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Turning Raw Information into Evidence: Drawing and Explaining Conclusions

The purpose of this handout and the accompanying lecture is to help you think about the research questions you ask, the evidence you find, and the conclusions you draw. An article based on an earlier version of this presentation is available in OnBoard*, 25:3 (September 2019).*

Your job as a genealogical researcher is to find and assemble information relevant to a well-formed research question and write a conclusion supported by evidence and logic.

Starting Point: Certain Identity

All research starts with a person known to be in a certain place at a certain time. Our research is about who that person was related to (genealogy), as well as the what, when, and where of her or his life (personal or family history). Orderly genealogical research proceeds in three steps.

1) Establish the existence of a research subject. The evidence for an individual's existence is usually direct. The person appears in a census or on a passenger manifest, registered for the draft, was named in a newspaper article, or was taken to court. That is, a person by a certain name, was in a certain place, at a certain time. That person is the research subject.

2) Ascertain the individual's unique identity through time, by either merging biographical fragments from different places or times into a single identity, or by separating identities of two individuals who are easily confounded because of similar names, ages or residences.

3) Link individuals together within a generation (siblings and cousins) or across generations (parent-child relationships) using documentary and/or DNA evidence.

The second and third steps often require construction of proofs based on logical arguments tying together direct, indirect evidence, and/or negative evidence drawn from recorded information from a mix of informants with primary or secondary knowledge of events.

Kinds of Research Questions

Thinking about the nature of research questions helps us understand what kinds of information we need to answer a chosen research question.

Identity and Relationships. Genealogy research questions are generally of two kinds:

- Identity questions: Was X in a certain time and place the same person as Y in another time and place?
- Relationship questions: Who was the parent of A? What was the relationship between A and B?

As a practical matter, we can restate relationship questions as yes/no questions. In the course of research, we may encounter enough information to form a hypothesis that can be tested.

> *Relationship Question*: Who was the father of John Fawkner who died in Hendricks County, Indiana, in 1839?
> *Hypothesis*: Joseph Faulconer was the father of John.

We may encounter several plausible candidates for John's father. In this case, we must test each possibility against the evidence. It is sometimes easier to disprove alternative hypotheses than to prove the favored hypothesis; each alternative hypothesis that can be rejected shrinks the number of possible answers to the original research question.

Identity questions are already in the form of yes/no questions. However, the answer to an identity question might rest on answering a series of relationship questions.

> *Identity Question*: Was John of Garrard County in 1813 the same man as John in Bourbon County in 1808?
> *Hypothesis*: John of Garrard County was the same man as John of Bourbon County:

One path to testing the hypothesis is to try to prove that they were different men. If both men can be established in the same place at the same time, but as members of different families (relationship questions), the hypothesis that John of Garrard was the same man as John of Bourbon can be rejected.

Events. Family history researchers also ask questions about events. These questions take two forms:

- Presence: Was ancestor Z present or a participant in a particular event?
- The event: What actually happened?

Presence is a yes/no question – an ancestor either was or wasn't there. The question of what actually happened can be more difficult. Two participants' or witnesses' descriptions of an event might differ because they observed the event from different vantage points or with differently biased mindsets. This is one reason genealogists never unquestionably trust information from any single source.

The best research questions are about an individual identified with certainty in a place at a specific time.

- An inadequate research question: Who was James Fawkner?
- A slightly better research question: Who were James Fawkner's parents?
- A good research question: Who were the parents of the James C. Faulkner, age 21, living in Marion Township, Hendricks County, Indiana, in 1850?

The solution to such a research question often depends on answering a series of research questions about identity. For example, evidence pointing toward James' parents may come from information about a man named James Fawkner (or similar name) in several places over time. It may be necessary to prove that

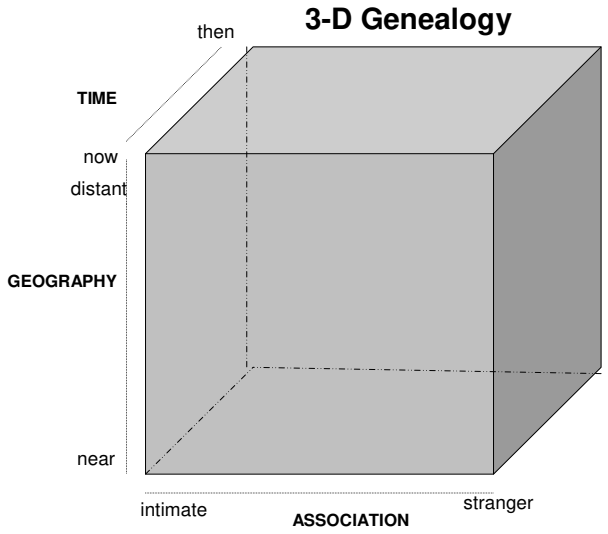
James in Indiana in 1850 was the same man as James in Missouri in 1870 and James in Illinois in 1880. Alternatively, if a sibling relationship to John can be proved, the research focus might shift to a search for the sibling's parents.

Sources: Information Transport Vehicles

A source – whether in its *original* or a *derivative* form – is an information-transport vehicle. Sources are valued for the information they preserve and transport across time. Sources include:

- Records – vital records, censuses, wills, newspapers, gravestones, DNA, etc.
- Authored works – books and articles drawing on a variety of sources.

Reasonably Exhaustive Research. An extensive search that locates and uses reasonably available sources that might be expected to produce relevant information to answer a question increases the odds of finding needed information and reduces the likelihood that later searches will produce evidence to cast doubt on a conclusion. Useful sources with relevant information may not have been created when and where expected. A 3-D search that stretches across time, geography, and associates may be necessary.



- Information from any single source can be wrong. A single source is sufficient only if no other source with relevant information is available.
- Agreeing information from two, three or more sources can still be wrong. Corroborating information from a second or third source increases confidence in the information, but only if the information was independently reported and recorded.
- If two or more sources present conflicting information, only one can be correct, and both can be wrong.

A Written Conclusion

A conclusion in your head is like an undeveloped photograph (from the days of film and darkrooms); it is of no value to anyone else until it is fixed – in this case, in words. Only then is your conclusion accessible to other researchers, who can contest it or accept it and incorporate it into their research. Each conclusion of fact requires a proof statement, proof summary, or proof argument.[1]

> **Proof statement** – a statement of fact, supported by credible information from a reliable source – but only if reasonably exhaustive research produces no contrary evidence.

[1] See Thomas W. Jones, Mastering Genealogical Proof (Arlington, Va.: National Genealogical Society, Special Publication No. 107, 2013), pp. 84-9.

Proof summary – a short narrative or list of points of evidence that together logically support a conclusion – and only that conclusion.
Proof argument – narrative explaining why evidence supports a conclusion – always necessary when conclusion rests on indirect and/or negative evidence or when a search produces conflicting evidence.

While there is no step-by-step recipe for writing a proof argument, there are at least three approaches.[2]

- Reveal your conclusion up front; then lay out and discuss the points of evidence supporting it.
- Identify two or more hypotheses, discuss the evidence for each, eliminating them one-by-one until the one best supported by the evidence remains standing.
- Starting with what is already known about a research subject, present points of evidence in a logical order that leads to a convincing conclusion. The logic behind the conclusion may be deductive or inductive.

Deductive reasoning – top-down – from accepted premises to a logically necessary conclusion.
Inductive reasoning – bottom-up – from a series of observations to a probabilistic conclusion.

Genealogy has a stronger proof standard than the "preponderance of evidence" standard used in civil court cases, which require only that evidence be weighty enough to tip the scales for or against a verdict. In genealogy, proof is achieved when evidence in support of a conclusion is sufficient to convince a reasonable, unbiased person. Still, the genealogy standard is somewhat less demanding than the proof "beyond reasonable doubt" required in criminal cases.[3]

Five Fonkert Tips for Asking Questions and Explaining Conclusions

1. Make sure the identity of the research subject is certain – name, time, and place.
2. Make sure the research question is potentially answerable.
3. Demonstrate that the research was reasonably exhaustive – relative to the research question.
4. Evaluate each source and each separate piece of information it carried.
5. Explicitly explain how the extracted information logically answers the research question.

Recommended Reading or Viewing

Board for Certification of Genealogists, *Genealogy Standards*, Second Edition (Ancestry.com, 2019).
Fonkert, J. H., "Turning Raw Information into Evidence: Drawing and Explaining Conclusions," *On Board*, 25:3 (September 2019), 1-2, 7.
Jones, Thomas W., *Managing Genealogical Proof* (Arlington, Va.: National Genealogical Society, 2013).
Peters, Nancy, *Reporting on Research: Standards Encourage Better Communication* (Legacy Family Tree Webinars, March 2021, www.familytreewebinars.com).
Zinsser, William. *On Writing Well: The Classic Guide to Writing Nonfiction*, 30th Anniversary Edition (Collins, 2006).

[2] The first two approaches correspond to the single hypothesis and alternative hypothesis approaches described by Jones (*Mastering Genealogical Proof*, p. 89). The inductive and deductive options in the third approach are similar to Jones' third and fourth approaches: "building blocks" and "syllogisms."
[3] Helen F. M. Leary, "Evidence Revisited: DNA, POE, and GPS, *OnBoard*, 4:1 (January 1998); https://bcgcertification.org/skillbuilding-evidence-revisited-dna-poe-and-gps/.