DIVING DEEP INTO ANALYSIS

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The Research Process Overview

The research process is typically comprised of five stages, including establishing a research question, identifying and collecting sources, analyzing and correlating evidence from information within the sources, determining evidence and making conclusions, and then proving those conclusions in writing.[1]

Research questions usually deal with identity, relationship, or events. Effective questions are targeted and answerable. For example, a research question focusing on a relationship could be: "Who was the father of David Linn Dewitt who was born in 1801 in Allegheny, Maryland, and who married Sarah Headley in 1827?" Once the question is identified, the next steps a researcher takes may be to begin researching sources that may answer the research question or to create a locality guide if the research is in an unfamiliar location.

After the research question is pinpointed, a research plan should be crafted. In it, sources are identified that are most likely to answer the research question directly or indirectly. Research plans are not static—they evolve as the process continues. When research commences and a source is found, analysis of that source and its information should be performed. Analysis includes determining if a source is original, derivative, or authored. Categorization of information items within sources may be determined as primary, secondary, or undetermined.

When many sources are reviewed and analyzed, correlation begins. Correlation is a process that compares information items from within or between sources. From correlation, conclusions may be able to be drawn, and when put in writing, could become proven.

This article isolates and discusses the analysis stage of the research process. An example at the end of the article demonstrates each step. There are three types of analysis to consider—source analysis, information analysis, and evidence analysis.

SOURCE ANALYSIS

Source Basics

A genealogical source contains information that may help genealogists answer their research questions. Sources vary greatly and can include records, publications, recordings, images, written materials, and even artifacts.[2] Some examples of these might be birth records, an oral family history, a death index, a family photo album, a passport application, and much more.

There are three source classifications. A source can be a record or an authored narrative. Records can be original or derivative. Therefore, the classification of a source is one of three choices: an original record, a derivative record, or an authored narrative, as shown in Figure 1. Are the terms source and record interchangeable? No, a record is a subcategory of a source and thus the terms should be used differently.

Original records are often made at the time of an event or soon after to report the event. They are not based on prior records.[3] Examples of original records may include marriage certificates, military draft cards, and passenger lists. Derivative records are created from prior records.[4] Those prior records may have been original or derivative. Examples of derivative records may include death indexes and city directories. Authored narratives are a compilation of information from multiple sources in some written form.[5] Examples of authored narratives may include genealogies, diaries, letters, family trees, and obituaries.

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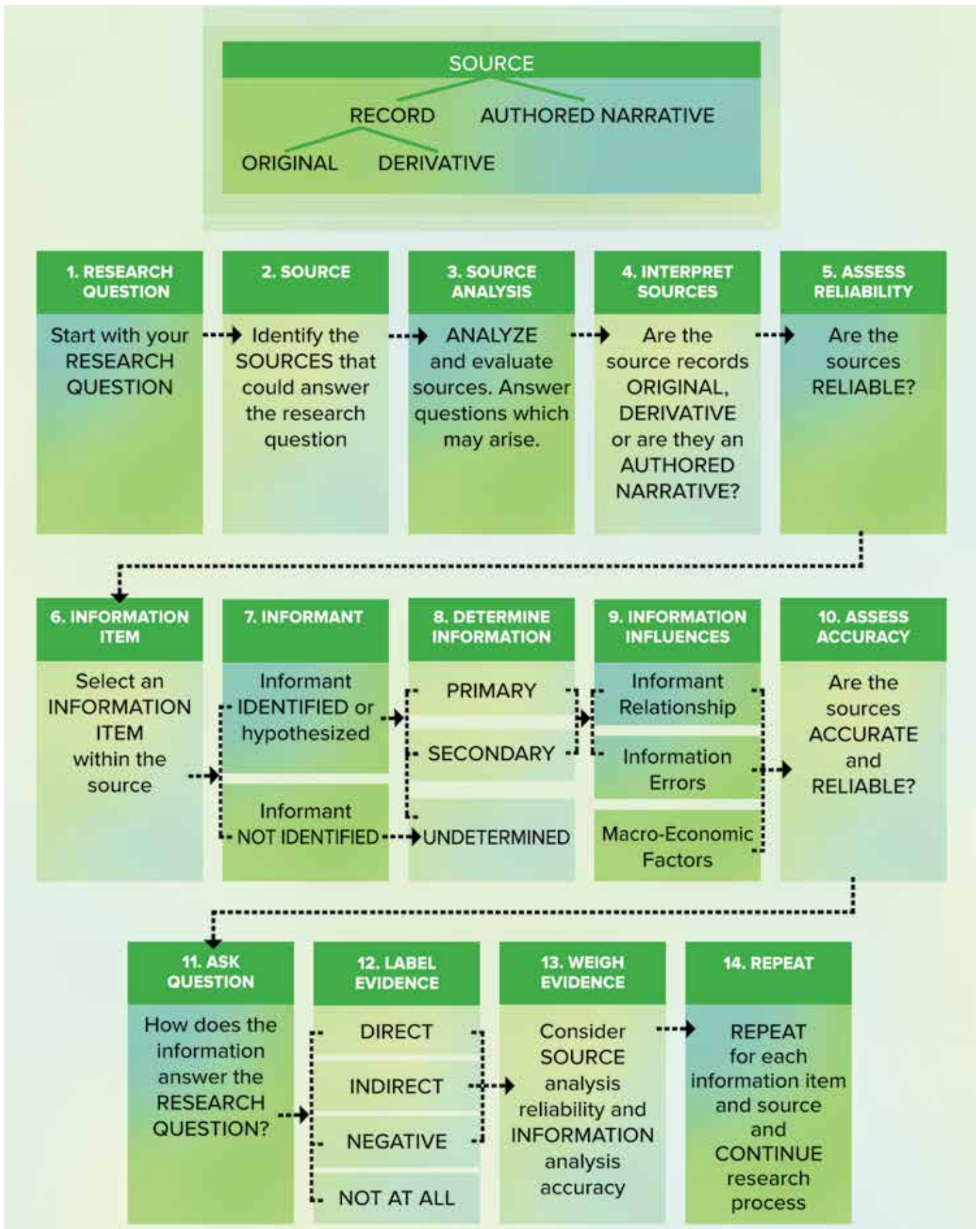
SOURCE

RECORD   AUTHORED NARRATIVE

ORIGINAL   DERIVATIVE

1. RESEARCH QUESTION	2. SOURCE	3. SOURCE ANALYSIS	4. INTERPRET SOURCES	5. ASSESS RELIABILITY
Start with your RESEARCH QUESTION	Identify the SOURCES that could answer the research question	ANALYZE and evaluate sources. Answer questions which may arise.	Are the source records ORIGINAL, DERIVATIVE or are they an AUTHORED NARRATIVE?	Are the sources RELIABLE?

6. INFORMATION ITEM	7. INFORMANT	8. DETERMINE INFORMATION	9. INFORMATION INFLUENCES	10. ASSESS ACCURACY
Select an INFORMATION ITEM within the source	Informant IDENTIFIED or hypothesized / Informant NOT IDENTIFIED	PRIMARY / SECONDARY / UNDETERMINED	Informant Relationship / Information Errors / Macro-Economic Factors	Are the sources ACCURATE and RELIABLE?

11. ASK QUESTION	12. LABEL EVIDENCE	13. WEIGH EVIDENCE	14. REPEAT
How does the information answer the RESEARCH QUESTION?	DIRECT / INDIRECT / NEGATIVE / NOT AT ALL	Consider SOURCE analysis reliability and INFORMATION analysis accuracy	REPEAT for each information item and source and CONTINUE research process

FIGURE 1: *Source Analysis and Research Process.*

What is Source Analysis?

Analysis of a source is when just one source is isolated and analyzed. Combining the words source and analysis creates a new intention: one that is narrower than just analysis. It is reviewing a source's background and context, physical state, purpose, and other factors. While it may be simple to determine a source as original, derivative, or authored, the complexity that accompanies that categorization to ultimately assess its reliability is not.

Source analysis of one record sounds straightforward but actually involves the consideration of multiple source factors. See Figure 1, step #3. These include reviewing legibility, understanding custody, determining format, and much more. Analyzing a source is an everyday activity for genealogists. As a researcher's experience grows, it becomes more innate and something that is often completed "in our heads." It may be written in research notes or research logs. Unless there is an anomaly, conflicting information, or an oddity that needs attention called to it, it is rarely discussed in a written report or article. As research is planned, understanding source quality makes a difference.

Why Apply Source Analysis?

Genealogists seek highly reliable sources to help answer their research questions. The most reliable sources are usually original records, not derivative records or authored narratives. By addressing the source analysis factor questions discussed further below and extending source analysis to more than just the designation of original, derivative, or authored, a deeper and more thorough understanding of the source's reliability will be achieved.

Original records may contain more information and be more accurate than a derivative. That is because the process of creating a derivative record entails being somehow transcribed or copied, and occasionally abbreviated. Though original sources are much more sought after, that does not mean derivatives have no value. Derivative records can lead us to those coveted original records, and sometimes, derivatives are extant when originals are not.

Original records are more likely to withstand the rigors of source analysis factors than derivative records or authored narratives. An analysis of an original re-

cord usually results in a conclusion that the source is more reliable than its derivative counterpart. For example, consider sources created from a death such as a death certificate and an obituary. Ponder the purpose. The death certificate's purpose is to inform the state of deaths and causes. An obituary's purposes are to share news in the community, celebrate the decedent, and make money for the newspaper.

Source analysis is applied by genealogists to all source types with the ultimate goal of gauging reliability. Reliability is a measure of dependence on the source for accuracy and honesty. Gauging the reliability of one source aids genealogists further in the research process when analyzing multiple sources and correlating them. For example, if there is conflicting information on an ancestor's death date between two records, then the source with better reliability is often the one weighted more heavily.

Source Analysis Steps

Breaking down Source Analysis can be done with a series of steps as shown in Figure 1. The outcome of Source Analysis includes not only labeling the source as original, derivative, or authored, but also assessing the source's reliability through a variety of questions and answers. By understanding answers to the Source Analysis Factors, the overall reliability of the source should be determinable.

1) *Research question.* State the research question which usually targets a relationship, identity, or activity. Include information within the research question that uniquely identifies individuals.

2) *Source.* Identify a potentially relevant source. Based on the research question or objective, identify a source that may help answer the research question or further the research objective.

3) *Source analysis factors.* Answer the following questions tied to these Source Analysis Factors. Some may be more relevant than others depending on the source for the research question. The sequence of questions progresses from a broader perspective, such as the source's purpose, to the finer details, such as the legibility of the handwriting. Three categories help to position the analysis: background or contextual elements, recording elements, and physical or visual elements. Answering

the questions in sequence is not critical but understanding the implications of each is important.

Contextual Elements

a) *Purpose*. What is the purpose for the creation of the source? Its recording?

b) *Legal Requirements*. Was the source required by law? Its recording? Was it reviewed by an objective party for accuracy and adherence to law?

c) *Financial Implications*. Are there financial implications that may have influenced any of the parties involved, the information, or the creation and recording of the source?

d) *Macroenvironmental Factors*. What macroenvironmental factors may have influenced the creation or recording of the source, such as politics, migration, religion, economy, demography, and ethnicity?

Recording Elements

e) *Setting*. Explain how this source may have been created and recorded (if applicable). Include describing the setting, people involved, timing, and more.

f) *Chain of Custody.* Identify the entity, or person, that created the source, its provenance. Note any custody changes that may have occurred between its recording and its current custody.

g) *Time Lapse*. What time lapses exist between the event and its recording or any other custody events?

h) *Creation and Recording Professionalism*. Was the source created carefully and professionally? Was the scribe careful, thorough, and complete? If surrounded by other records, do those remain intact and in original sequence?

i) *External Consistency.* Does this source present similarly to others like it for the same time and place? Consider the language, form, handwriting, and law. Are there any customs or traditions that impact this source's origin, recording, information, etc.?

j) *Internal Consistency*. Is the uniformity of the handwriting consistent within the source where it should be? Are signatures originals or copies? Are any alterations to the source evident?

Physical Elements

k) *Format*. What is the presentation form of the source? Is it a book, ledger, loose paper, recording, letter, photograph, or artifact? Implications?

l) *Image*. Is this source an image, such as a film, photocopy, photograph, scan, video, or other replication? Implications?

m) *Medium*. What means of showing the source was used, such as a microfilm reader, digitization, or an online database? Does it affect the image, viewing, or completeness?

n) *Physical Condition*. Is the source free of tears, rips, smudges, and other damage? Describe the physical condition of the source.

o) *Legibility*. Describe the legibility of the handwriting and/or printing for the source. Are any words, sections, marks, or symbols unclear or incomplete?

4) *Original, derivative, or authored*. Determine if the source is an original record, a derivative record, or an authored narrative.

- Based on the definitions for original, derivative, and authored, label the source as one of these. Steps #3 and #4 need not be sequential but sometimes addressing the factors helps to determine source categorization.

5) *Assess reliability*.

- Summarize the reliability for each source based on the observations from previous steps.

These five steps can be repeated for each source and in a variety of situations. For genealogists new to source analysis, it is recommended that these steps are followed until they become habitual. They should also be used when any genealogist is analyzing an unfamiliar source type, a different time period setting, a source in a different language, or any other source type not previously explored. In everyday use, genealogists inherently apply these steps but typically without recording them unless there is something questionable.

INFORMATION ANALYSIS

Defining Information and Analysis

Sources contain information items. Information may

be considered primary, secondary, or undetermined. A primary piece of information is when the event or circumstance was witnessed by the informant. When the information is secondary, the informant learned of that information or event from someone else or something else. When it is not known if the information is primary or secondary, it is titled undetermined.[6]

What is Information Analysis?

One outcome of Information Analysis is the categorization of information as primary, secondary, or undetermined. This labeling itself is a quick and convenient view at considering accuracy, but more deliberation must occur to comprehensively evaluate an information item. The assessment of accuracy is the desired outcome of Information Analysis. That accuracy is able to be better determined by considering the informant's relationship to the research subject and the influences over the event, information item, informant, and more. It helps genealogists understand more about an information item's potential accuracy via a review of the information item, the informant, how that informant learned of the information, and influences over each of those.

Information Items and Their Nuances

Information items may seem simple and often are a straightforward date, a name, and/or a place. Some information items may not be as obvious as data on a document. These instances include oral statements, audio recordings, video recordings, artifacts, and more. No matter how simple or not, there can be nuances to information items and their analyses that increase complexity. For example, multiple information items often exist within one source. For a birth certificate this could include parents' names and places of birth, the child's name and date and place of birth, and more.

Another type of complexity is that one source may have multiple informants. For example, on a birth certificate, the medical doctor likely provides the date and time of birth while the mother provides the names of the child and the father.

An additional complexity to Information Analysis is that information items within a source may vary in their categorization. One information item may be primary while another may be secondary. For example, on a death certificate with an informant as the deceased's child, the name of the deceased is primary information (the child knows the parent's name) and information as to when and where the deceased was born is secondary (the child was not an eyewitness to the parent's birth or location).

Information Analysis Steps

Deconstructing Information Analysis results in five steps as shown in the flowchart in Figure 1. The product of the analysis includes the determination of the information as primary, secondary, or undetermined. But, more importantly, the outcome is an assessment of the information accuracy which is done by gauging the influences on the event, informant, and information item. The flow of these steps may be depicted as follows (see Figure 1).

There are five basic steps to Information Analysis after a source is selected.

6) *Select information item*. Within a source, select an information item that may be relevant to the research. Examples include a burial date, a marriage location, a witness name, or a property description.

7) *Identify informant.* Determine, if possible, the informant for that information item. Some documents state an informant's name explicitly. Those explicitly stated informants may be present on birth, baptism, marriage, death, and some military records. Witnesses on a will may be informants of certain information items, such as the identification of the testator and the testator's state of mind. Yet the witness would not typically attest to the information within the will such as relationships and property distribution.

If the informant's identity is not stated, it may be inferred or hypothesized, and is likely based on the genealogist's understanding of that source, time, place, and customs. Hypothesizing will be helpful as long as that uncertainty is taken into consideration for the final evaluation of the information categorization and potential accuracy. For example, information on deeds, some military records, and passports almost always originates from grantors, soldiers, and travelers as informants.

Some informants will never be known or able to be

hypothesized. This is often the case with sources such as censuses, genealogies, obituaries, city directories, family bibles, and online family trees.

8) *Primary, secondary, or undetermined.* If the informant is identified, assess the informant's knowledge of the identified information item as primary, secondary, or undetermined.

a) Primary Information

When an informant was present at an event, then some information items from it can be determined as primary. The information item must have been observed by the informant for it to be considered primary. For example, a marriage may be considered primary information by at least the bride, groom, officiant, and witnesses. In the case of the bride and groom for a wedding, the informants may be research subjects themselves. Other examples of that may include a person supplying information for military purposes, a passenger list, a will, or a deed.

b) Secondary Information

Secondary information occurs when the informant did not learn of the information by observing it but rather by hearing about it secondhand. For example, a marriage in which people weren't present but knew the couple as married. These informants could be people who were living but not at the event or people who had not yet been born at the time of the event. In the marriage example, that would include the couple's descendants as well as family and friends who were living at the time but not present at the wedding.

c) Undetermined Information

When the informant is not identified, or when an informant is identified but the information cannot be classified as primary or secondary, then the information is undetermined. An example of an identified informant with undetermined information would be in a widow's pension application with a widow who indicated she was a second wife, and she named the first wife. It is not known if the second wife knew the first wife during the time the couple was married or if she had just heard the first wife's name. Therefore, that information of the first wife's name would be classified as undetermined.

9) *Information item influences.* Gauge any information analysis influences over the event, informant, information item, and more. Consider these:

a) *Informant Relationship*

- What is the relationship of the informant to the research subject?

- How long did the informant know the research subject?

- Would the informant have been present in the research subject's time and geography? If yes, how long?

b) *Errors*

- *Memory*. Over time, a person's memory fades, the event details become less clear and more prone to error.

- *Recording*. An unintentional error can be made in speaking, writing, or recording the information.

- *Intentional Error – Financial*. E.g., an understated property value to avoid higher taxation.

- *Intentional Error – Legal*. E.g., a bride or groom states that he/she is older so that the marriage can occur without a guardian, or a boy overstates his age to join the military.

- *Intentional Error – Propriety*. E.g., a woman states "widowed" instead of "divorced" or "abandoned" because it is embarrassing, or a wedding date is provided as earlier to hide a child's conception prior to the wedding of its parents.

- *Intentional Error – Vanity or Pride*. E.g., the age of a person decreases as time passes; or the age of a bride or groom is understated to appear more appealing to the prospective spouse.

10) *Assess accuracy.* Assess the accuracy of the information item. Summarize the accuracy for each information item based on the observations and conclusions from the previous steps.

Repeat these steps for each information item.

Why Apply Information Analysis?

Understanding the nuances of Information Analysis and moving through the five steps aid researchers in concluding the accuracy of information items. When an informant is an eyewitness to an event—and therefore it is primary information—that information is more likely to be accurate than when the information is secondhand—or secondary information.

Genealogical proof is ideally comprised of evidence that has at least one piece of primary information related to answering the research question. Additionally, partiality to unbiased eyewitnesses is preferred. While secondary information may be less reliable than primary, it should not be assumed as inaccurate. However, information accuracy does not have a stronghold on primary information; inaccuracies still exist within primary information for a variety of reasons.

EVIDENCE CATEGORIZATION – A PRECURSOR TO EVIDENCE ANALYSIS

Defining Evidence

Sources provide information items that may answer our research questions. Evidence is only present when a research question has been posed. For example, a death date on a death certificate is not evidence. But when the research question is "when did John Doe die?" then that death date is evidence of John's death. Typically, multiple pieces of evidence allow us to tentatively answer the research question.[7] Evidence may provide answers that are direct, indirect, or negative.

Direct evidence is an information item that answers the research question by itself.[8] For example, consider the research question "when did John Doe and Sarah Smith marry?" A marriage certificate that provides the date of 02 September 1933 is direct evidence.

Indirect evidence is an information item that, when combined with other information items, may answer the research question.[9] Indirect evidence does not answer the research question directly or on its own. Consider the child John Doe in an 1850 census household which includes a man and woman of an appropriate age to be that child's parents. The 1850-1880 federal censuses do not provide relationships of household members to the head of the household. However, most of the children in these households are the children of the inferred father and mother,

and therefore this is indirect evidence of the parent-child relationship. When this is combined with other evidence, it could answer the research question "who was the father of John Doe?"

Negative evidence occurs when the absence of a situation or information supports answering the research question.[10] For example, when a person disappears from a series of city directories in which she had previously been documented, that may be negative evidence that she moved out of the area or died (depending on the research question).

Evidence Categorization Steps

The steps in Evidence Categorization can be depicted as follows (see Figure 1):

11) *Review* – Use the information item identified in the previous step. Ask "how does that information item answer the research question?"

12) There are four possible answers which will be demonstrated using the research question: "When did John Doe die, who was born 1850 in Centre County, Pennsylvania, and who married Sally Smith in 1875 in Centre?"

- *Direct* – the information item answers the research question directly.

  o E.g., a FindAGrave memorial with a death date of 15 April 1915. This date directly answers the question for when John died.

- *Indirect* – the information item answers the research question indirectly.

  o E.g., a newspaper society announcement dated 1918 that mentions Sally Doe, widow, who visited friends out of town. Sally's status as a widow indirectly gives evidence of her husband's death prior to the publication date in 1918.

- *Negative* – the absence of the research subject in extant records that can be suggestive of an answer to a research question.

  o E.g., John Doe was not found in the 1920 census anywhere, including at his 1910 residence, and therefore he may have died between 1910 and 1920.

- *Not at all* – an information item does not an-

swer the research question directly, indirectly, or negatively.

13) *Analyze* – If direct, indirect, or negative evidence was an outcome of the previous step, review the Source Analysis and Information Analysis. This review will provide insights into the reliability and accuracy of the evidence.

14) *Repeat* – All the steps in Source, Information Item, and Evidence Item analysis for comprehensive Evidence Categorization. Continue the research process to correlate evidence and potentially to answer the research question. Each of the types of evidence above for John Doe suggests an answer to the research question. None of them can be considered accurate until further analysis and correlation are completed. Thus, it takes more than one evidence item to form a conclusion.

What Happens After Evidence Categorization?

Remember that there are typically five stages in the research process which begins with establishing a research question, identifying and collecting sources, and analysis. After analyzing the sources, analyzing the information, and categorizing the evidence, correlation of evidence often is required.

Correlation compares and contrasts evidence to ideally result in a conclusion. There are many techniques to help genealogists correlate. These include the creation of timelines, tables, maps, lists, and much more. In correlation, the source analysis and information analysis are considered to weigh evidence. This evidence analysis may be simple or quite complex depending on the situation.

SOURCE ANALYSIS EXAMPLE

1) *Research question*: **"Who was the mother of Nancy Hile who was born about 1846 and lived in Holmes County, Ohio, in 1860?"**

2) *Source*. The source is an 1860 U.S. Federal Census record from Washington Township, Holmes County, Ohio, with Nancy Hile as a 14-year-old. This source may help answer the research question because it shows Nancy with an inferred family that may include her mother.

3) *Source Analysis Factors*

Contextual Elements

a) *Purpose*. The purpose of the U.S. Federal Census has changed over the decades from initially assessing the country's industrial and military potential to determining population trends for many reasons including community funding. In 1860, families likely had no issue with being enumerated nor with the information they would provide.[11]

b) *Legal Requirements*. The census was required by U.S. Law and citizens were required to answer it.

c) *Financial Implications*. There were no personal financial implications to being enumerated or to the answers given to the enumerator. While the value of real and personal property was gathered, it had no bearing on the enumerated person or family.[12] Enumerators were paid $.02 for each person enumerated.

d) *Macroenvironmental Factors*. Little or no effect of macroenvironmental factors was likely present for the enumeration itself nor its recording, and almost certainly none that would have affected the Hile family's enumeration.

Recording Elements

e) *Setting*. It is likely that the U.S. Marshal or Assistant Marshal visited the Hile home as directed by the enumerator instructions for "a personal visit to each dwelling-house." The enumerators were not required to speak with the head of the household though, and it could be "some member of the family…or an agent of such family."[13] The Hile family household appears to have complete and fairly accurate information as shown by names, specific ages (not estimates), real and personal values, and birthplaces.

f) *Chain of Custody*. The enumerators were required to make two copies of the census, for a total of three. The original went to the clerk of the county court, and two copies went to the marshal of the district. The marshal was required to provide one copy to the Secretary of the Interior and the other copy to the Secretary of the State or Territory.[14] While the chain of custody would likely not have created any potential issues with the record, certainly the

copying from the original to two copies could. Errors could easily have been made in transcribing, spelling, and comprehensive reporting of any family, individual, or information item.

g) *Time Lapse*. The official enumeration date for the 1860 census was 01 June. The Washington Township page with the Hile family was dated 31st July. Enumerators were instructed to record the composition of the family as of the enumeration date. In this case almost two full months had elapsed. If the family composition changed in those two months, the enumerator may have recorded it either for 01 June or for 31 July. For example, if a baby was born on 30 June, was the baby included or excluded? According to instructions, the baby should be excluded. Another example is ages—ages would have been of the 01 June date, but we cannot be sure what date was taken into account. Time lapses between the original and the copy creation should have no additional implications other than the expected copying errors already discussed.

h) *Creation and Recording Professionalism*. This enumeration page is clearly written and appears to be professionally recorded. Details appear to be captured consistently, which gives the impression that care was taken (e.g., places of birth change with each person or are given ditto marks).

i) *External Consistency*. The consistency with this census page, others surrounding it within the township and county, and others from within the state is quite good. There are no red flags.

j) *Internal Consistency*. It appears that one scribe wrote the census page for the Hile family. There are 35 images for Washington Township. The first two pages associated with the township are written in a different style. It appears that Ripley Township was continued over to Washington Township based on the dwelling number continuation, family number continuation, the surname Reede as the last in Ripley and the first in Washington, and the handwriting style. Further analysis could be done if there is a concern about which families resided in which townships.

Physical Elements

k) *Format*. The individual census pages appear to be bound together in a book form, though based on enumerator instructions were likely loose pages originally, perhaps for the original. Page numbers switch in an A / B format from the left to right side. Implications to this could be that pages may be out of order though the Hile family page and those immediately surrounding it show consistent dwelling and family number sequence.

l) *Image*. This is a digital image of good quality.

m) *Medium*. This was viewed online. There appear to be no implications with viewing in this manner—all edges are visible.

n) *Physical Condition*. The page seems largely intact and free of damage. There may be some slight "curling up" of edges but that does not interfere with any information captured on the census page. There are no rips or smudges that interfere with legibility.

o) *Legibility*. The handwriting is neatly written and clear; therefore, it is easy to read. For Nancy's age, the "14" is not quite clear and could be viewed as "111." Her place in the family, between a 15 year old and a 10 year old, plus the formation of other number "4s" on the page, almost certainly indicate she was 14 years old.

4) *Original, Derivative, or Authored*. This census page is likely a copy of the original. It can be treated as an original with the caveat and understanding that information was likely copied from one source to this one. The label of original versus derivative is not critically important, but understanding its reliability is.

5) *Assess Reliability*. The reliability of this record should be considered good. This is an official government record though with little financial or legal implications (which would typically increase reliability). The enumerator was professional and careful in documenting details of each household and family member.

INFORMATION ANALYSIS EXAMPLE

6) *Information Item*. The information item selected for this example is the name of the inferred wife of George Hile–Margaret Hile, age 41, female, born in Pennsylvania. Margaret could be Nancy's mother.

7) *Informant*. The informant is not able to be identified. However, based on the precise information within the Hile household, it likely is either George or Margaret. There are eleven household members, each with a specific age and differences in birth places. These would not likely be known by a child in the household or a neighbor.

8) *Determination of Information*. The information item—Margaret Hile, age 41, female, and born in Pennsylvania—would be primary information if Margaret was the informant. If George was the informant, then it would be a mix of primary and secondary information as he would know her name but not have had firsthand knowledge of her birth (age) and perhaps her birth location (Pennsylvania). If the informant was a child in the household or other person, then the information about Margaret would likely be secondary. Since the informant is unidentified, the information can only be categorized as undetermined.

9) *Information Item Influence*. Without an identified informant, the influences over the information item are difficult to speculate. However, there are some general influences over items such as age. It is not uncommon to see a person's age in censuses decrease over time or be stated to be younger than a husband's age. If Margaret was the mother of all the children in the household, then she was about 19 when inferred daughter Mary was born. That is realistic.

10) *Assess Accuracy*. Margaret's name, age, gender, and birthplace are likely to be accurate based on the analysis. The informant, albeit unidentified, appeared to provide specific information about the entire household that would have been known by

someone who knows the family well; likely George or Margaret Hile. Margaret's age fits nicely as an inferred wife to George and an inferred mother to the children in the family. Her Pennsylvania birth also matches George and many others on this census page who migrated from Pennsylvania to Ohio during this time of westward expansion.

EVIDENCE CATEGORIZATION

11) *Answer Research Question*. As the inferred wife of George Hile and inferred mother of the Hile children in the household, the information item may answer the research question of "who was Nancy Hile's mother?" Margaret Hile may be Nancy Hile's mother indicating her first name of Margaret but no indication of a maiden name.

12) *Label Evidence Item.* There is indirect evidence that Margaret Hile (maiden name unknown) may be the mother of Nancy Hile. It is indirect because relationships are not provided, only inferred.

13) *Weigh Evidence*. The source reliability is fairly good based on the analysis above. Additionally, the accuracy of information should be considered strong. Overall, this evidence should be considered strong.

14) *Repeat*. Indirect evidence, like this piece that suggests Margaret Hile may be the mother of Nancy Hile, must always be combined with other evidence before a conclusion can be made. The overall analysis process must be repeated until a conclusion is formed and then proven in writing. This is done by analyzing more information items within each source, as well as identifying and using more sources.

[1] Thomas W. Jones, *Mastering Genealogical Proof* (Arlington: National Genealogical Society, 2013), 5.

[2] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 89.

[3] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 82.

[4] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 75.

[5] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 73.

[6] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 82.

[7] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 72, 80.

[8] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 75-76.

[9] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 80.

[10] Board for Certification of Genealogists, *Genealogy Standards,* second edition (Nashville, TN: Ancestry, 2019), 81-82.

[11] 1860 U.S. census, Holmes, Ohio, population schedule, Washington, p 218 (penned), p 422 (stamped), dwelling #1498, family #1520, Nancy Hile; digital image, *Ancestry* (www.ancestry.com : accessed 04 April 2023); citing NARA microfilm publication M653, roll 989.

[12] "1850 Census Instructions to Enumerators," *United States Census Bureau* (www.census.gov : accessed 25 November 2023), U.S. Census Bureau.

[13] "1860 Census Instructions to Enumerators," *United States Census Bureau* (www.census.gov : accessed 25 November 2023), U.S. Census Bureau.

[14] "1850 Census Instructions to Enumerators," *United States Census Bureau* (www.census.gov : accessed 25 November 2023), U.S. Census Bureau.