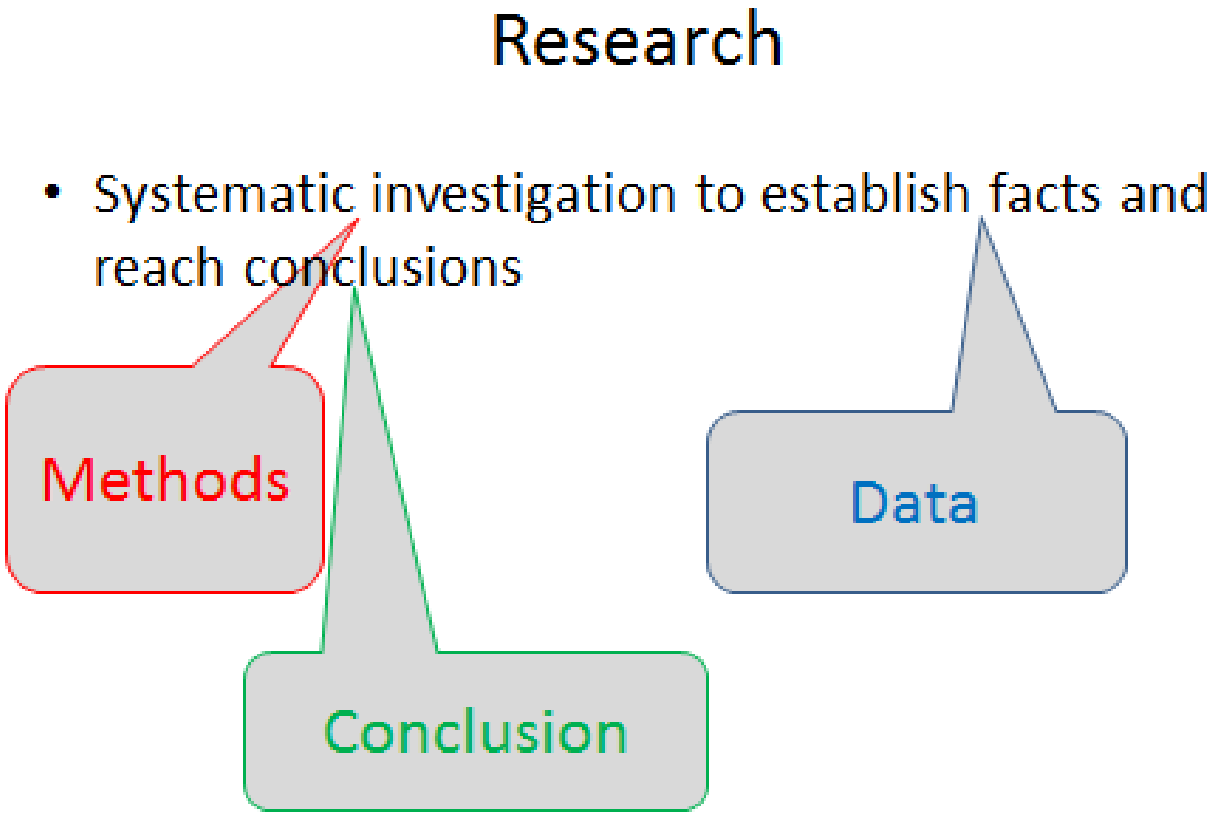
Without a question, it is difficult to make sense of what you find.

Texas Sharp-shooter Fallacy



Texas Sharp-shooter Fallacy

- Unless you define the question *from the beginning*, you may not be doing research.



Research question

- Identify some phenomena, event, or area that interests you.
- Ask one or more specific questions:
  - What
  - Why
  - etc.
  - How
  - When
- (Yes/no questions tend to be less interesting, but they are also possible.)

Research question

- A topic (without a specific question) leaves you with too much to study or write about.
  - “Juvenile crime”

- Asking a question provides focus.
  - How does skipping school relate to juvenile crime?
  - What factors in the home predict juvenile crime?
  - How do rates of juvenile crime differ in cities versus rural areas?

Research question

- Questions can be too broad.
  - Why do some teenagers commit crimes?
- Questions can be too narrow.
  - How many crimes were committed in Nagoya in 2013?
- A good question should be *specific* but not *trivial* to answer.
  - How do school attendance rates correlate with rates of juvenile crime?

Two uses (at least)

- While researching
  - A well-defined question can guide data collection, theory selection, methods of analysis, etc.
- While writing
  - A well-defined question helps create the thesis statement and structure the paper.

Research question

- **Literature review** can help focus the question.
  - Survey what is already known
  - Identify key theories, methods, or findings
  - Look for gaps in current research

- (Literature review can also help you find theories to test, or methods that have been successful in the past.)

Research question

- Identify some phenomena, event, or area that interests you.
- Ask a specific question that you can answer.
- Make sure the question is not too simple (trivial) or too difficult (impractical, non-factual) to answer.
  - Some questions cannot be answered factually.

    "Is AKB48 as good as Morning Musume?"

Research question

- There is no one right way to turn an interest into a research question.
- But here are some things to keep in mind.
  - Relevance
  - Manageability
  - Originality
  - Interest
  - Clarity
  - Position in your field

Relevance

- Make your research question relevant to people in your field.
  - Your professor
  - Your colleagues
  - Other researchers
  - Other fields?
  - Future employers?
  - Industry/Government?
- Will an answer to your question fill a gap in knowledge? Will it change understanding? Will it affect practices?

Interest

- Make your research question interesting to other people *and to you*.
- It can take several weeks to several years to research, write, and publish. Stay interested.
- Avoid common traps:
  - Fads. A question many people are doing now. Those trends change; will you stay interested?
  - Convenience. A project to fit a grant application or professor's request might not keep your interest.

Manageability

- The question should be one you can answer.
  - Limits on time. When will you graduate/publish?
  - Limits on access. Can you access the equipment, field sites, documents, etc. you need to study?
  - Limits on resources. Do you need money, lab, etc.?
  - Ethical limitations. What potential negative effects will the research have on people or the world?
  - Limits on ability. Do you have (or can you learn) the skills necessary to answer the question?

Clarity

- A complicated question might hide unclear thinking or gaps in your own understanding.
- A vague question can lead to muddled data and unclear or improper analysis.
- State your research question in one sentence (or one main question plus several specific sub-components).

Originality

- Your research should be a (reasonably) original contribution to your field.
- Research that simply replicates previous findings is unlikely to be published.
- Your question should show your imagination and/or particular interests.
- (A question *based* on previous research is fine, but it should *differ* in at least one dimension.)

Position in the field

- Originality is important, but so is fitting with other research.
- How is your question similar to other research? How is it different?

- (Your paper should cite and respond to other work in your field. Writing the literature review is a major focus of my Developing Academic Writing course.)

Research question

- Identify some phenomena, event, or area that interests you.
- Ask a specific question that you can answer.
- Make sure the question is
  - Relevant
  - Manageable
  - Original
  - Interesting
  - Clear
  - Positioned in your field

Group work

- With your group, discuss your interest and suggest possible research questions.
- Try to fill in the following information

Research question (clarity & originality)	Justification (relevance, interest & position)	Practical issues (manageable)	Ethical issues (manageable)	Data sources and methods