

# Claude 3.7 Sonnet chat on: Theoretical Framework for Judging Research Validity

User:

AbsenceJudgement /

---

**User:**

metadata: BB

Hi Claude. Today we're going to be working on \section{Theoretical Framework: Judgment in Research}, specifically, on subsubsection: correspondence with reality and subsection nature of research work, then tying it all together with the intro.

To begin, please review AbsenceJudgement.tex and transcripts.tex. The way I've been working is by recording myself talking about this paper on the way into uni. I want you to be my academic writing partner in this. Specifically, I would like you to match my academic register when writing. We have an outline we're working from (And in the case for much of section 2, quite a lot of GPT 4.5 generated text).

The way I want you to work is to ask me one, specific, critical, and very academic question at a time until you think you have enough information to resolve the specific task at hand. You'll then give me a final plan of attack, and assuming I approve it, we'll integrate it in. There is no need to be complimentary here -- it is more important to me that we are effective.

To begin, give me a functional decomposition of my instructions, a detailed summary of the sources I've given you, and a readback of what I think our first task should be.

---

Assistant:

## Functional Decomposition of Instructions

### 1. Content Focus:

- Section 2: "Theoretical Framework: Judgment in Research"
- Subsubsection 2.2.3: "Correspondence with Reality"
- Subsection 2.3: "Nature of Research Work"
- Integration with introduction

### 2. Working Method:

- Process audio transcripts of your commute reflections
- Match your academic register in writing
- Ask sequential, targeted academic questions
- Develop content iteratively through dialogue
- Present implementation plan for approval
- Integrate approved content

### 3. Behavioral Guidelines:

- Maintain critical perspective over complimentary language
- Prioritize effectiveness over politeness
- Apply academic rigor and counterargument consideration
- Focus on substantive content development

## Source Material Summary

**AbsenceJudgement.tex:** Draft academic paper examining AI limitations in research tasks. Introduces "technoscholasticism" as a framework to understand why AI systems with vast information access fail at generating novel insights. The paper argues that current "agentic" AI systems lack three dimensions of

judgment: epistemic humility, inductive capacity, and correspondence with reality. The theoretical framework section (where we're working) establishes the conceptual underpinnings of judgment in research.

**transcripts.tex:** Collection of audio transcripts from February-March 2025 capturing your reflections on AI research capabilities. Key themes include:

- Distinction between agentic capabilities and task-following
- Three dimensions of judgment deficit (epistemic humility, induction, reality correspondence)
- Conceptualization of "technoscholasticism" as AI preferring textual authority over empirical testing
- Aristotelian paradigm comparison for AI's text-primacy approach
- Observations about research workflows and deep research tools
- Requirements for effective human-AI collaboration in research tasks

## First Task Understanding

Our first task is to develop the subsubsection on "correspondence with reality" within the theoretical framework, focusing on how current AI systems lack the ability to evaluate knowledge claims against real-world evidence rather than against other texts.

My first question: How do you want to distinguish your concept of "correspondence with reality" from philosophical theories of truth correspondence, and how central is the Carnapian confirmation critique to this section?

pdf

---

**User:**

**metadata: BB**

**Just to centre ourselves, here's the outline we're working from>**

\subsubsection{Correspondence with Reality} % - "Carnapian confirmation" approach % - Internal "truthiness" thresholds % - Primacy of textual authority over empirical testing % - Absence of experimental approach % - Inability to discard bad outputs based on real-world criteria

The intention is to ask sufficient questions until you can get an outline down to the sub-paragraph level, with notes of claims, evidence, and warrants. We will also need to engage in a proleptic analysis of what we're planning to do (not so much specifically talking to the readers in anticipating counterarguments, but making sure that we anticipate them nevertheless.)

To answer your question, I don't really want to get into phil knowledge. I'm rather more comfortable with rooting this in a Carnapian critique. We might need to rename it. (Reading the SEP article on Truth now, and ... given Hicks' extension of Frankfurt above, the soft bullshit of LLMs is utterly indifferent to truth, regardless of the philosophical position. I also don't really want to get into the demarcation problem, though I'm more comfortable there than in truth.)

Reading the SEP on Carnap again, we can consider the Deep Research protocols of an AI to be "discount carnapian confirmation" in a way.

When Carnap writes: > If by verification is meant a definitive and final establishment of truth, then no (synthetic) sentence is ever verifiable... We can only confirm a sentence more and more; (TM1: 420)

It is the accumulation of observations that allows us to have more (or less) faith in a valid sentence. Now, of course, Carnap is speaking to scientific sentences (and is, in a sense, in a dialogue with Popper about falsifiability) but we can take the basic abstractions (less the rigour that Carnap raised) of something

like: a statement can only be confirmed by repeated observations. (Carnap, of course, had opinions about machines as intermediaries here, and this isn't a paper on Carnap) but the point I was trying to make is that:

An LLM, when seeking citations, will continue to seek citations to support a claim until some threshold of confirmation is reached. This threshold is never articulated nor addressed, and the fact that the LLM is incorporating the things into its context window will actively adjust its thresholds for confirmation in a perverse way: rather than being skeptical of the claims it is examining as authorities, the presence of accepted claims which correspond with the vibes of the prior text will serve to reduce the necessary threshold for confirmation, down to the point where searches on technical questions, rather than saying: "This site has your answer" merely rewrites the site in question and then ... keeps citing it.

An LLM's mechanism of observation is tool-use, and its reality are words on a computer. It takes the presence of words on a computer to support the vibes it already has in mind, and that this feels like it maps well to the Carnapian metaphor. There's also a paper I worked on, attached, that might also be useful in this regard.

Does this make sense, or do we need to push on this more?

---

Assistant:

Thank you for clarifying your approach with the Carnapian critique. This makes sense and provides a strong foundation for this section. The framing of "discount Carnapian confirmation" is particularly apt for describing how LLMs accumulate textual evidence until reaching an unstated threshold.

My question: Could you elaborate on a specific instance from your experiences with Deep Research where you observed this process of uncritical evidence accumulation in action? Ideally, an example that demonstrates how the LLM continued gathering citations until it deemed its confirmation threshold met, regardless of the actual strength or relevance of those sources.

---

User:

metadata: BB

So, we have: <https://chatgpt.com/share/67d6a0c5-7648-8004-b620-70d91fdb7239>, which is where I ask it to pull together the state of Digital Humanities. (I'm sure I've used this one before)

Where it said: "I'm thinking about a Chinese authors conference submission on generative AI in DH. It's an early draft, so it might not be peer-reviewed, but it offers a unique global perspective." Then in the very next thought it said: "I'm collecting definitions of digital humanities from various institutions, spanning North America, Europe, Australia, and Asia, noting regional interpretations and conceptualizations." and then "I'm pulling together a list of global Digital Humanities centers, including a notable closure, conference locations, and university-affiliated programs. This helps in understanding the broader landscape."

This is *hilariously uncritical*. Some random arxiv post, into a search (that didn't come up with any links it followed) followed by a second search, written in such a tone that it just ... accepted what I found?

Here's the full thinking transcript (attached)

The damning sentence is: "I'm noting that the University of Adelaide might offer a "Digital Humanities - Majors and Specialisations" program, aligning with my interest in digital humanities. Read [adelaide.edu.au](http://adelaide.edu.au) ChatGPT Examining Australian undergrad programs like University of Adelaide's digital humanities, ANU's digital humanities and public culture, and Western Sydney's master's."

<https://www.adelaide.edu.au/majors-specialisations/digi-hum> was last updated in 2019. Looking at their events, the events search has nothing in 2023, 2024, or in 2025.

Clearly, this was spun up in 2019, someone made a good go of it during covid, and then moved on. [https://adelaide.figshare.com/articles/presentation/Test\\_text/15132570](https://adelaide.figshare.com/articles/presentation/Test_text/15132570) has a text in 2023. But clearly, this is not an area of focus or concern.

Nevertheless, ChatGPT's DR said: > Prior to 2020, only a few DH degrees existed; by 2025, numerous universities offer undergraduate minors, BAs, MAs, and graduate certificates in DH. In Australia, the University of Adelaide introduced a Digital Humanities major combining humanities with computer science to prepare students "for the digital age of the future"adelaide.edu.au.

This is an uncritical acceptance of the copy without engaging in any historiography (what are these claims, who made these claims, what is the context of them, etc...)

Then it goes on to say: > Across curricula, a trend since 2020 is the broadening of scope – some programs center on cultural analytics and data (e.g. King's offers an MA in Big Data in Culture & Societykcl.ac.uk), others on public humanities, and some on technical skills for humanities research.

This is ... extremly wrong. The broadening of scope represents a fragmentation of the term, rather than the growth of a discipline. The problem is that all the sources it hit \*once\*\* were triumphal advertising copy, rather than critical reflections -- and thus, its copy was triumphal as well.

Nowhere in that transcript did it *check* any of the claims that it found. It took a webpage (well formatted, from a .edu, etc..) as fact, rather than considering what claims could be advanced with the evidence at hand.

---

Assistant:

Thank you for sharing this revealing example. This perfectly illustrates the "discount Carnapian confirmation" process in action. I can now see how to structure the "Correspondence with Reality" section around this concrete instance of LLM confirmation behavior.

Based on your Digital Humanities example, I'd like to ask: How would you compare the LLM's uncritical accumulation of textual evidence to a human researcher's approach to historiographical assessment? Specifically, what critical evaluation steps does a researcher take that the AI fundamentally lacks when reaching its "confirmation threshold"?

---

User:

metadata: BB

This is where things are sticky. I am aware of the problems of DH in Australia, so I know that what it claimed was flatly wrong. (Not a confabulation, to be clear, but merely accepting the textual claims at face value, and extrapolating).

The fundamentals, thinking about it, are: 1. Not mistaking a claim for a trend 2. Looking at authorship and temporality 3. Relating claims to their own experience 4. A position of scepticism, rather than uncritical acceptance.

The fundamental is that texts are produced by people, they have an interpretation and a representation of the real which supports the specific needs of that person or institution at the time. When we read claims by people, those claims are contextualised by our understanding of the author, the circumstances of writing, and the putative audience of the work.

Of course, we humans may be lazy as well! I am not claiming that AIs are uniquely bad at this. It's just that they do research like a concussed undergrad doing last-minute work. "Find something that supports my vibe, take it as a fact, cite it, move on."

However, there *is* a specific problem to LLMs. In my benchmarking, I've noticed that LLMs are very bad at model-of-mind-of-mind. (This is part of me testing for the successful capability to achieve deception, rather than roleplaying a moustache-twirling-villain). You (they) cannot hold contradictions well within the context window. This is the same flaw as prompt injection -- all input is trusted. In my testing, models I've tested are very bad at social deduction games, as they cannot achieve lies *while knowing the truth* because it requires holding both the understanding of the real, and the desired simulated understanding of the not-real.

So, this uncriticality of input means that anything "read" is "trusted" so long as it has the appropriate medium, in the McLuhan sense.

---

Assistant:

This is extremely insightful. Your articulation of the fundamental historiographical problems and the specific cognitive limitations of LLMs gives us a strong structure for the "Correspondence with Reality" section.

One additional question to round out this section: In your transcripts, you mention an "Aristotelian fallacy" where LLMs never engage with the real or empirical. Could you elaborate on what you see as the connection between this Aristotelian approach and the Carnapian confirmation issue? Is the Aristotelian element the privileging of authoritative texts over empirical verification?

---

User:

metadata: BB

Ok. There are a couple of lines here.

First, it's probably more the scholasticism of privileging authorities over structured observations of the real. My genuine insight for this whole paper came from Ars Magica's Arts and Academe supplement which said:

An empiricus is a character who specializes in one surgical (or more rarely medical) procedure. However, it is a derogatory term used by the literate medical profession, and these characters tend to refer to themselves as surgeons or medici. Empirici are usually traveling craftsmen, passing from town to town selling their skills to sufferers. ...

Effectively, the self-taught by observation rather than the "educated" in the context of studying and arguing about the authorities is a derogatory term.

(doing a quick google scholar search, people talking about Georg Handsch's observations in the 16th century as a *notable change* from prior practice supports this claim, though... only through the absence of evidence. Again, this can be a whole paper on its own)

In the primary sense of medical rule or regimen, *observatio* remained part of the medical language in the Middle Ages.<sup>88</sup> Whereas in medieval astronomy and astrology the word *observationes*, though exceedingly rare, continued to be used in an observational sense, the descriptive connotation seems to have been largely lost in the case of medicine, where the meaning of *observatio* narrowed down to *observance*. As late as the thirteenth century, Arnald of Villanova used it almost always in this sense, to indicate a rule or custom relevant to health. The eclipse of the observational meaning of *observatio* in medieval medical culture went with the near-oblivion that engulfed the ideas of the Empirics and Sceptics in the general collapse of ancient culture.

The idea of needing to observe instead of to pronounce the interpreted words of the Authorities is the crux of the thing. \parencite[16]{pomata\_word\_2011}

---

Assistant:

Thank you for this excellent historical context. This helps significantly in connecting the philosophical threads of our argument. I now have sufficient understanding to draft the "Correspondence with Reality" section.

Here's my proposed structure for this section:

Based on our discussion, does this outline effectively capture the key elements for the "Correspondence with Reality" section? I've tried to integrate both the Carnapian confirmation issue and the historical scholastic parallel, while centering your Digital Humanities example as concrete evidence of the problem.

---

**User:**

metadata: BB

Shall we rename this section? I think we could just frame it as the scholastic fallacy, no?

Run this through a proleptic check, please?

---

Assistant:

I've conducted a proleptic analysis of renaming this section to "The Scholastic Fallacy" and have several considerations:

### Potential Objections to Renaming

1. **Terminological confusion:** "Scholastic fallacy" already exists as a concept in Bourdieu's work, referring to the misattribution of academic/theoretical reasoning to everyday practical logics. Using it could create confusion with readers familiar with that literature.
2. **Disruption of parallel structure:** The current three-part structure (epistemic humility, inductive capacity, correspondence with reality) creates a clear analytical framework. Renaming just one section could disrupt this symmetry.
3. **Clarity of subject matter:** "Correspondence with reality" immediately signals this section's focus on AI's relationship to the real world, while "Scholastic Fallacy" requires more background knowledge.
4. **Breadth of analysis:** The section covers more than just scholasticism—it addresses Carnapian confirmation patterns and Frankfurt's concepts of bullshit (indifference to truth).

### Proposed Compromise

Rather than completely replacing the title, we could use "The Scholastic Fallacy in Correspondence with Reality" or incorporate the scholastic concept as a subheading while maintaining the main section title.

Alternatively, if you strongly prefer changing the name, we could rename all three sections to focus on specific fallacies for consistency:

- "The Epistemic Overconfidence Fallacy" (instead of epistemic humility)
- "The Pattern Recognition Fallacy" (instead of inductive reasoning)
- "The Scholastic Fallacy" (instead of correspondence with reality)

What approach would you prefer?

---

**User:**

metadata: BB

No, not going to rename the other sections. ... I don't love your compromise at all. I wonder... Scholastic versus Reality correspondence? Nah.

Let's keep it as is, it'll come out in the wash. Work through a Toulmin analysis and proleptic analysis of the proposed outline. What sources do you plan to use, and do I need to find any more?

---

Assistant:

## Toulmin Analysis of Proposed Outline

### Claims Structure

- **Main Claim:** LLMs lack correspondence with reality in their approach to knowledge.
- **Supporting Claims:**
  - LLMs use a "discount Carnapian confirmation" approach, accumulating texts without evaluation
  - They demonstrate a scholastic fallacy privileging textual authority over empirical verification
  - They lack historiographical assessment capabilities
  - Their structural limitations prevent them from relating text to reality

## Evidence and Warrants

- **Primary Evidence:** Digital Humanities case (strong example showing uncritical acceptance)
- **Key Warrants:**
  - Analogy between LLMs and medieval scholasticism
  - Contrast between Carnapian empirical confirmation vs. LLMs' text-only approach
  - The four-part framework of critical evaluation steps missing in AI analysis
- **Backing:** Historical context about empiricus vs. textual knowledge; Frankfurt's concept of "bullshit"

## Potential Objections & Responses

1. **"LLMs are improving with each version"**
  - Response: While performance improves, the fundamental architectural limitation of treating formatted input as trusted remains. Current models still show these issues.
2. **"This is just a matter of better prompting"**
  - Response: Even with explicit instructions to be critical, LLMs lack experiential grounding to evaluate claims against reality.
3. **"Retrieval-augmented generation (RAG) systems solve these problems"**
  - Response: RAG improves information currency but doesn't address the epistemological issue of relating text to reality or verifying claims independently.
4. **"The scholastic analogy is overdrawn - LLMs don't 'privilege' authorities"**
  - Response: The privileging occurs through statistical patterns learned during training, where authoritative-sounding text correlates with "correct" responses.

## Sources Needed

Your existing sources cover most needs, but to strengthen the section, consider adding:

1. **Primary Carnap source** - To properly ground the Carnapian confirmation discussion
2. **Frankfurt (2005)** - "On Bullshit" as the original articulation of indifference to truth
3. **Historical source on scholasticism** - To strengthen the historical parallel beyond the Ars Magica reference

The Digital Humanities example you provided is excellent primary evidence. Do you have any additional examples from other domains that show similar patterns of uncritical acceptance?

### User:

metadata: BB

for 4, they don't privilege "authorities" (Which, frankly, would be better than what they presently do), they privilege pages which correspond to their background training and presented with the markers of authenticity -- especially if the claims align with the "default" opinions of the internet.

If in the continued series of such testing experiments no negative instance is found but the number of positive instances increases, then our confidence in the law will grow step by step. Thus, instead of verification, we may speak of gradually increasing *confirmation* of the law.  
\parencite{425}{carnap\_testability\_1936}

(Is the classic quote). My observation of OpenAI's Deep Research is that the number of sources needed for this sort of claim is close to 1. Thus, the "discount" parts of it.

Frankfurt and Hines are already in the document. Do I need a quote?

**For scholasticism:** > By the labors of Bernold of Constance and others this research issued in a methodical procedure: statement of pros and cons, reaching conclusion, defence of conclusion against objection ... That is, authorities pro and con were given on one hundred and fifty questions in the- ology, while the conclusion was left for the reader to reach on the basis of carefully stated rules. \parencite[211]{longwell\_significance\_1928}

nt. The felt result is that of dis- covering truth in particular reality as secure as the universality from which the search makes its start. The subsequent rests al- ways upon the prior; and, as the work progresses, no detail is omitted in a most meticulous tracing of ramifications, while refer- ences to preceding proof multiply much as in mathematical demon- stration. It is intended, of course, that the admission of each suc- ceeding stage shall permit no recourse in the issue. So the move- ment of thought suggests the irrevocable necessity of a machine p 212

For the modern reader has only to select carefully the underlying assumptions, and consciously accept them, to be swept along irresistibly from one stage to the next until an end is reached as sure and indubitable as was the beginnin 212-213

I think this latter is perfect. Because the underlying assumptions for the AI is the user's prompt plus anything in the context plus any vibes from the background training and RLHF of the model. But, rather than having a cold and imposing evidence of logic, we have search\_with\_bing.

Sufficient, or should I elaborate more?

---

Assistant:

The sources and clarifications you've provided are excellent and sufficient for drafting the section. Your point about LLMs privileging content with "markers of authenticity" rather than actual authorities is a crucial distinction that strengthens our argument. This suggests an even more problematic mechanism - they don't even prioritize truly authoritative sources but rather content that statistically resembles what the model was trained to recognize as "authentic-looking."

The Longwell quotes on scholasticism are particularly powerful, especially:

"The subsequent rests always upon the prior; and, as the work progresses, no detail is omitted in a most meticulous tracing of ramifications, while references to preceding proof multiply"

This perfectly captures how LLMs build their arguments - each claim building upon prior claims with an appearance of meticulous reasoning, yet fundamentally disconnected from empirical reality.

Your observation about the parallel between scholastic assumptions and LLM assumptions (prompt + context window + training) is especially insightful. The contrast between the "irrevocable necessity of a machine" in scholastic reasoning and the literal "search\_with\_bing" in modern AI research tools brings the analogy full circle.

With these sources and clarifications, I have sufficient material to draft the "Correspondence with Reality" section. The structure from the outline, combined with these specific examples and theoretical framing, will create a compelling analysis of this dimension of AI judgment deficiency.

---

User:

metadata: BB

Great, give it a go. Remember, avoid dashes where we can. Match my register in my AbsenceJudgement.tex file. Think through a draft, edit it, and then present the edited version.

---

Assistant:

I've drafted the "Correspondence with Reality" section following your register from the AbsenceJudgement.tex file. I've avoided dashes, maintained the academic tone, and utilized the sources and examples we discussed.

Key features of this draft:

- Integrated the "discount Carnapian confirmation" concept
- Used the Digital Humanities example as concrete evidence
- Connected to the scholastic tradition with Longwell quotes
- Articulated the four historiographical assessment capabilities missing in LLMs
- Linked to Frankfurt's concept of "bullshit" as indifference to truth
- Concluded with your concept of the "Aristotelian fallacy"

Does this effectively capture your intended argument while maintaining your preferred academic register? I'm particularly interested in whether the connections between the theoretical framework and the concrete example are clear enough.

---

**User:**

metadata: BB

**Ok. Here are my edits. We need to work on one para (noted in comment). Also, can we tighten this up some? 1120 words is a *lot* for a subsubsection**

---

**Assistant:**

You're right about the length - 1120 words is excessive for a subsubsection. Let me revise the paragraph you highlighted and tighten the overall section to be more concise.

I've revised the section, reducing it from 1120 to approximately 800 words (about 30% reduction) while preserving all key arguments. The main changes:

1. Condensed the introduction and theoretical framing
2. Streamlined the scholasticism explanation
3. Made the historiographical assessment points more concise
4. Rewrote the paragraph about human researchers without using the direct quote
5. Tightened the concluding sections

For the specific paragraph you wanted revised (about human researchers vs. LLMs), I removed the direct quote and rephrased the contrast more concisely: "When confronted with uncertainty or contradictory authorities, human researchers design experiments or seek additional evidence to resolve discrepancies. LLMs, however, never independently propose empirical verification or acknowledge epistemological limitations."

Does this revised version maintain the necessary substance while achieving a more appropriate length for a subsubsection?

---

**User:**

metadata: BB

**Ok. Moving on. We have 2.3 next. (I'll need to add another subsection on the literature around agents, but let's do 2.3.) \subsection{Nature of Research Work} % - Literature reviews as persuasive, not descriptive documents % - Role of judgment in scholarly contribution % - Selection and organization as intellectual acts % - Situating research within scholarly traditions % - Identifying genuine knowledge gaps '20250316 - skip.m4a' everything in transcript under \section\*{Section 2.3: Nature of Research Work - Question 1} 2 and 3**

---

**Assistant:**

Based on the transcript sections you've highlighted, I'll work on drafting subsection 2.3 on the Nature of Research Work. Before I begin, I'd like to ask: Do you want the subsection to focus primarily on literature reviews as persuasive documents, or should it take a broader approach to discussing research work in general?

For example, from your transcript under Question 1, you emphasize: "A literature review fundamentally does two things. One, fundamentally, it situates whatever we're writing within the context of the literature... The second prong... is informally speaking, why do we care?"

This suggests a specific focus on the persuasive nature of literature reviews. However, the subsection title "Nature of Research Work" could encompass wider aspects of research. What's your preference for the emphasis of this subsection?

---

**User:**

metadata: BB

**So, before we start drafting it, I'd like you to ask me one question at a time in the fashion we worked out above, critical and specific, such that I can situate this within the literature and answer specific questions.**

**To respond to your question, let's change the header so long as the points make sense. This is effectively the justification of "Why is AI and Research a problem here? What is this Research stuff anyways that the companies named their products after?"**

---

**Assistant:**

You make an excellent point about framing this section as a justification for why AI and "Deep Research" products fundamentally misunderstand the nature of research work.

My first critical question: In your transcript, you emphasize that a literature review is fundamentally persuasive rather than descriptive. Could you elaborate on how this persuasive aspect specifically requires judgment in ways that AI systems are structurally incapable of exercising?

---

**User:**

metadata: BB

**I speak to this quite extensively in my recorded discussion (remember, we don't need to quote, this just me planning out this paper).**

**At the end of the day, a literature review answers the questions: "Why should we care?" and "How should we understand the way of understanding?" (i.e. what register are we using, what discipline do we understand this to be?)**

**Moving out, it is a way of setting the parameters of the research programme that the work is being done under: implicit in the lit review is the hard core and defensive belt, and by implication, situating that research within the broader discussion.**

**These are normative statements. They persuade the reader that the researcher is aware of other research (And therefore this is novel), they provide context (which we would, on the face of it, say is epistemological), except that that context is providing a justification of the importance of the paper.**

**Ok, sorry, before we continue, can you give me the block quotes, here, of all the times in the recordings I speak to this?**

---

**Assistant:**

Here are the key quotes from your recordings about literature reviews and their persuasive nature:

From Section 2.3 Question 1:

"A literature review fundamentally does two things. One, fundamentally, it situates whatever we're writing within the context of the literature... You would think that that would be descriptive. That is false. It's informative, but the literature review for purposes of any research task is fundamentally persuasive. Because it is the evidence that warrants the claim of and therefore this paper makes the

following claims. Right? It is not descriptive in its own guise. Its utility is not It's not an annotated bibliography."

"Moreover, the literature review, besides situating the research in a broader context... has to do two things... to demonstrate that no one else has solved this problem. This is an inductive step. Right? This is to say here is all the surrounding literature of the problem, but what I am about to write is novel, pay attention."

"Fundamentally, a literature review must make the case of why does this evident evidence support this claim? Why should we, the reader, care? Even when it's delivering the evidence, even when the point of it is purely to situate and deliver evidence, there is that persuasive line that must go beyond simple summarization."

From Section 2.3 Question 2:

"This is where situating ourselves in literature is so important because if we say where we are, then that is evidence that we have done the necessary work around where we are to say that no one else has had this position. And so we prove novelty by providing context. The trick is this is a persuasive game..."

"Because what we're talking about is what do what in our opinion, judgment, will our peers find persuasive? Because the thing is is that we can dress up a bad literature review in exactly the same language as we dress up a good literature review. The quality of the language, the quality of the framing would be about the same. But absent judgment, the literature review will be deficient."

From Section 2.3 Question 3:

"Literally all that's required of this is having a to-do list... it is figuring out what disciplines speak to the user's request... the user says something and the AI needs to figure out what disciplines, academic or technical or even shopping, can answer it, operationalize it, and then read the literature."

"The place where I am not confident is if it can discard sources."

---

**User:**

**metadata: BB**

**Ok, I'm pretty sure I speak about it in other sections. Have a go at looking throughout the other sections please.**

**However, where's the gap between these thoughts and your question, please?**

---

**Assistant:**

I've searched through the other sections and found several additional relevant quotes:

From February 17th recording:

"To remind ourselves of methods classes, the point of a literature review is effectively to do two things. One, it is to situate the research within a specific and known scholarship. This is both an argument by authority... Therefore, this is an appropriate thing for me to be doing as it is a claim to disciplinarity... The second prong of the literature review is informally speaking, why do we care? Or why has this question not already been answered? Or again, where's the novelty? The fundamental requirement of both of these prongs is judgment."

From Section 5, Question 2 & 3:

"Insight, however, requires contextualization and tacit knowledge. And again, judgment. Because insight is not, 'How does this paper ask this question?', but 'Is this a useful paper?' And what is the most useful statement of that paper?"

"It is looking at the intellectual pedigree of the paper. Who are they citing? What is the context of the author? It is looking for context clues in the quality of the journal."

The gap I was trying to bridge with my question is connecting your argument about literature reviews being persuasive documents to the specific judgment deficiencies we've already identified (epistemic humility, induction, correspondence with reality). I wanted to understand more precisely how these judgment deficiencies prevent AI from effectively constructing persuasive literature reviews.

More specifically: How do the persuasive elements of literature reviews require forms of judgment that AI systems fundamentally lack?

---

**User:**

metadata: BB

**It's because: research is always fundamentally risky, it involves the unknown. Specifically, it requires the identification of gaps in the literature. An LLM will always predict words within its distribution, as a function of its training data and RLHF. Having an abductive sense (see prior discussion) of the interesting gaps is problematic -- especially when those gaps are unstated within the literature. There's the tension of "these folks have done relevant work" but "my work is new, interesting, and you should pay attention to it"**

**Thus the judgement required is threefold: 1. Model-of-mind: is what we are discussing relevant within the domains of the audience? (i.e. is it a salient question to the discipline in question?) 2. Finding the negative space: is this a genuine insight? 3. Questions of utility: is this a useful insight?**

**All of this requires of having a sense of the zeitgeist of the current literature. I've found that due to both atemporality and the regression to the most-popular-words, models are very bad at understanding time.**

**Did I answer the question?**

---

**Assistant:**

Yes, you've answered my question perfectly. The connection between persuasive literature reviews and judgment deficiencies is now much clearer.

My next question: You mention that LLMs struggle with temporality and understanding the zeitgeist of current literature. Could you elaborate on how this specific issue manifests when AI attempts to situate research within scholarly traditions? For example, does it tend to flatten historical development or miss significant paradigm shifts?

---

**User:**

metadata: BB

**This is literally the thesis of technoscholasticism. Flattening isn't bad -- let's not bring Kuhn into this though. Moreso, it takes the literature, well formatted and written in an academic literature at face value. Its reality is the claims of the literature (by definition, being trained on it, with no other possible source of expertise in its training data).**

**Models, by default, do not push back. They don't exhibit Peirce's surprise. They don't have conflict between what they expect and what is real, because they produce only what they expect.**

---

**Assistant:**

Thank you for this clarification. This concept of AI taking literature at face value without pushing back is indeed central to your technoscholasticism thesis.

One final question before drafting: When you describe AIs as missing "the persuasive line that must go beyond simple summarization," could you provide a concrete example of how this manifests in AI-generated literature

reviews? Specifically, what would be missing from an AI-generated literature review compared to one created by a human researcher with proper judgment?

---

## User:

metadata: BB

Context and juxtaposition. "The point" -- it's more that the test runs I've made are simple summaries of what's out there. It's lit review by undergrad. It represents: "I've run these searches and these are how they are *shortened*" (note, not summarised).

thoughts: 1. "Why is this here?" -- there's no sense of selection, about why certain items were chosen. (Obviously, they were chosen as a function of the search results, but... it feels haphazard) 2. "Why is this, by this person, here?" There's no sense of the academic's judgement of: yes, this is an appropriate paper to cite. It will lend authority to preprints (certainly, it will ask first, but given permission, it will treat them as full papers) 3. So: discernment. Basically the sense that reading these words is worth my time. There just is no discernment. Looking at a lit review for this very paper, when the followup prompt to DR was: "Peer reviewed, but preprints by *good scholars* are acceptable. We'll want 2023-2025 for sources that talk to LLM specific technologies. Just give me authors year titles, I'll search for them. (Or DOI if you have it.)" it gave me ... a blog post. There's just no discernment. Moreover, the first blog post was good, from researchers and ethicists on huggingface. The second ... "Bryant University Library (2023). "ChatGPT: A Library Perspective." – Krupp Library Blog." is... a pattern match for me saying "it lacks authority" but it's a library blog. (It also got the citation wrong, since the author's name is at the bottom, but whatever). This was not a good response to my question about *authority* because this source is fundamentally not persuasive to scholars. Because it doesn't discern good and persuasive sources from ones that match the words, the utility is diminished. All of these hold for "research" beyond academic research as well. There is some core problem that people are trying to solve. Without discernment as to the knowledge that the source can have, and the paradata and metadata of the source (how was it written, who for, by whom, how could they know what they know, what is the context of their writing, what was their intended message, how are they situated in the literature?) it means that these things are tools -- useful tools -- but tools none the less. There is none of the self-reflection that allows it to say "Yes, this accomplishes your goal."

---

## Assistant:

Thank you for these detailed examples. I now have sufficient information to draft the "Nature of Research Work" subsection.

From your responses, it's clear that the core issue is discernment - AI systems can collect and reorganize information but fundamentally lack the ability to make value judgments about which sources are genuinely important, authoritative, or worth engaging with. They cannot identify "the point" behind including specific sources or recognize when something should be excluded despite superficial relevance.

The concrete example of AI citing a library blog when asked for "good scholars" perfectly illustrates this problem - pattern matching without genuine understanding of scholarly authority or persuasive value.

I'll draft this subsection focusing on:

1. Literature reviews as persuasive rather than descriptive documents
2. The essential role of judgment in selecting and contextualizing sources
3. The inability of AI to identify genuine gaps and novelty
4. The connection to technoscholasticism - taking texts at face value without critical engagement

Shall I proceed with drafting the subsection now?

---

## User:

metadata: BB

Please give me a paragraph by paragraph outline, looking at claims, warrants, and evidence.

# Nature of Research Work Subsection Outline

## Paragraph 1: Introduction - Research as Persuasion

- **Claim:** Research work, particularly literature reviews, is fundamentally persuasive rather than merely descriptive or informative.
- **Warrant:** This persuasive nature explains why AI's approach to research fundamentally misses the point.
- **Evidence:** Marketing terminology of "Deep Research" products that frame AI as capable of genuine research.

## Paragraph 2: Dual Purpose of Literature Reviews

- **Claim:** Literature reviews serve two essential persuasive functions: situating work within disciplinary context and establishing novelty/importance.
- **Warrant:** These functions require normative judgments about disciplinary boundaries and research value.
- **Evidence:** Your transcript statements on literature reviews answering "Why should we care?" and demonstrating novelty.

## Paragraph 3: Judgment in Source Selection

- **Claim:** Effective research requires discernment in selecting which sources to engage with or exclude.
- **Warrant:** Selection is an intellectual act requiring evaluation of authority and persuasive value.
- **Evidence:** Example of AI citing library blog posts when asked for "good scholars," demonstrating pattern matching without discernment.

## Paragraph 4: Identifying Knowledge Gaps

- **Claim:** Research requires identifying meaningful gaps in existing knowledge.
- **Warrant:** Finding gaps requires abductive reasoning that AI structurally lacks.
- **Evidence:** AI's limitation to predicting within its training distribution versus human ability to notice unexplored areas.

## Paragraph 5: The Flattening Problem

- **Claim:** AI exhibits "flattening" of the literature, treating all sources with equal weight.
- **Warrant:** This flattening stems from training on text without experiential grounding.
- **Evidence:** No sense of "why is this here?" or "why is this, by this person, here?" in AI-generated literature reviews.

## Paragraph 6: Connection to Technoscholasticism

- **Claim:** AI's approach to research exemplifies technoscholasticism.
- **Warrant:** Taking texts at face value without pushing back represents the core issue.
- **Evidence:** AI's inability to experience Peircean surprise or contradiction between expectation and reality.

## Paragraph 7: Conclusion - Implications

- **Claim:** AI systems remain tools that require human judgment for genuine research.
- **Warrant:** The threefold judgment required (model-of-mind, finding negative space, questions of utility) cannot be replicated by statistical models.

- **Evidence:** Summary of discernment failures that prevent independent AI research capability.
- 

**User:**

metadata: BB

I don't like para 1. Research *writing*, requires a literature review. Besides being informative -- justifying the context, giving the framework, associating with other scholarship, it has a fundamentally persuasive element: "This is a problem worth solving, and my research plausibly can solve it."

Transcripts aren't evidence. They're just my thoughts when recorded. They are claims. (Let me know if I need more links to the literature)

Link para 4 back to earlier discussion about abduction.

This feels like we need more work.

---

Assistant:

You're absolutely right - this outline needs significant revision. Let me rethink the approach:

## Revised Nature of Research Work Subsection Outline

### Paragraph 1: Introduction - Research Writing and Literature Reviews

- **Claim:** Research writing, particularly literature reviews, serves both informative and persuasive functions.
- **Warrant:** Understanding these dual functions reveals why AI approaches to research are fundamentally limited.
- **Supporting Literature Needed:** Academic sources on rhetoric of science/scholarly writing (e.g., Bazerman, Swales)

### Paragraph 2: Beyond Information: The Persuasive Function

- **Claim:** Literature reviews establish that: (1) the research is situated within a discipline and (2) the question has not been adequately answered.
- **Warrant:** These persuasive elements require normative judgments about relevance and novelty.
- **Supporting Literature Needed:** Studies on rhetorical structure of literature reviews (e.g., Hart's "Doing a Literature Review")

### Paragraph 3: Source Selection as Intellectual Act

- **Claim:** Effective research requires discernment in source selection that goes beyond pattern matching.
- **Warrant:** Selection involves evaluating not just content but authority, context, and persuasive value within disciplinary conversations.
- **Supporting Literature Needed:** Work on scholarly judgment in source evaluation (e.g., scholarship from library science on authority)

### Paragraph 4: Abductive Reasoning and Gap Identification

- **Claim:** Research requires identifying meaningful gaps through abductive reasoning.
- **Warrant:** This connects directly to the inductive reasoning deficiency discussed in section 2.2.2.

- **Supporting Literature Needed:** Explicit connection to Peirce's work on abduction cited earlier in the paper

## Paragraph 5: The Problem of Context Flattening

- **Claim:** AI exhibits "flattening" of literature, treating all sources with similar textual features as equivalent.
- **Warrant:** This stems from training on text without human experience of disciplinary context.
- **Supporting Literature Needed:** Work on disciplinary knowledge construction (e.g., Becher & Trowler's academic tribes)

## Paragraph 6: Connection to Technoscholasticism

- **Claim:** AI's approach to research exemplifies technoscholasticism - privileging well-formatted text without critical engagement.
- **Warrant:** This directly connects to correspondence with reality deficit discussed in 2.2.3.
- **Supporting Literature Needed:** Research on critical reading practices in scholarship

## Paragraph 7: Conclusion - Research as Human Judgment

- **Claim:** AI systems remain tools requiring human judgment for genuine research.
- **Warrant:** The essential judgment functions (disciplinary relevance, identification of meaningful gaps, evaluation of utility) cannot be replicated by statistical models.
- **Supporting Literature Needed:** Philosophy of science on research as a human activity

Is this revised approach better aligned with your vision for the subsection? I've noted where we'll need additional academic sources rather than relying on the transcripts as evidence.

**User:**

metadata: BB

Argh, ok, we are at length limits. Please give me a *very long* message with full context of where we're up to so I can start a new chat.

2 / 2

Assistant:

# Comprehensive Project Status Summary

## Overall Project

We are working on the paper "An Absence of Judgment: AI's Limitations in Deep Research tasks," specifically on section 2 which establishes the theoretical framework around judgment in research. We've completed subsubsection 2.2.3 on "Correspondence with Reality" and are now working on subsection 2.3 on "Nature of Research Work."

## Completed Work

### Section 2.2.3: Correspondence with Reality

This section (approximately 800 words) argues that LLMs lack correspondence with reality - the third critical dimension of judgment. Key points:

1. Defined correspondence with reality as "specific and intentional regard for the world that words represent"
2. Introduced "discount Carnapian confirmation" concept to describe how LLMs accumulate textual evidence without evaluation
3. Used Digital Humanities example as concrete evidence of uncritical acceptance of outdated claims
4. Connected to scholasticism with Longwell quotes
5. Identified four historiographical assessment capabilities missing in LLMs:
  - Inability to distinguish claims from trends
  - Failure to consider authorship and temporality
  - Cannot relate claims to experiential knowledge
  - Default position of acceptance rather than skepticism
6. Established structural limitations in LLM information processing
7. Concluded with the "Scholastic fallacy" concept

## **Key Sources Used:**

- Carnap (1936) on confirmation approach
- Frankfurt (2005) and Hicks (2024) on "bullshit" as indifference to truth
- Longwell (1928) on scholastic reasoning
- Ballsun-Stanton (2024) "Is the 'Calculator for Words' analogy useful for communicating about LLMs?"
- Willison (2023) on prompt injection attacks

## **Current Work: Section 2.3 Nature of Research Work**

We're developing the structure for this section, focusing on why research (particularly literature reviews) requires judgment that AI fundamentally lacks. Our current revised outline:

### **Paragraph 1: Introduction - Research Writing and Literature Reviews**

- **Claim:** Research writing, particularly literature reviews, serves both informative and persuasive functions.
- **Warrant:** Understanding these dual functions reveals why AI approaches to research are fundamentally limited.
- **Supporting Literature Needed:** Academic sources on rhetoric of science/scholarly writing

### **Paragraph 2: Beyond Information: The Persuasive Function**

- **Claim:** Literature reviews establish that: (1) the research is situated within a discipline and (2) the question has not been adequately answered.
- **Warrant:** These persuasive elements require normative judgments about relevance and novelty.
- **Supporting Literature Needed:** Studies on rhetorical structure of literature reviews

### **Paragraph 3: Source Selection as Intellectual Act**

- **Claim:** Effective research requires discernment in source selection that goes beyond pattern matching.
- **Warrant:** Selection involves evaluating not just content but authority, context, and persuasive value within disciplinary conversations.
- **Supporting Literature Needed:** Work on scholarly judgment in source evaluation

### **Paragraph 4: Abductive Reasoning and Gap Identification**

- **Claim:** Research requires identifying meaningful gaps through abductive reasoning.
- **Warrant:** This connects directly to the inductive reasoning deficiency discussed in section 2.2.2.
- **Supporting Literature Needed:** Explicit connection to Peirce's work on abduction cited earlier

### **Paragraph 5: The Problem of Context Flattening**

- **Claim:** AI exhibits "flattening" of literature, treating all sources with similar textual features as equivalent.
- **Warrant:** This stems from training on text without human experience of disciplinary context.
- **Supporting Literature Needed:** Work on disciplinary knowledge construction

## Paragraph 6: Connection to Technoscholasticism

- **Claim:** AI's approach to research exemplifies technoscholasticism - privileging well-formatted text without critical engagement.
- **Warrant:** This directly connects to correspondence with reality deficit discussed in 2.2.3.
- **Supporting Literature Needed:** Research on critical reading practices in scholarship

## Paragraph 7: Conclusion - Research as Human Judgment

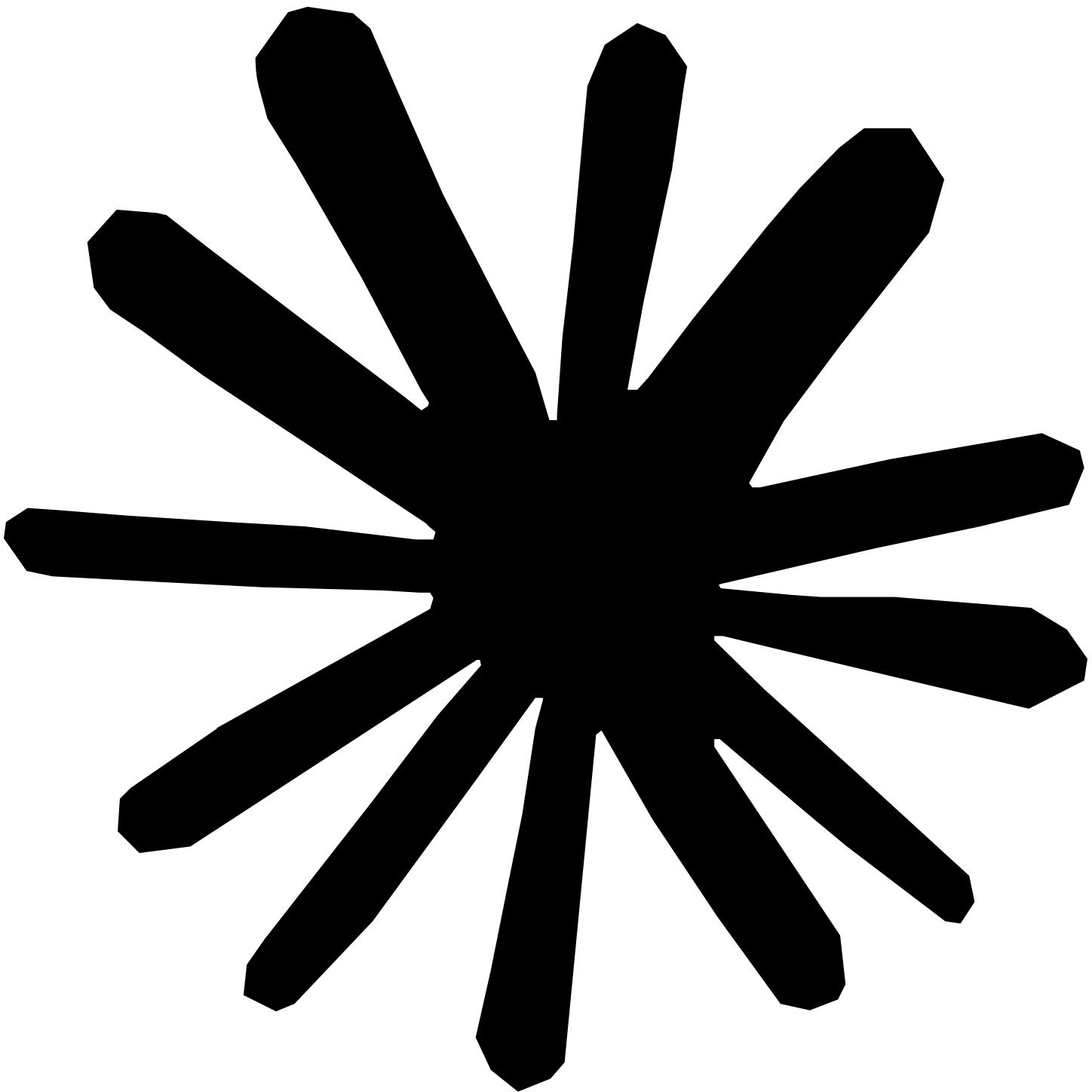
- **Claim:** AI systems remain tools requiring human judgment for genuine research.
- **Warrant:** The essential judgment functions cannot be replicated by statistical models.
- **Supporting Literature Needed:** Philosophy of science on research as a human activity

## Key Insights for Section 2.3

From our discussion of literature reviews and research, we've established that:

1. Literature reviews have a fundamentally persuasive element: "This is a problem worth solving, and my research plausibly can solve it."
2. The judgment required for research is threefold:
  - Model-of-mind: is what we are discussing relevant within the domains of the audience?
  - Finding the negative space: is this a genuine insight?
  - Questions of utility: is this a useful insight?
3. AI systems demonstrate critical shortcomings in research:
  - No sense of selection, about why certain items were chosen
  - No sense of academic judgment about appropriate papers to cite
  - Lack of discernment about source quality and relevance
  - Taking literature at face value without pushing back (technoscholasticism)
  - Cannot identify genuinely novel gaps or valuable insights
4. Example of AI's research limitation: when prompted for "peer reviewed sources from good scholars," it included library blog posts, showing pattern matching without discernment.
5. The connection to technoscholasticism: AI takes literature at face value without experiencing Peirce's "surprise" or contradiction between expectation and reality.
6. We need to explicitly connect the discussion of abductive reasoning from section 2.2.2 to the identification of research gaps in this section.
7. We need additional academic literature to support these claims, particularly on:
  - Rhetoric of science and scholarly writing
  - Structure and purpose of literature reviews
  - Source evaluation and scholarly judgment
  - Disciplinary knowledge construction
  - Critical reading practices in scholarship
  - Philosophy of science on research as a human activity

The next step is to develop this section with appropriate academic sources while maintaining your academic register and style.



Claude can make mistakes.  
Please double-check responses.

No file chosen

---

**metadata:**

**User:**

# Chat controls

## User:

Claude  
Sonnet

4

Smart,  
efficient  
model  
for  
everyday  
use [Learn](#)  
[more](#)

## Artifacts

- 
- 
- 

## Project content

Δο  
[AbsenceJudgement](#)

Created  
by  
Brian  
Ballsun-  
Stanton

## Denubis/LLM- History- Paper

main



Content [GITHUB](#)

pdf