



## Sense and Sensibility The Power of Logic, Intuition, and Critical Thinking

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As genealogists, we make hundreds of decisions every day based on thousands of pieces of information. We automatically use common sense, logic, and even intuition, to identify relevant information, analyze evidence, problem-solve, and answer complex questions. But it's empowering to become deliberate and thoughtful about our use of logic. When we use these skills within the logical framework of the Genealogical Proof Standard (GPS) and the genealogy standards, we can deconstruct problems and generate tools, methodologies, and tests, that support our work from research question to final written product.

The GPS and collective genealogy standards are a logic system/framework used by genealogy practitioners to determine whether a research question has been answered *conclusively* (a deductive argument); or to identify if it has been answered "*only with some degree of probability*"<sup>1</sup> (an inductive argument).

### logic + "reasonably exhaustive research"

Using syllogism and problem-deconstruction assists us in fulfilling the first element of the GPS and ensuring "... examination of all potentially relevant sources."<sup>2</sup> Keep in mind that "relevant sources" means *sources relevant to our particular research question*.

### The Research Question

Genealogists use the research question as a focusing tool. The research question can pull us out of rabbit holes, deconstruct problems, and test whether we've conducted "reasonably exhaustive research." Our "focused proof" or **goal** as genealogists is to **answer** a particular research question. Throughout the research process that question is a constant reminder to keep our eye on that goal.

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<sup>1</sup> Board of Certification of Genealogists, "Chapter 1—The Genealogy Proof Standard," *Genealogy Standards, second edition*, Board of Certification of Genealogists (Washington, D.C.: 2019); p. 3.

<sup>2</sup> Board of Certification of Genealogists, "Chapter 1—The Genealogy Proof Standard," *Genealogy Standards, second edition*; pp. 1-2.

**Strategy: Break Down to Build Up**

While each research question has a focused goal, it can also be part of a set of questions, that fulfill a larger research objective. The formation of related research questions can be used to deconstruct and identify the steps needed to complete a more complex research objective.

Focus	Goal
<b>Research Objective</b>	Prove paternal line to immigrant ancestor.
<b>Research Questions</b>	Prove kinship each generation going back in time
1. Who was Jephtha G. Speaks's father?	
2. Who was Jephtha G. Speaks's paternal grandfather?	
3. Who was Samuel Speake's father?	
4. Who was Samuel Speake's paternal grandfather?	
<b>Research Question</b>	Prove (identify) father of Jephtha Speake
Who was the father of <b>Jephtha Gilead Speaks</b> (b. abt. 1828, Indiana—d. 1871, Bourbon County, Kansas), who was married to Nancy Hold (b. 1830, Ohio—d. 1914, Lawrence, Franklin, Kansas) at Noble, Hamilton, Indiana, in 1847?	

**Research Plan**

Your initial **research plan** should be reflective of the information you know about the subject of your research question. Keep it simple. Make it flexible. Ten minutes into gathering data about your subject, you may discover that you have to change everything on your initial plan.

**Strategy: "If-Then" + Research Plan**

One of the most powerful logic-based tools we use in genealogy are syllogisms ("If-Then" statements). If you're unsure where to begin, or having difficulties amending your research plan, take the time to jot down specific "If-Then" statements. These statements help you get creative about finding sources, and tests whether you've included "potentially relevant sources" in your plan.

<b>Research Question:</b> Who was the father of <b>Jephtha Gilead Speaks</b> (b. abt. 1828, Indiana—d. 1871, Bourbon County, Kansas), who was married to Nancy Hold (b. 1830, Ohio—d. 1914, Lawrence, Franklin, Kansas) at Noble, Hamilton, Indiana, in 1847?	
<b>"If-Then" Statements</b>	<b>"potentially relevant sources"</b>
If Jephtha was born and married in Indiana, <b>then</b> his mother, or both of his parents were probably in Indiana from 1828+.	U.S. census records <b>1810—1850</b> . Baptismal records, Indiana?
If Jephtha's parents were in Indiana in 1828, <b>then</b> they may have married there.	<b>Indiana</b> marriage records, <b>1810—1830</b> .



If Jephtha died in Bourbon County, Kansas, <b>then</b> he arrived there between 1847 and 1871.	Burial records <b>Bourbon County, Kansas?</b>
If Jephtha arrived in Kansas between 1847 and 1871, <b>then</b> what route might he have taken?	<b>Migration maps, Indiana-Kansas, 1820-1880.</b>
If Jephtha was about 33 years old in 1861, <b>then</b> he may have served in the Civil War.	Muster Rolls, <b>Union (?)</b> , in <b>Indiana/Kansas/etc.</b>

**Strategy: Work It > Reframe It > Rework It**

What happens when you can't answer a research question or are unable to resolve a conflict? *What do you do if you're unable to meet the GPS?*

1	Acknowledge that you know more about your subject now than when you began. It's important to see the progress you've made!
2	Review any new material you've discovered.
3	Compare it to what you knew prior to research on this question.
4	Use the new information to generate one or more reframed research questions.
5	Work through each research question, one at a time.
6	Still not meeting the GPS?
7	Repeat 1-5.

**Data Collection**

After we complete an initial plan we begin to collect data. Genealogy standards 19-36 concern the logistics of evaluating and testing the sources we find, and the information therein.<sup>3</sup> Why do we evaluate our sources and information? Common sense dictates that the evidence assembled to answer a research question needs to be reliable, relevant, and there has to be enough of it. *Quality* is the point.

**Strategy: "I've fallen down a rabbit hole!"**

If you find yourself up at 3:00 a.m. playing with a shiny new record or analysis tool that's just come online, or notice you've spent an hour trying to figure out what happened to a neighbor's cousin's wife . . . you may have fallen down a rabbit hole. To pull yourself out remember:

<sup>3</sup> Board of Certification of Genealogists, "Chapter 1—The Genealogy Proof Standard," *Genealogy Standards, second edition*; pp. 15-23.



## Revisit-Research Question-Research Plan-Stash

- **Revisit the Research Question:** Print it out in big bold type and post it where you can see it as you work. Check it regularly. Use it to re-focus your attention.
- **Revisit the Research Plan** to add, subtract, amend, adjust course. If your mind is wandering, it may signal that you need to re-vamp the research plan.
- **Stash:** Keep a folder and/or file on your desktop where you can easily save that link, make a note of the family or fascinating puzzle you want to unwind later.

### **Strategy: Hypothesize From Evidence**

If someone you're researching apparently disappeared off the face of the Earth, you can generate hypotheses that point to records that were not initially obvious.

	Action
<b>Step 1</b> <i>hypothesize</i>	Make a list of logical possible <b>outcomes</b> for the missing subject (married, employed, moved, UFO visit, etc . . .) based on what you know. Get creative.
<b>Step 2</b> <i>test</i>	Eliminate possibilities that seem unlikely based on what you know thus far. (UFO abduction)
<b>Step 3</b> <i>evaluate</i>	What sources are remaining possibilities pointing to? (migration route, FAN research . . .)
<b>Step 4</b> <i>strategize</i>	Use those sources to adjust the research plan.

### **Strategy: Use Intuition to Your Advantage**

Throughout the research process we might examine hundreds of sources/pieces of information focused on something particular in the moment. We absorb lots of other information along the way, but because it isn't relevant to a particular subject, it flies under the radar.<sup>4</sup> This is sometimes called intuition or a "gut-feeling." It's your subconscious mind telling you to pay attention. You know something, but you don't know quite yet what you know, or how you know it. Positive or negative, it's worth investigating where that "feeling" takes you. Just remember that intuition or "a feeling" is **not** evidence. It's a hint or suggestion of the next steps to take on your research journey.

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<sup>4</sup> Laura Kutsch, "Can We Rely on Our Intuition?" *Scientific American*, 15 August 2019. **Also:** Kendra Cherry, "What Are Heuristics?: These mental shortcuts lead to fast decisions—and biased thinking," *Very Well Mind*, Dotdash Meredith, Inc., 2024.



## logic + tests + conflicts

Testing evidence is the part of the research process in which you deliberately use different methods to analyze and correlate information pertaining to a research question, and to resolve conflicts. What are you testing for? To determine if the assembled evidence:

- Answers the research question conclusively (meets the GPS).
- Answers the research question “only to some degree of probability” (does not meet the GPS).
- Does not answer the research question.

Genealogists use many different types of methodologies to test sources, information, and evidence, and to resolve conflicts. A methodology is a way or system to look at information.

### **Strategy: DIY Methodology**

There is no one-size-fits all timeline, analysis worksheet, or DNA analysis tool. Building a tool that fits a particular project or problem allows you to organize your information in a format tailored to *your needs*. **Bonus:** The process of creating a DIY methodology forces you to deconstruct and better understand a problem.

Step	Action	Example
1	Specify a particular problem.	Everyone in this family is named John or Thomas . . . or both. ☹
2	Pinpoint why problem is frustrating.	Is this a cousin? Brother? Nephew? The same guy in a new place? I can't tell them apart.
3	Identify what you know about subject/problem already.	Most Tom/John different birth years; wives have different surnames;
4	What do I need/want to do with this information?	I need to quickly sort out who a Tom/John might be in a given generation.
5	List possible solutions.	l-r tree chart, birthdate timeline, table of how all related.
6	Experiment with formats until one works.	Spreadsheet tracing each Tom/John by ancestor and descendants?.

### **Strategy: Build Problem Solving Skills**

- ☛ **Games:** Relax and build skills at the same time playing logic-based games (*Sudoku*, marble solitaire, chess, etc. . .). **Turbo Charge:** Check to see if you're on the right path to completing the game . . . and if not, see if you can unwind the puzzle to where you first went astray.



- **Feedback:** Take every opportunity to give feedback and critique on written products (proof arguments, articles, reports . . . but also novels, essays, movies). Identify research question, supporting evidence, conflicts, theme, premise. Offer evidence from the work supporting your opinions as to what works or what does not work in the written piece. Perhaps share how you might remedy a problem.

### critical thinking + written conclusion

The different phases of the research process revolve around producing a clear and coherent written conclusion. The craft of writing and editing is logic-based: Our written conclusion has to make sense or it's not a proof. Since genealogists spend a vast amount of time writing, it's important to use that time strategically.

#### Strategies: Writing/Editing, the Ultimate Logic Tool

Use writing and editing a written conclusion as a turbo-charged logic-based tool. Writing and reviewing your written work offers numerous opportunities to organize, problem solve, and test your final product because . . . it has to make sense.

Goal	Action
Organize	Use research question to outline/organize your writing project at the beginning of your project. <i>Bonus:</i> Also informs initial research plan.
Problem-Solve	In addition to giving feedback, simply writing about a problem, in an informal way, discussing the conflicts, the evidence, the frustrations, can help you identify new sources, resolve conflicts, and build problem-solving skills.
Test for "Sense"	Editing your work helps identify if you've connected the dots . . . explained why evidence answers the research question. Does it make sense?

### Resources

#### Logic, Critical Thinking and Intuition

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