

Learning To See Otherwise:

Building Your Research Avatar Through Qualitative Awareness

By

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Introduction and Orientation to This Guide

When you hear the term *qualitative research*, you might initially think of interviews and focus groups, or of specific research designs such as case study and phenomenology. You may also associate it with analytic practices like coding data and developing categories and themes—and you would be right. At the same time, qualitative research is not only about applying a research design or implementing particular methods. It is more than a methodology that informs design and data collection (Denzin & Lincoln, 2018).

Qualitative research is also a distinct way of approaching and interpreting the social world (Hesse-Beiber, 2016). It shapes the kinds of research problems we pursue and legitimizes subjective, multiple, and contextually situated interpretations of reality, rather than assuming a single objective truth. Consequently, a qualitative researcher does not simply interview participants to obtain answers to predefined questions. Instead, they approach the social world from a particular vantage point—one that recognizes knowledge as co-constructed through interaction and interpretation (Denzin & Lincoln, 2018). A qualitative researcher therefore not only interviews, but also reflects, interprets, and constructs a narrative that seeks to make sense of the social world around them.

Purpose and Scope

The objective of this guide is to cultivate qualitative awareness by encouraging you to identify and question apparent and established understandings while exploring alternative ways of thinking. The conceptual guardrails presented here are meant to

function as prompts rather than prescriptions for cultivating or honing a critical and qualitative orientation to research.

Accordingly, this guide is not intended to help you exhaustively comprehend the philosophical tenets and concepts described within it. Instead, you are encouraged to reflect on whether these ideas resonate with you and prompt you to examine your own ways of thinking. The ultimate goal here is to develop an *awareness* of how you think and know, and how these orientations shape what you research and how do it qualitatively.

Johnny Saldaña's *Thinking Qualitatively* (2015) serves as a key point of reference throughout this guide, particularly in the third part. However, this guide is not a handbook or companion to Saldaña's book, nor is it intended to teach qualitative data analysis techniques. Instead, it abstracts and adapts selected ideas to help you deconstruct habitual ways of thinking and cultivate a more reflective, critical, and curious orientation toward the social world you wish to examine.

Importantly, the ways of thinking discussed in this guide are not limited to data collection or analysis. They are relevant from the very beginning of the doctoral journey—shaping how research problems are framed, how questions are formulated, how theoretical frameworks are approached, and how methodological and design decisions are made. In this sense, the guide addresses the entire research process, not just its technical stages.

Structure

This guide is organized into three interconnected parts:

1. *Becoming Aware as a Researcher*: The first part focuses on cultivating critical academic thinking, learning to question assumptions, recognize complexity, and move beyond surface-level explanations.
2. *Shaping Your Research Avatar*: The second part introduces research paradigms as different ways of seeing and engaging with reality. Here, you are invited to identify your own “research avatar”—the philosophical stance that most closely aligns with how you understand knowledge, reality, and inquiry.
3. *Equipping Your Research Avatar: Qualitative Awareness*: The final part offers a toolkit of qualitative awareness, drawing on different ways of noticing, organizing, and interpreting information. These forms of awareness help researchers read between the lines, exhaust the potential of the literature and data, and organize their thinking toward identifying patterns, essence, and conclusions.

Throughout the guide, examples from everyday life and diverse disciplines are used to ensure that concepts remain accessible and relevant, regardless of your field of study.

How to Engage with This Guide and Approach Examples

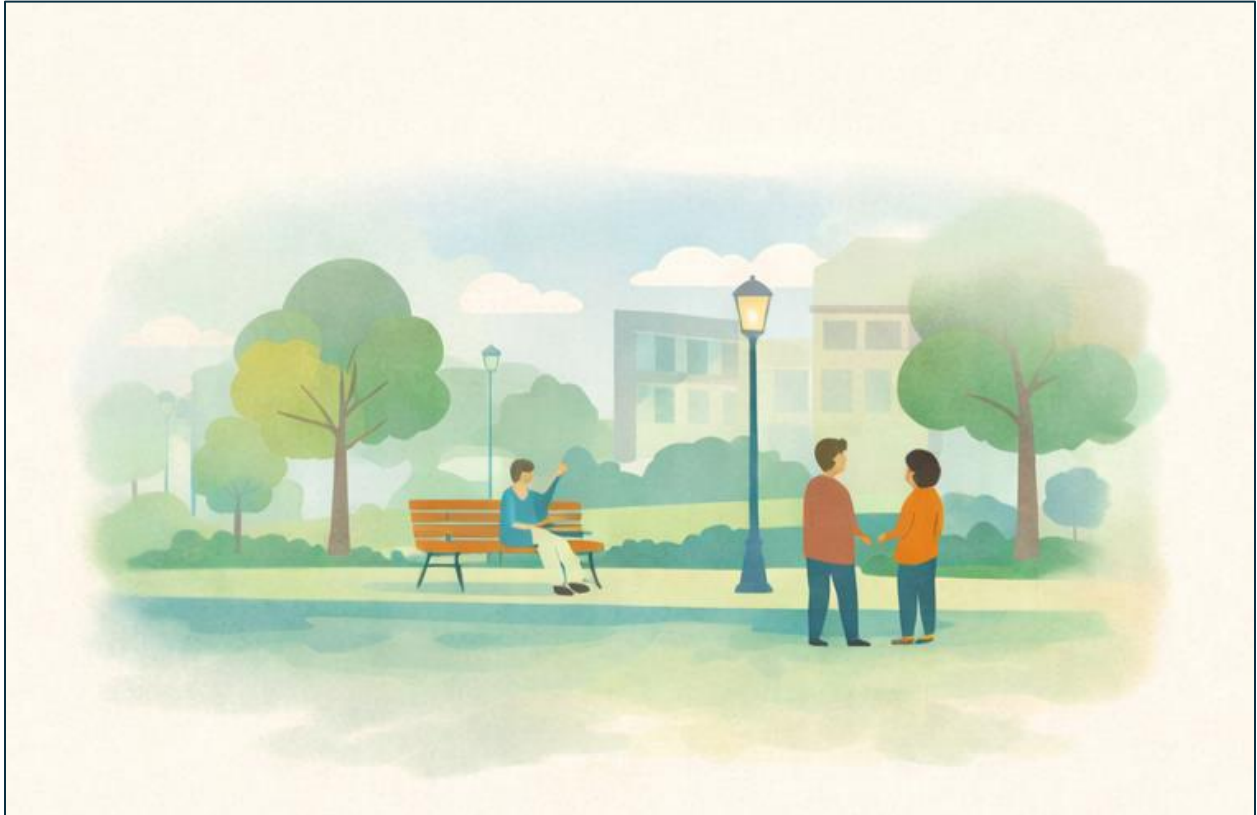
Firstly, this resource is best approached as an invitation to think, rather than a checklist to complete. You are encouraged to move slowly, revisit sections as your understanding evolves, and use the ideas as lenses for reflection rather than rules to follow. The goal is not mastery, but awareness of how you think, how you know, and how your thinking shapes the research you ultimately produce.

Secondly, the guide includes example banks with discipline specific examples to make the practice of qualitative awareness more relatable. The examples are fictional and illustrate how qualitative awareness shapes what researchers observe and

question. Read those examples as opportunities to explore the different avenues those take you to and reflect on your thinking. Refrain from approaching those as templates that can be replicated to your study.

A Note on the Use of AI

AI has been used in the development of this resource for the purposes of creating illustrative images, fictional data excerpts for examples, and alt texts for figures and images, serving as a sounding board for ideas, providing feedback on conceptual clarity and assisting in explaining intricate or overlapping concepts. All AI-assisted outputs were critically reviewed and refined by me and all decisions regarding interpretation, emphasis, and framing were taken by me based on the literature and scholarship on qualitative research. Therefore, AI was treated here as a supportive tool, not a substitute for scholarly thinking or authorship.



Part I: Becoming Aware as a Researcher

Questioning Knowledge, Reality, and Research Assumptions

Knowledge in Doctoral Research

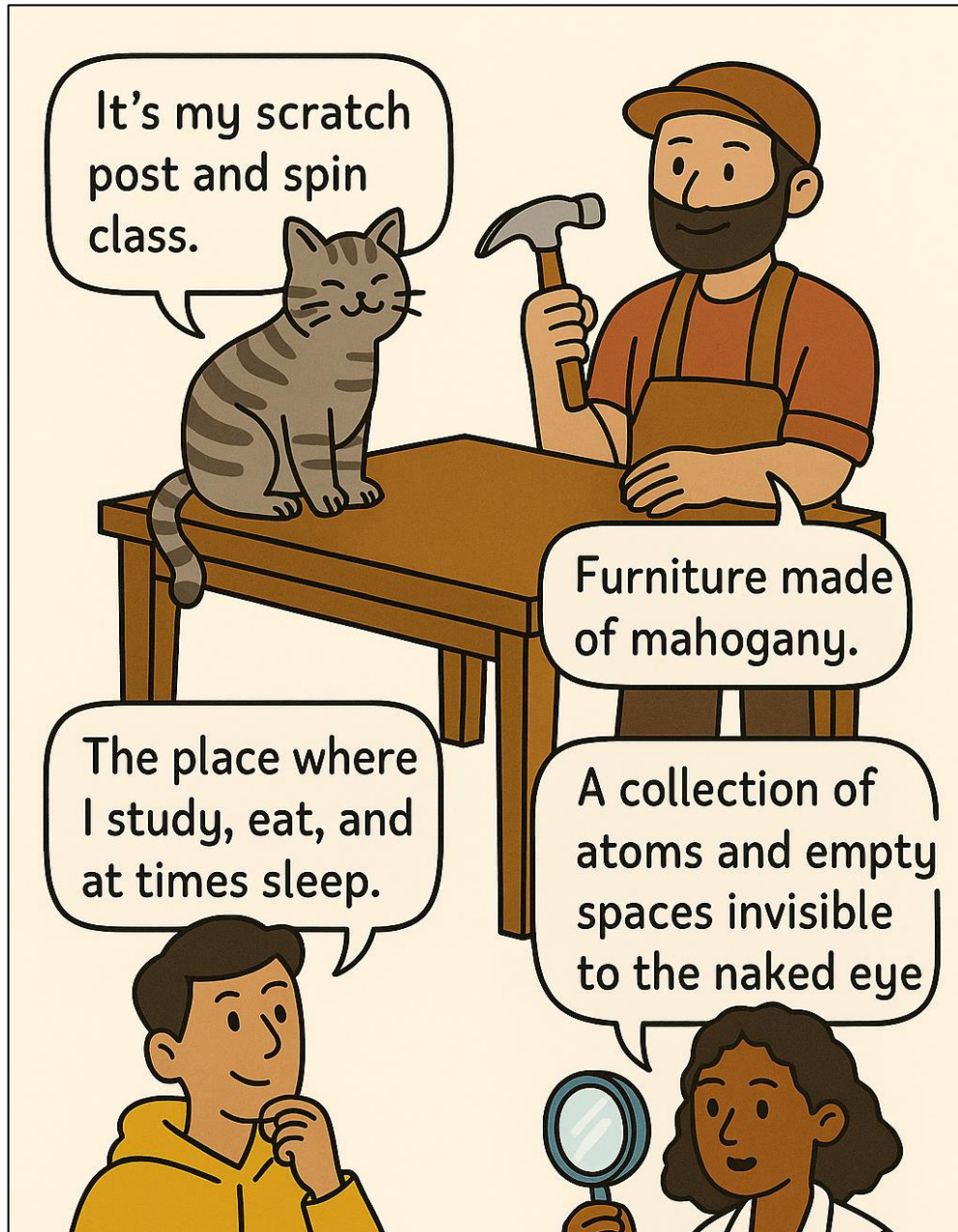
A simple search of how universities across the globe describe the PhD program will lead to common descriptions of original or significant contributions to knowledge (cf. Australian National University, n.d.; Harvard John A. Paulson School of Engineering and Applied Sciences, 2021; University College London, n.d.; University of Toronto, n.d.). The same notion is re-enforced with the emphasis on the gap in knowledge that the research must address (Educational Services and Assessment Support, 2025). If knowledge is what we are expected to produce as doctoral researchers, then it is a good starting point to begin examining what we are meant to produce and pushing the boundaries of our own knowledge first.

Re-thinking What We Know

Knowledge is something that we have taken for granted. It is as commonplace as everyday objects such as a chair, table, glasses on our eyes, and the laptops we use for work. Even though we may *know* what these objects mean based on their utility in our lives, we may not necessarily **know** the nature of the object that makes them qualified to be an object that can be known and examined from varied perspectives. For example, a table can have multiple usages – eating, studying, carving, painting, storing, decorative, or a scratch post for a cat. Likewise, the definition of a table will vary based on different perspectives, as illustrated in Figure 1, included below.

Figure 1

Varying definitions of a table



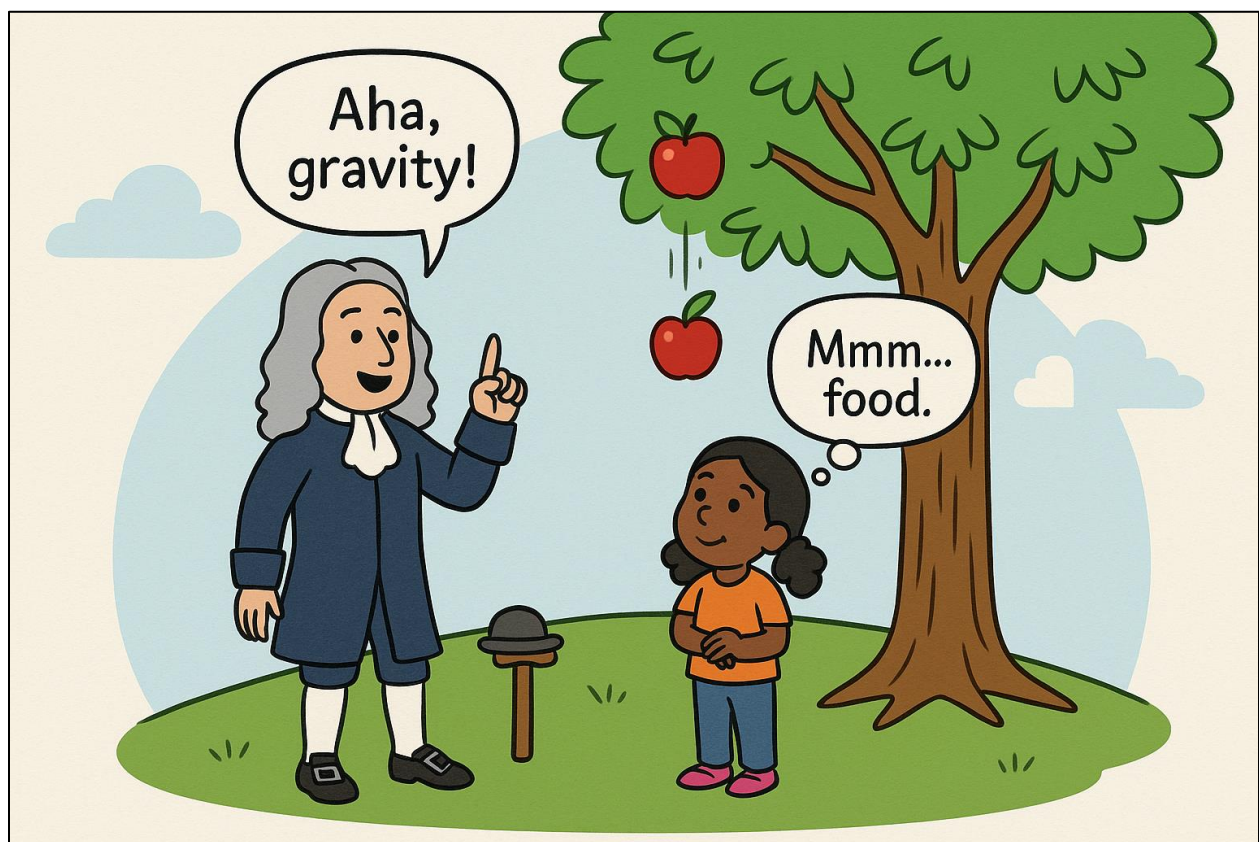
Note. Image created with the use of ChatGPT v5.1(2025).

To make a simple table more complex, the table can change while remaining the same. Philosopher, Stephen Mumford (2012) posits that an object can *remain quantitatively stagnant while changing qualitatively*. A curious illustration of this tenet lies

in the singular process of the falling of an apple from a tree. If we imagine that Sir Isaac Newton was sitting under the tree with a child at the momentous instance of discovering gravity, they would have both approached the falling of the same apple from the tree from different perspectives (see Figure 2). While quantitatively, there is no change in the process or in the object – a single apple fell from the tree once – the qualitative significance of the process and object are widely different.

Figure 2

Same Apple, Different Worlds



Note. Image created with the use of ChatGPT v5.1(2025).

If you are still with me, there is a possibility you are desperate to see the point here. My single objective here is to help you see the different ways in which an object

(table) or a phenomenon (falling of an apple from a tree) can be seen and interpreted and deconstruct the notion of a singular reality or interpretation.

What Can be Known?

Objects and phenomenon take different meanings for different beings in varied contexts and are instrumental in shaping their *realities*. If we go back to the same example of a table - for most living beings, it is an object with varying utility. It can be –

- Commercially significant – Jobs and revenue generated in the process of manufacturing and selling the table.
- Practically significant – Useful for doing meaningful activities such as studying, working, chopping vegetables etc.
- Decoratively significant – An artifact of decoration representing an idea of beauty and style.
- Affectively significant – A symbol of emotional attachment due to the personal associations with the table.

So, where does that lead us with knowing what a table is? Is it a commercial, domestic, affective, or even an academic object? The simple answer is it is an object with commercial, domestic, affective, and even academic or philosophic significance. But there is still more nuance to it. Mumford (2012, p. 201) offers an elegant explanation of what a table could potentially be –

The table is something that underlies the properties and holds them all together in one place. It is something I cannot see or touch, because all I experience is thing's properties, but I know it is there through my rational thinking.

Ontology and Epistemology

The succinct definition of a table by Mumford (2012) is founded on two fundamental and intertwined tenets – ontology and epistemology. Ontology, on the one end, is the study of being (in the sense of human existence) and philosophical belief system about what comprises knowledge (Crotty, 1998; Hesse-Beiber, 2016). The seminal researchers of research methodology, Egon S. Guba and Yvonne S. Lincoln (1994, p. 108) approach ontology as the philosophical assumptions one makes about “the nature of reality and what is there that can be known about it”. Therefore, Mumford’s definition of a table is found on the ontological assumption of the object that is more than its characteristics and utility.

Epistemology, on the other end, pragmatizes this theoretical understanding of the nature of being by defining the relationship between the researcher and the research project and the perimeters of what can be known (Crotty, 1998; Guba & Lincoln, 1994; Hesse-Beiber, 2016). In the instance of the definition mentioned above, the acknowledgement of only partially experiencing the table through its utility and estimating its existence as a logical possibility are an indication of how we can *know* the table and to what extent. Identification of these ontological and epistemological assumptions and orientation is not an exercise in philosophy, instead it is a foundational process in understanding how something is known.

Let’s think about those who believe that the earth is a flat surface. According to a YouGov poll conducted in 2018, some form of this assumption—whether outright flat-earth belief or suspicion about scientific accounts of the Earth’s shape—can be found among roughly one-third of Americans between the ages of 18 and 24 (Furze, 2019).

Historically, this belief is considered to have arisen from the observation of ships disappearing from the horizon and never returning (Furze, 2019). This *belief* about the nature of reality was informed by their observation of what appeared to be *real*. This in turn is subsumed by the assumption that what we see is reality as it is.

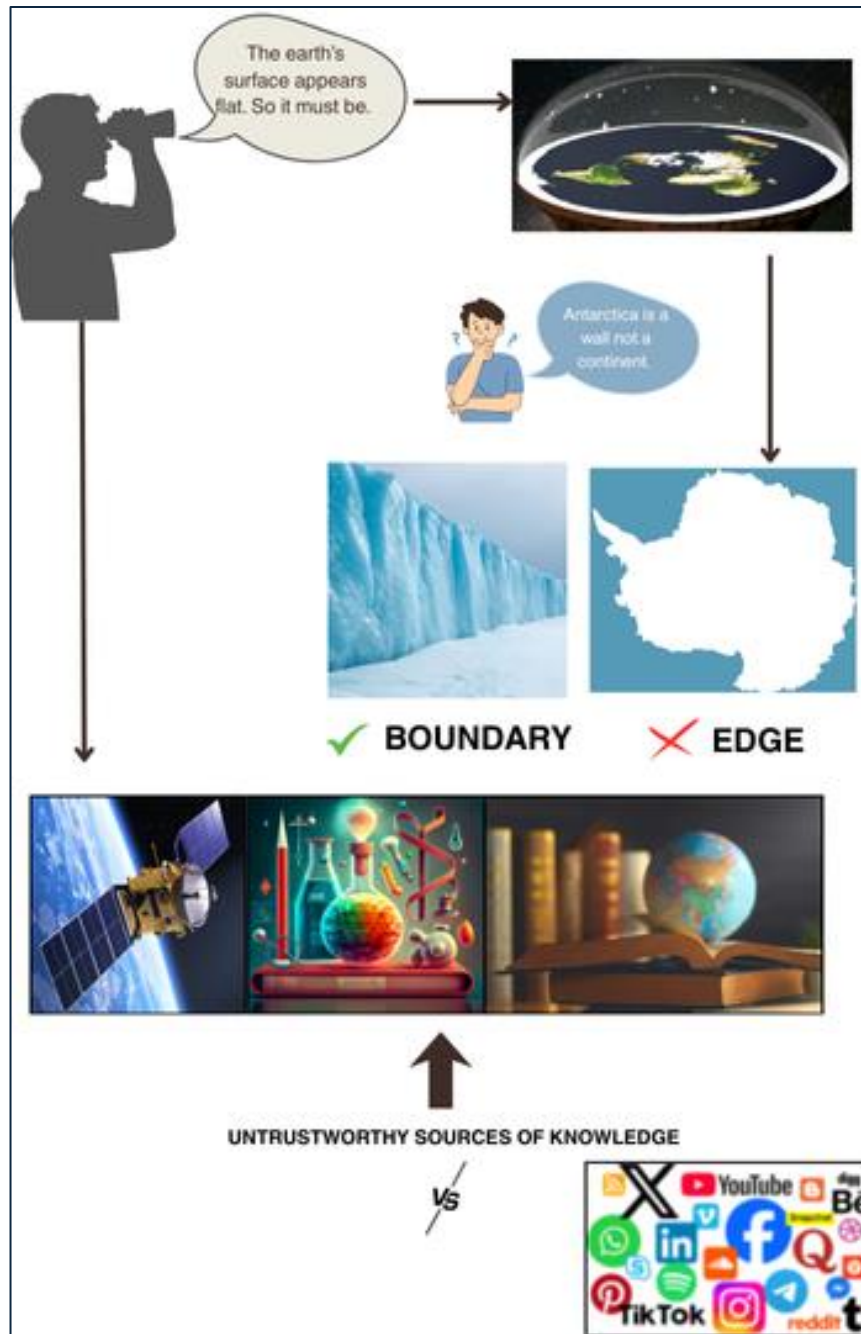
Before we dismiss the flat earth theory for its lack of scientific value, it is important to recognize that this theory is a reality for many (as indicated by the YouGov poll), which further informs the way the flat-earth believers view and understand the world around them. It also has real and critical sociological implications as for such believers, academic and research institutions are the source of false narratives as opposed to knowledge. Therefore, like the table, the flat-earth theory is multi-faceted, and it does not necessarily need to be examined as a scientific possibility. Instead, it can be examined as a sociological reality that influences how some individuals interpret and relate to the world around them.

For the flat-earth believers, the ontological assumption of the earth being flat extends into how they perceive other facets of reality and how they believe true knowledge can be examined (see Figure 3). For a flat-earther, Antarctica is a massive wall of ice that serves as the boundary for the planet and is not a continent on the edge of the planet (Furze, 2019). Such a view informs their understanding of the geographical layout of the planet and the nature of the object (Antarctica) and, therefore, underlies further questions about how it can be further examined. Epistemologically, the ontology of a flat earth also positions traditionally recognized sources of knowledge, such as satellite images of the planet from space, textbooks, and scientific experiments as being

untrustworthy. Instead, to flat earthers, authentic knowledge can only be derived from marginalized narratives in social media (Furze, 2019).

Figure 3

Ontological and Epistemological Implications of a Theory



 **Thinking Corner**



Note. Video URL – [The Gods Must Be Crazy Coke Bottle Scene](#) (Muskat, 2019)

This snippet from the film, *The God's must be crazy* (1980) is not just an entertaining anecdote. The ontological assumption informing the tribe's reality is that anything that falls from the sky is a gift from God. This is not a trivial story, as their understanding of the Coke bottle informs real and meaningful practices about how they use the object creatively for multiple purposes. The Coke bottle is not only a physical object; it exists within the tribe's lived world as something extraordinary, meaningful, and inherently valuable because of the belief system that shapes their reality. This ontological assumption then directly shapes how the tribe uses the bottle as a tool of utility, of play and amusement, and even as an artistic instrument.

Epistemologically, the tribe's way of knowing is rooted in direct experience and shared beliefs. In this context, the tribe does not rely on scientific evidence or formally established knowledge to investigate the origin or utility of the bottle. Thus, the epistemological assumption here is that *knowledge is rooted in shared beliefs and experience and communal meaning-making*. As a consequence, the tribes interpretation of the Coke bottle is inseparable from who they are, what they believe in and do in their everyday lives.

This example is not just an interesting anecdote. It illustrates that what people consider *real*, *meaningful*, and *knowable* is not universal and is shaped by a myriad of socio-cultural and psychological factors. As qualitative researchers, learning to see how different ontological and epistemological assumptions lead to different facets of reality is central to understanding multiple ways of knowing the social world.

❓ Questions to Ponder

1. What is *real* in this scene?
2. What factors underpin the tribes' interpretation of the Coke bottle?
3. What was your initial response to watching this video? What did you think was meaningful that can constitute knowledge in the story?
4. Can you identify at least one belief that shapes how you interpret artefacts or processes in your life?

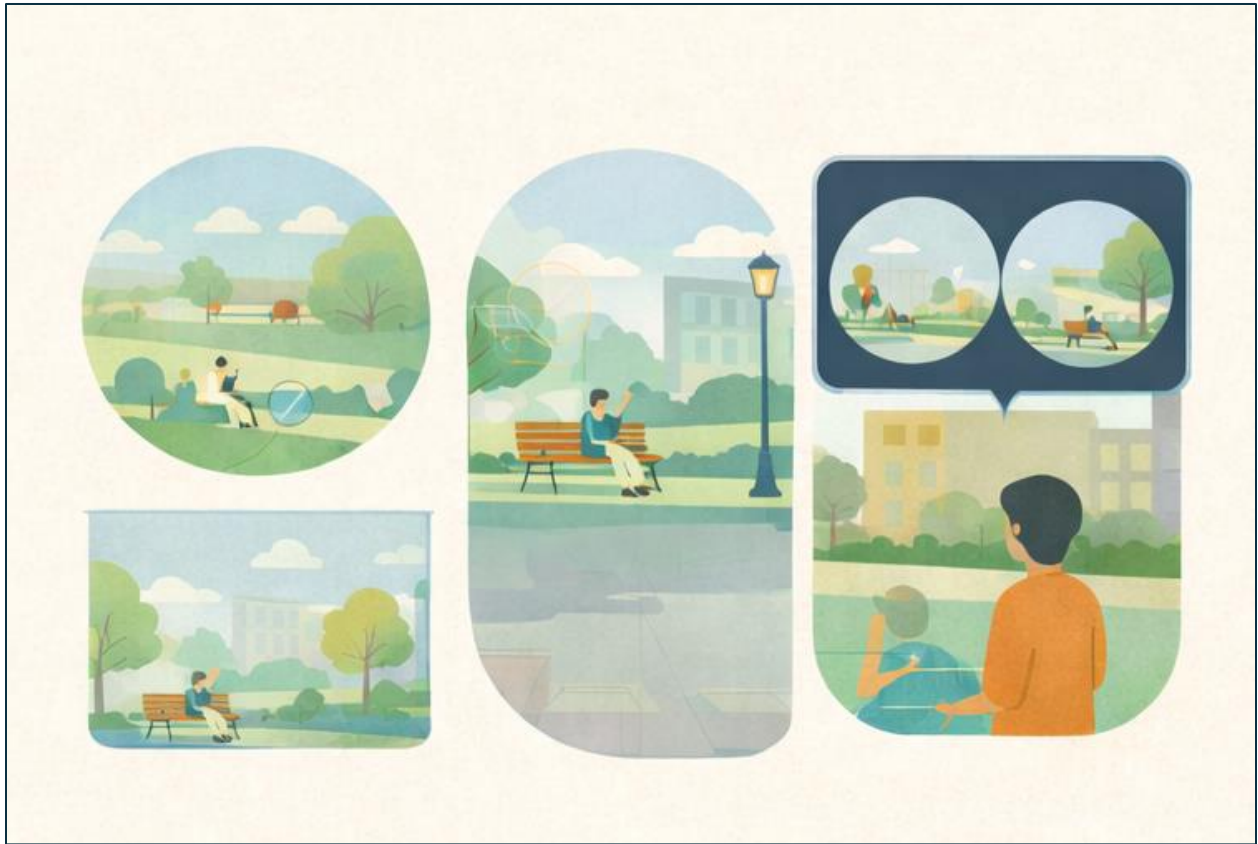
In a Nutshell

This part is an invitation for you to step back from methods and techniques and reflect on how knowledge itself is understood.

It introduces key ideas about reality (ontology) and knowledge (epistemology) to help you recognize that research is never neutral—it is always informed by assumptions about what exists and what can be known. Here, you are led to question what feels obvious, natural, or taken for granted in your thinking about research problems and the social world.

Key Take Away

Your assumptions about reality and knowledge shape what you notice, the questions you ask, and what you consider worthy of study from the very beginning of your research process.



Part II: Shaping Your Research Avatar

Exploring Different Ways of Seeing and Approaching Research

Paradigms as Research Avatars

Now that we have discussed the foundational significance of ontology and epistemology in the process of knowing, let us transition into examining how these philosophical concepts can be operationalized in a systematic, synergic, and scientific manner to examine the social world around us through the distinct paradigms of positivism, critical realism, and interpretivism. Guba and Lincoln (1994, p. 107 emphasis in original) offer a very lucid and comprehensive explanation of paradigms as a “set of basic beliefs...a *worldview*” that defines, for its holder, the nature of the “world”, the individuals place in it, and the range of possible relationships to that world and its parts, as for example, cosmologies and theologies do”.

Identifying a paradigm is the first step in building your identity as a researcher. If we were to think in terms of everyday graphics, that is the *avatar*, you would choose to represent yourself as a researcher. Therefore, as you read about the three paradigms described below, think about which of the paradigms resonate more with your understanding of the world and of the research problem that drives you. To illustrate how different paradigms and forms of qualitative awareness operate in practice, this and the part of the guide will include a single and consistent fictional research context drawn from education described below.



Sample Research Context from Education for Illustration

There is a clear association between absenteeism and lower academic performance (Short, 2022). Therefore, there is a need to understand why students miss school and the different ways in which this impacts their academic performance for educational practice and policy (Fry, 2024).



Plurality in Knowledge

There is an important aspect to Guba and Lincoln's definition of paradigm that needs to be pinned in our understanding before we proceed into learning about the paradigms. Notice how Guba and Lincoln begin the definition by establishing that this worldview is specific to the holder, meaning there is no universal paradigm and no singular worldview that encapsulates all of reality. Hence, subjectivity does not become the justification for a person's belief, but the nature of reality itself.

Think back to the example of flat earth. For the flat-earthers their belief and understanding informs their reality and shapes their association not only with the physical and material world but also their social relationships, which in turn makes it worthy of recognition and examination. Therefore, the subjectivity that enables us to choose our paradigm is a testament to the plurality of interpretations, knowledge, and reality and an acknowledgement of knowledge ultimately being a *human construction* (Guba & Lincoln, 1994). The paradigms, thus, are classifications of the different ways in which the world can be known.

A Positivist Researcher

For a researcher who aligns with positivism, reality –


- i. exists regardless of human endeavors to know it and
- ii. it is independent of human interpretation (Guba & Lincoln, 1994).

These tenets can be evidenced in the scientific reality of the earth's revolution around the sun. This astronomical phenomenon has continued to occur even when human beings believed in the earth being the center of the universe, with the sun revolving around it. It also continues to happen whether or not we believe the earth to be a spherical object.

Associated with the two tenets of positivism is the assumption that knowledge is objective and not reliant upon human interpretation, which further implies a singular ontology (Clark et al., 2021; Ryan, 2018). For instance, the earth revolves around the sun without the scope for an alternate scientific possibility. This further implies that such singular objective reality tends towards disciplines that presume a reality that is governed by a set of principles and which can be empirically proven, explained, and even predicted (Clark et al., 2021; Hesse-Beiber, 2016; Ryan, 2018). For example, the law of gravity is assumed to operate uniformly regardless of who observes it, allowing scientists to predict the path of a falling object with precision. Or, if rainfall levels drop below a known threshold, scientists can predict increased wildfire risk based on measurable environmental conditions by assuming that these relationships hold across contexts. Even, in finance, the assumption of an objective economic reality allows analysts to predict that if interest rates rise, the price of existing bonds will fall.

A Positivists' Research Focus

Positivism, as explained above, has been foundational to the examination of research problems that are grounded in empirical observation and assume predictability and replicability (Clark et al., 2021; Hesse-Beiber, 2016; Ryan, 2018). Hence, positivism is generally limited to quantitative studies with a focus on testing theories and patterns within the premise of a singular and objective reality (Clark et al., 2021)¹.

 **Example:** With reference to the fictional research problem presented above, a positivist researcher would be focused on identifying predefined and measurable variables (e.g., number of days absent, GPA, reading and comprehension scores) that explain absenteeism and its impact on performance. These variables would then be operationalized based on how those relate to one another (e.g., higher rate of absenteeism resulting in lower reading and comprehension scores) and tested in the context of their study and the chosen population sample.

The Reach of a Positivist's Research Focus

In positivistic thought, the researcher and the research are placed on two separate planes, whereby one does not influence the other (Hesse-Beiber, 2016). This implies that the researcher is objective in its separation from the phenomenon under examination and that knowledge of the laws governing the research problem can be generated through observation. Let's think back to the example of the earth being considered a flat surface and the center of the universe. Regardless of how we perceive it, and some continue to do, the shape of the planet has always been a sphere that

¹ It is important to generalize with caution as it is still possible to do a mixed-method or qualitative study within the positivist paradigm under certain specific conditions.

revolves around the sun. Thereby, placing the researcher and the research on two separate planes.

However, such conceptualization of the researcher's role is problematized by the absence of the probable and even inevitable "meaning variance" and "inconsistency in scientific change" (Archer et al., 1998, p. x). This prevents us from accounting for the fact that our capacity to examine the observations is subjected to change with time and scientific, academic, and technical evolution. For instance, until the 16th century, it was widely accepted that the Earth was the center of the universe. This view was challenged by Nicolaus Copernicus through his publication of the heliocentric theory, which posited that the sun is closest to the center of the universe and that there could be multiple centers within the universe (New Mexico Museum of Space History, n.d.). But finally, it was with the invention and use of the telescope in the 17th century that Galileo Galilei was able to provide empirical support for Copernicus's heliocentric theory, which led to its wider acceptance as scientific knowledge (Whitworth, 2022). This indicates that there may be an ultimate and immovable truth outside of the boundaries of human knowledge, but our knowledge of the same cannot be deemed to be absolute.² Hence, state-of-the-art knowledge is not only fallible and evolving but also interpretive and historically situated. Such conceptualization of knowledge and epistemology are addressed within the overarching paradigms of critical realism and interpretivism.

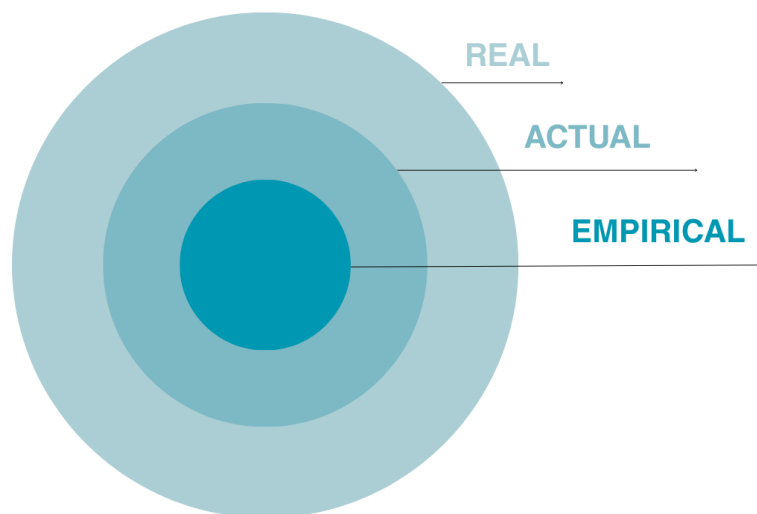
² This view is best described as post-positivist (or critical realist): it accepts the existence of an objective reality while recognizing that human knowledge of that reality is always tentative, incomplete, and open to revision (cf. Archer et al., 1998; Guba and Lincoln, 1994)

A Critical Realist Researcher

A critical realist recognizes the premise in positivism of knowledge existing regardless of whether or not we are cognizant of it (Hesse-Beiber, 2016). However, in extension to positivism, a critical realist proposes a stratified understanding of the world as is and how it can be known – the real, actual, and empirical (Schiller, 2016). As illustrated in Figure 4, the real is the outermost periphery of knowledge, which is all encompassing, and independent of the need to be known. The actual is a subset of the real that represents the knowledge, which is accessible to all sentient beings for exploration, interpretation, and understanding. Finally, within the oeuvre of the real and perimeters of the actual, lies the empirical – representing what is known based on a study of the world around us.

Figure 4

Stratified Ontology of Critical Realism



Note. The representation is based on Re-examining Bhaskar's three ontological domains: The lessons from emergence by Dave Elder-Vass, 2006, in C. Lawson, J. Latsis, & N. Martin (Eds.), *Contributions to Social Ontology* (p. 160-176). Routledge.

It is worth noting that this stratified system of knowledge is not only philosophically but also pragmatically relevant. The real, actual, and empirical are also applicable to any research worthy social problem. In the context of the research problem on low attendance and poor academic performance, the policies, regulations, and socio-economic access within which the schools and students exist and operate would come under the domain of the real. The actual events or actions occur as a result of the real, such as chronic absenteeism, decline in grades fall in the second strata, which further inform the empirical – artefacts and actions such as missing school, change in comprehension and attention, attendance records, reports, coursework that can be examined ³.

Recognizing that the actual and the empirical are sub-sets of the oeuvre of the real has some practical considerations that need to be recognized in thinking about our research problem. In practical terms, this indicates the openness to recognizing the plausible fallibility of knowledge, which *could* eventually be further built upon or even be disproven (Kuhn, 2012). However, the latter possibility is not to be supposed as an excuse for non-rigorous research, instead it is to make us approach research with humility, openness, and rigor such that we can create knowledge through sound and scientific research, defend it with logic, and provide a foundation for future evolution of knowledge.

The other implication lies in acknowledging and defining the contextual bounds of a research site and acknowledging that the empirical provides only a partial and account of the problem (Schiller, 2016). Therefore, this invites a specific focus on the

³ This example is based on a similar illustration in the context of a hospital by Schiller (2016) on page 91.

contextual and even temporal conditions for a mechanism. A recognizable instance of this contextual and temporal dependence lies in the consideration of the COVID-19 pandemic that has significantly modified approaches and modalities of learning, working, and sanitizing. Therefore, any knowledge about the patterns of sanitation practices amongst teenagers prior to 2020 *may* no longer be generalizable to the post-pandemic world.



Instances of Knowledge's Evolving, Historically Situated and Flawed Nature

There are several instances of the evolving and fallible nature of knowledge in science. As discussed earlier, Copernicus' heliocentric theory laid the foundation for Galileo's empirical observations of space (Whitworth, 2022).

Another notable example is Albert Einstein's disagreement with Newton's position that the speed of gravity is the same as the speed of light, with Einstein instead positing that the speed of light is incomparable and unsurpassable.

Chown (2024) illustrates this difference through a hypothetical disappearance of the sun. Under Newtonian assumptions, the Earth would instantly fall off into space, whereas Einstein argued that it would take approximately 8.5 minutes for the Earth to register the sun's disappearance—the time it takes for light to travel between the two objects. In this way, Einstein both challenged and built on Newtonian theory.


A Critical Realist's Research Focus

Besides the differences between the ontological (what can be known) assumptions held by the positivists and the critical realists, there are also epistemological (how can we know) differences between the two paradigms of researchers. A positivist researcher, is focused on a limited and pre-defined set of variables to identify occurrences and variances (Hesse-Beiber, 2016), whereas a critical realist assumes that outcomes are caused by the interaction of multiple mechanisms (Fletcher, 2016). Due to this characteristic of critical realism, it is considered ideal for identifying the causal depths and breadth underpinning actions and phenomenon in the social world (Archer et al., 1998; Fletcher, 2016).

Empirical Applicability of Critical Realism

“The ability to engage in explanation and causal analysis (rather than engaging in thick empirical description of a given context) makes critical realism useful for analyzing social problems and suggesting solutions for social change.”

(Fletcher, 2016, p. 182)

 **Example:** For a critical realist the students' poor attendance could be rooted in factors outside of the physical and social context of the school and in their family environment at home which cannot always be captured in surface-level correlations. Therefore, instead of limiting the inquiry to predefined variables, a critical realist would seek to explore and examine all the different kinds of factors that inform absenteeism and lower academic performance. Listed below are a sample of the kinds of factors and conditions that could come into play –

- Institutional factors: school climate, disciplinary policies, teacher-student ratio
- Social conditions: family responsibilities, bullying, housing and transport access
- Personal factors: physical and mental health related conditions, learning disabilities and neurodivergence

The Reach of a Critical Realist's Research Focus

On the one end, critical realists absolves some of the positivists' blind spots regarding objectivity, through their recognition of the theorization of the incomplete and flawed nature of knowledge (Archer et al., 1998). On the other end, they incorporate the subjectivity of the participants and researchers in the process of co-creating knowledge about a reality that exists independently of those interactions (Maxwell, 2012). However they also draw a boundary against subjectivism by maintaining that reality exists independently of our interpretations (Archer et al., 1998). While critical realists consider subjective mechanisms to be included in the causal depths of the phenomenon being examined, they do not exclusively focus on the subjective mechanisms and how those are created or manifested. Such exclusive examination of how individuals interpret, derive meaning, and experience the social world, falls under the broad paradigm of interpretivism (Schwandt, 2000).


An Interpretivist Researcher

Interpretivist researchers privilege individuals' subjective experience and interpretation, which further informs their actions and motivations (Schwandt, 2000). Therefore, for them the meaning attached to an action by an individual is more significant than the action itself (Weber, 1981). By thus focusing on the subjective mechanisms of action, the interpretivists shift away from any positivistic assumptions of

objective knowledge and posit that not only knowledge (as believed by critical realists, see Maxwell, 2012) but reality itself is socially constructed (Hesse-Beiber, 2016; Pulla & Carter, 2018; Schwandt, 2000).

An Interpretivist's Research Focus

The foundational philosophical assumption of reality as socially constructed defines the suitability of an interpretivist paradigm for research problems that require an “empathic understanding of an individual’s feelings and the meaning that they give to everyday life with the goal to gaining greater understanding of the individual’s behavior” (Pulla & Carter, 2018, p. 9).

 **Example:** For an interpretivist focused on subjective meaning and experience of individuals, absenteeism is a social and subjective phenomenon. The researcher would thus, examine how students interpret the relevance of attending school and the need and effect of absenteeism, and how those interpretations influence their engagement with learning. Listed below are some examples of questions that will be of crucial to an interpretivist examination of the research problem –

- What does attendance mean to students?

The intention behind this question would be to examine how varying extents of attendance are an outcome of students’ lived experiences, identities, and sense-making processes.

- How do students make sense of their absences and academic struggles?

Note that the question does not presume an association between absences and academic struggles. Instead, it focuses on whether or not the students interpret an association between the two phenomena.

The Reach of an Interpretivist's Research Focus

Pulla and Carter (2018, p. 10) succinctly describe interpretivism as an “objective science of the subjective.” Given such ontological and epistemological focus on subjectivity and social construction of reality, interpretivism is not a suitable paradigm for research problems that are based on the need to –

- a. assume that knowledge exists regardless of our understanding of the same (as is believed by a positivist and critical realist),
- b. objectively examine pre-defined variables and generalize the patterns in which those operate (as is true for natural sciences), and
- c. observe phenomenon as opposed to the subjective interpretations of the phenomenon.

(Pulla & Carter, 2018)

Example Bank: Identifying Your Research Avatar

The objective in this section is to offer discipline-specific examples of *fictionalized* research scenarios to illustrate how the paradigms of positivism, critical realism, and interpretivism can be applied to a context that is more familiar to you.



Technology and Engineering

Research Problem: AI-powered tools have the potential to enhance safety and well-being and social connection among baby boomers (Laurie, 2024). However, recent studies indicate uneven adaptation of AI-powered tools such as voice assistants, recommendation systems, and health monitoring apps) within this population.

A Positivist Researcher Perspective

- i. **Identify predefined and measurable variables that explain adoption or non-adoption.**

Age, income, gender, prior familiarity with technology, and access to technical assistance.

- ii. **Test established relationships between these variables and technology adoption.**

If prior research has found that individuals above the age of 70 are less likely to learn and use new technologies, a positivist researcher would examine whether the predicted pattern holds for their study.

A Critical Realist Perspective

- i. **Examine the underlying factors and conditions that inform the different ways in which baby boomers use AI-powered tools.**

These different ways could range from varying extents of adoption to non-adoption.

- ii. **Consider but not limit themselves to the factors identified in existing research.**

Besides the identified factors of age, income, gender, prior familiarity with technology, and access to technical assistance, the researcher would remain open to other factors that are relevant to the participants such as physiological limitations, psychological conditions, and exposure to technology at work.

- iii. **Explore the mechanisms underlying these factors and conditions operate and result in varying patterns of use.**

How does the adoption of voice assistants by two participants with different backgrounds and life histories compare?

An Interpretivist Perspective

- i. **Examine how baby boomers understand AI and its application in their everyday lives.**

Such an examination could lead to participants seeing the benefits of voice assistance but feeling intimidated by and insecure because of the tools inability to comprehend what they are saying.

- ii. **Approach the actions of adoption and non-adoption as an outcome of the participants' subjective interpretation of technology.**

The focus would not be on the rates of adoption or non-adoption of technology. Instead, it would be on the patterns of meaning-making of the technology, which could result in varying extents of adoption or non-adoption of AI-powered tools.

Research Problem: The return to in-person or hybrid work following the COVID-19 pandemic has been positioned as a critical step toward restoring organizational productivity, collaboration, and employee well-being (Fry & Thompson, 2024). However, emerging evidence suggests returning to work after the pandemic has been a difficult transition, with many employees experiencing challenges with adjustment, engagement, and performance across individuals and organizational contexts (Cleese, 2024, Martin, 2025).

A Positivist Perspective

- i. Identify predefined and measurable variables associated with successful or unsuccessful return-to-work outcomes.**

Job position, workload, organizational support systems, leadership approach, personal and domestic responsibilities.

- ii. Test established relationships between these variables and return-to-work outcomes.**

If prior research suggests that longer commute to work times lead to burnout at work, a positivist researcher's research objective would be to examine whether such a pattern would apply to their research context and contributes to challenges with adjusting to return-to-work.

A Critical Realist Perspective

- i. Examine the underlying mechanisms and contextual conditions that shape the challenges associated with returning to work for employees.**

In addition to factors identified in the literature – such as job position, workload, organizational support systems – the researcher would remain open to influential conditions that emerge as significant to the participants such as organizational culture, job insecurity, physiological and psychological conditions, impact of the pandemic, and overarching socio-economic challenges.

ii. Explore how these mechanisms operate differently across contexts.

The researcher could focus on how return-to-work is experienced differently by employees coming from varying backgrounds and life stories to examine the context-specific mechanisms that inform each participant's pattern of adjustment. For example, comparing and evaluating the experiences of a full-time teacher, who is also a single parent of two teenagers and lives close to the school with that of a sales manager, who lives by themselves and takes two trains to reach work.

An Interpretivist Perspective

i. Examine how employees interpret and make sense of the return-to-work after the pandemic.

This may include examining the interpretation of return-to-work as a loss of flexibility, a source of social and health-related anxiety, or a welcome return to normalcy.

ii. Explore the varied extents of and complexities in the participants' experience of adjustment to return-to-work.

Some participants may experience enthusiasm about returning to normalcy and yet experience health-related anxieties while adjusting to returning to work, thereby

resulting in contradictions in subjective meaning-making that problematize how adjustment unfolds over time.



Psychology and Social Sciences

Research Problem: Social media platforms have been identified as a source of both enhanced social connection and confidence (Thompson & Laurie, 2019) and increased feeling of isolation and insecurity for teenagers (Fry & Atkinson, 2024). But there is a gap in our understanding of why teenagers have such differing experiences on social media platforms.

A Positivist Perspective

- i. Identify predefined and measurable variables associated with use of social media and outcomes such as isolation and connectedness.**

Time spent on social media, number of platforms used, nature of engagement, online bullying, frequency of in-person social interaction, measures of anxiety and depression.

- ii. Test established relationships between these variables and psychological outcomes.**

If prior research suggests that higher levels of passive usage of social media leads to increased sense of isolation, a positivist researcher would examine whether this association holds for the population sample of their study.

A Critical Realist Perspective

- i. Examine the underlying mechanisms and contextual conditions that shape the ways in which the teenagers feel connected with their peers and family in relation to their usage of social media.**

In addition to factors identified in the literature – time spent on social media, number of platforms used, nature of engagement, online bullying, frequency of in-person social interaction, measures of anxiety and depression – the researcher would remain open to other conditions that emerge as significant to the participants such as the communities and users the participants engage with, school, social, and family environments and dynamics, algorithmic recommendations in social media platforms.

- ii. Explore how these mechanisms interact and manifest differently across contexts.**

A critical realist researcher could examine the factors and conditions that influence how participants with different levels of social media usage relate with others socially.

An Interpretivist Perspective

- i. Examine how teenagers interpret and make sense of social media and its role in forming and maintaining social relationships.**

Such an examination could lead an interpretivist to examine adolescents' understanding of belonging, friendships, agency, and authenticity in both online and offline spaces.

ii. Explore the subjective experience of varying extents of social connectedness and isolation.

Some participants may feel more marginalized on a social media platform and still continue to use the platform extensively due to peer pressure or a misplaced sense of belonging. The intricacies of such experiences could lead to an exploration of how these experiences are informed by, and further shape the participants' patterns of social media usage.

 **Thinking Corner**

Pause and consider the following questions with reference to your chosen research topic. Please bear in mind that the objective here is to observe how you are thinking and reflect on how it can be evolved. The objective is not to arrive at conclusions about your research.

 **Questions to Ponder**

1. Which research avatar do you most identify with and why?
2. How would your chosen research avatar examine your chosen research problem?

In a Nutshell

This section introduces the three primary research paradigms of positivism, critical realism, and interpretivism.

These paradigms offer a different way of seeing and engaging with a research problem.

Each paradigm represents a distinct research “avatar” that brings certain questions, priorities, and explanations into focus.

Key Take Away

Recognize and reflect on how the same research problem can be framed and approached differently depending on the worldview of the three research avatars.



Part III: Equipping Your Research Avatars

Practicing Qualitative Awareness Across the Research Process

Qualitative Awareness

Cultivating qualitative awareness is about equipping your research avatar with thinking tools that align with qualitative paradigms such as critical realism and interpretivism. These tools enable you to explore, construct, and investigate knowledge from multiple perspectives. The application of such awareness extends across the entire research process—from the early stages of exploring and framing a research problem, to reviewing the literature, selecting a research design and methods, collecting data, and eventually making sense of what the data reveals.

I encourage you to think of awareness as a set of thinking tools rather than as a fixed skill. Pursuing a doctoral degree is a temporal process that leads to changing and becoming (Araújo, 2005). In my own experience, the doctoral journey transformed how I think, making me more attentive to the *whys* and *whats* underlying behavioral patterns. This shift in thinking continues to shape how I understand the social world and explore meaning in human action from multiple vantage points. It is therefore fitting that this journey of changing and becoming through research begins with cultivating awareness of what we are thinking, why we are thinking in certain ways, and what alternative possibilities might be available for exploration.

Types of Qualitative Awareness

In this section, I begin by discussing inductive, deductive, and abductive awareness as foundational ways of reasoning, with a brief reference to retroduction. Together, they form the foundation for the other types of qualitative awarenesses introduced later in this section, which influence how we notice patterns, ask questions, and reflect on meaning throughout the research process.


Central to these classifications of awareness is the understanding of what is quality – qualitative data. The answer to that question lies in its ability to adhere to the objectives of doing a qualitative study to critically and clearly examine and generate an understanding of a social problem (Hesse-Beiber, 2016), to “stimulate analytic connections, transcendence, and insight” (Saldaña, 2015, p. xiii) and to offer a thick description of findings (Johnson et al., 2020). It should support a dynamic exploration, examination, and interpretation of the data and thereby lend to the trustworthiness of the study through a practice of rigorous and scientific analysis.


⚠ Please note that the forms of awareness described here are not steps or stages of analysis. These are a selection of multitudinous ways to observe, query, and interpret research. This classification of awareness also does not operate in any given sequence, nor do those operate independently. Instead, in practice, researchers move fluidly among them and initially deliberately and later intuitively combine different forms of awareness depending on the research phase.

Inductive Awareness

Induction, in very broad terms, involves approaching a study with minimal preconceptions and remaining open to all possibilities the data may offer (Reichert, 2014; Saldaña's, 2013). It emphasizes the emergent nature of data, allowing observations to contribute to the generation of theory about how phenomena operate within a specific research context. Therefore, inductive awareness begins with the observation of individual aspects of the multifaceted data to examine patterns and generate a theory from the ground up (Reichert, 2014).

In the exploration and framing of the research problem, an inductive awareness would remind the researcher to remain open to all conceptual explanations for a research problem and not limit themselves to conceptual associations that appear logical to them. Similarly, in the context of designing the research and collecting and analyzing data an inductive awareness would entail a sense of curiosity and not certainty. Furthermore, it requires an openness to revisions and even contradiction of initially formed conceptions and understanding in recognition of the evolving nature of our understanding that is enhanced with deeper engagement and analysis (Saldaña, 2015).

 **Example:** As the researcher reviews the literature on absenteeism / interviews with students who miss school, they begin to notice recurring mentions of fatigue, family responsibilities, and disengagement from classroom instruction – factors that were unanticipated by the researcher at the outset.

 *Marker of Rigor and Trustworthiness*


The changes or contrasts in the initial understanding is also an indicator of the trustworthiness and rigor of the analysis (Johnson et al., 2020). It indicates that the researcher has considered all plausible possibilities, extensively examined the observations in the data and thus, arrived at the themes which are ideal for the research objectives.

Deductive Awareness

In contrast to induction, deduction in research refers to the examination of existing and established set of rules to gain knowledge in the context of a specific case (Clark et al., 2021; Reichertz, 2014). Therefore, deduction is classified as being tautological – that “unpacks” and re-affirms an existing theory or assumption – as

opposed to producing any new knowledge. However, it is of crucial significance for creating predictions of how something may happen by connecting “theoretical assumptions to an empirical hypothesis” (Kelle, 2014, p. 561).


While, a deductive approach to research is central to quantitative and positivistic studies (Clark et al., 2021; Park et al., 2020), in the context of qualitative studies, a deductive approach can lead to maintaining a focus on the variables of the study (attendance and academic performance) and comparing the data to the literature and theoretical framework to processes that are fundamental to finalizing the conclusions of the findings (Saldaña, 2015).

 **Example:** If prior research has identified a correlation between absenteeism and disengagement, then the researcher would specifically focus on how this pattern of disengagement manifests for students with high rates of absenteeism. They would also investigate other factors that may be associated with this correlation, such as motivation to learn, sense of belonging, and sense of self-efficacy. Therefore, in a positivistic strain, the researcher’s objective in practicing deductive awareness would be to evaluate whether and how expected correlations apply to their research context.

Abductive Awareness

Abductive awareness entails approaching the literature and the data with curiosity and exploring all plausible possibilities before making a final decision regarding the direction of and the conclusions from the study (Reichertz, 2014; Saldaña, 2015). In a way, abductive awareness bridges the vastly different inductive and deductive awareness. It enables the researcher to comprehensively explore the underlying meanings of patterns identified through inductive awareness. These patterns are then

positioned and theorized in relation to existing literature through deductive awareness to determine the most suitable analytical conclusion.

 **Example:** When students describe missing school despite expressing strong academic goals, the researcher explores competing explanations (such as physical constraints, anxiety, caregiving responsibilities, or adverse school climates) rather than concluding a single cause. This enables the researcher to move beyond obvious explanations and evaluate all analytical possibilities before arriving at a conclusion about the research problem.

Abductive Awareness as a Marker of Rigor

Abductive awareness acknowledges the plurality inherent in research, recognizing that there may be multiple plausible approaches and outcomes for a given study. Rigor, in this context, is established through the careful consideration and evaluation of alternative possibilities before arriving at a defensible selection or conclusion.


The need for abductive awareness is also embedded in the doctoral dissertation process, where researchers are expected to explain and justify their choices of theoretical or conceptual framework, research methodology (quantitative, qualitative, or mixed methods), research design (e.g., case study, qualitative descriptive, phenomenology), and methods (e.g., interviews, focus groups) (Saldaña, 2018).


As an extension of abductive awareness, retroductive awareness entails deconstructing the conclusions drawn through an abductive awareness to explore the conditions that exist for the problem to occur (Saldaña, 2015). For instance, if

absenteeism is caused by a combination of competing responsibilities at home, bullying, and undiagnosed learning disabilities, then this could predicate the existence of financial and psychological strain at home, hostile behavior informed by discrimination (clothing and possessions), and limited parental involvement (single parent, multiple jobs) that delay the diagnosis and addressal of academic challenges experienced by the students. Such a retroductive examination of the causal factors, further indicates the common essence of the problem with low attendance – emotional and physical strain experienced by the students as a result of challenging domestic circumstances.

Intuitive Awareness

Cultivating intuitive awareness is about exercising your sense or hunch about the data, which could range from anticipating a particular response to a question, or about how the different pieces of information in your data connect to form a story (Saldaña, 2015). Intuitive awareness does not replace examination; it offers a starting point that later inquiry must question, refine, or even overturn. Additionally, intuition is also a good way for us to immerse ourselves in the text, get a feel for it, and develop an understanding of what *may* be of importance.

 **Example:** While reading student interviews, the researcher senses that participants' mention of fatigue in relation to school absences could lead to potentially crucial explanations of the phenomenon.

 Note that while inductive awareness leads a researcher to recognize emergent and recurring features, intuitive awareness draws attention to what instinctively seems significant in that evolving understanding of the data. Thereby the two forms of awareness occurs in conjunction subconsciously. Also, notice that I am not suggesting


that we intuit about our data, or exercise our intuition. Instead, I am carefully positioning intuitive as an adjective to awareness to suggest that the intuition should be applied with awareness of how we are thinking.

The awareness of how we think ties into the process of accounting for ourselves in the analysis (Finlay, 2002). Our identity as academics and researchers cannot be boxed. It is malleable and overlaps with our other personal and professional identities. While it is impossible to eliminate our other identities from the analysis, there is the need to be more aware of ourselves by focusing on the *hows* and *whys* of our subjective response to the data (Finlay, 2002). This has been variedly and widely described in methodological literature as reflexivity or bracketing (in phenomenological studies) (cf. Braun & Clarke, 2021; Smith, 2019).

Critical Reflexive Awareness

Building on Finlay's (2002) articulation of reflexivity and Saldaña's (2015) emphasis on critically examining one's thinking, this guide introduces critical reflexive awareness as the practice of persistently identifying and evaluating researchers' subjective responses to data for their relevance and legitimacy. Importantly, the purpose of this awareness is not to exclude the researcher's responses from the research process, but to reflexively and responsibly account for ourselves as researchers who analyze, interpret, and construct knowledge (Braun & Clarke, 2021). Therefore, this awareness requires identification of the sources of our intuitions and responses to the data, and to critically examine how these shape our understanding of the study (Saldaña, 2015). It is also important to recognize here that there are certain aspects of our beliefs and values as individuals that we cannot eliminate from the study (Saldaña,

2015). For instance, a researcher's choice of topic may be informed by personal experience or intellectual interest. Such embeddedness therefore necessitates a critical reflexive awareness that evaluates the relevance and implications of these influences for the study.

 **Example:** In the context of the example on absenteeism, the researcher would practice critical reflexive awareness by identifying and querying into the legitimacy of their assumptions about absenteeism as an outcome of lack of motivation. They would also reflect on how their own education background shapes how they respond to and interpret the literature or data on absenteeism. For instance, it could be that their choice of research topic is informed by the challenges with absenteeism they experience as teachers in a high school.

 *Conceptual Anchor for Critical Reflexive Awareness*

“Thinking critically is thinking twice: The first time, it’s decoding what your senses interpret; the second time, it’s evaluating your mental responses to the stimuli.”

(Saldana, 2018, p. 63)

Categorical Awareness

When you see the figure below, do you find yourself subconsciously grouping the objects by color or type? Some of you may find yourselves classifying the objects based on their color, their utility, or any other characteristic based on your way of thinking. This is a natural tendency of the brain, whereby we tend to group what we see or read per classifications (Saldaña, 2015).

Figure 5

A Collection of Everyday Objects Varying in Shape, Color, and Function.





Note. Image created with the use of ChatGPT v5.2(2026).

Categorical awareness is about identifying similar and comparable elements that eventually lead to the identification of patterns and themes (Saldaña, 2015). Such tendency to classify is both intuitive and deliberate. You may have found yourself initially grouping the objects by colors and then decided to group those by a different characteristic such as utility if that seemed like a more useful way of categorizing the objects in the picture. Therefore, categorical awareness is both a function of exercising what “look alike” as well as “feel alike” (Lincoln & Guba, 1985, p. 347).

There is a twofold implication to Lincoln and Guba’s description of categorization. Firstly, it is aligned with a reflexive practice of intuitive and critical reflexive awareness in pursuing our instincts as researchers. Secondly, it indicates that much like inductive awareness, categorical awareness is an evolving process that is enhanced as we

progress into analysis. Hence, the value of categorical awareness lies in making the large volumes of data more manageable by abstracting and labeling its parts, which can then be further developed and analyzed (Saldaña, 2015). This early identification of broad categories is useful for organizing what aspects of the data appear salient and worthy of further attention. However, at this stage, categorization remains a preliminary function—it labels aspects of the data without yet situating them within the broader, emergent story or explaining the underlying mechanisms of the research problem.

 **Example:** At an initial stage, everything that participants (high school students) say about the quality and effectiveness of teaching may be broadly and almost automatically grouped in our thinking as students' perceptions or experiences of teaching quality. These may then be further categorized into positive and negative perceptions, or effective and ineffective teaching practices.

 It is important to practice abductive awareness in conjunction with categorical awareness, such that we do not prematurely finalize initial or working categories as definite themes that capture a specific meaning or mechanism in the literature and data. For example, information on “psychological factors” could also offer important insights into institutional practices or family dynamics and thus span across categories. If the researcher remains rigid in their initial classifications according to social and psychological factors, they may overlook or oversimplify the subtleties and complexities in the way the social world operates, as captured in the literature and data.

Application of Categorical Awareness for Reviewing Literature

While reading a scholarly text, it is not unusual to find ourselves intuitively relating to another source or topic. Therefore, there is value in consciously engaging categorical awareness to form varying classifications of the key concepts that are discussed in the scholarly sources being reviewed. For instance, what are the different kinds of research available on the variable of low attendance in school? Can those be grouped into categories, such as - psychological and social factors associated with low attendance, student engagement and low attendance, ineffective implementation of rules and regulations in school in relation to low attendance? Or even grouping studies that examine the teachers' perspective, parents' perspective, students' perspective, or a combination and comparison of any of those. The classifications could also be based on methodologies or design.

The utility of such classifications in the review of the literature is many, as it can –

- i. Offer structure to the extensive and often daunting task of exploring and reviewing the literature.
- ii. Be the foundational step to identifying variables that would need to be interlinked, examined and explained in the research questions and conceptual/theoretical framework, respectively.
- iii. Lead to the eventual development of themes (both in the literature and in data) through an evaluation of how the different categories interrelate and compare (Saldaña, 2015).

Pattern Awareness

Patterns in social science are manifestations of behaviors, situations, or consistent formulations of ideas and information in the data that recur at least twice (Saldaña, 2015). These manifestations can be identified as similarities, differences, and frequency, structure, associations, and causations (Hatch, 2002; Saldaña's, 2013). Therefore, pattern awareness is about identifying such regularities in the data and staying curious about identifying their causes and/or implications (Saldaña, 2015).

At more advanced phases of the analysis, these patterns can be identified in the form of the meaning and significance those similarities and differences, structure and frequencies, and associations and causations represent. Saldaña (2015, p. 29) classifies these meaningful patterns as the “5 r’s of routines, rituals, rules, roles, and relationships”.

- *Routines* are a pre-determined set of processes and practices that individuals engage in daily. These are more functional in nature and have little subjective significance for the participants. For example, students take the bus to school.
- *Rules* too are a pre-determined set of guidelines that could underpin action in different ways based on the participants’ interpretation of the same. For example, some students only miss school for excused reasons of absence (such as illness, death in the family, and legal or official commitments), and some who are absent for unexcused reasons.
- *Rituals* are actions that are underpinned by a subjective meaning and significance. For instance, some students are more regular in attendance before

exams to borrow notes from their classmates, so that they can manage their exam-related anxieties.

- *Roles* are characterized by a set of goal-oriented tasks. For instance, a student's role includes doing the course work assigned by the teacher, submitting assignments on time, appearing for examinations, following school policies etc.
- Finally, patterns of *relationships* capture underlying actions, intentions, and emotions that influence how the participant performs a role. For instance, if a student is intimidated by a teacher, they are more likely to be nervous about the examination and assigned coursework for that class.

The awareness of these patterns encapsulates an identification of how the participants think and act as evidenced in the intertwined taxonomy of 5 r's and paves the way to analyze their subjective significance and meaning (as illustrated in Table 1) through a combination of the other modes of awareness.

Table 1*Example: Analytical Significance of Pattern Awareness*

Type of R	Example	Meaning created by students
<i>Routines</i>	Robin takes the bus to school every day.	It is the usual mode of transport for attending school and does not require thinking.
<i>Rules</i>	Robin is absent only for excused reasons.	They abide by the rules and possibly understand those too.
<i>Rituals</i>	Avery attends classes more regularly before exams to borrow notes.	Attendance before exams gives the student a sense of control that helps with academic preparedness and managing anxiety.
<i>Roles</i> (as students)	Avery and Robin submit assignments and take exams.	Students fulfil certain responsibilities as enrolled students.
<i>Relationships</i>	Avery feels intimidated by a teacher and becomes anxious about the assignment and exams for their class.	The learning environment in that teacher's class appears threatening and that influences the efficacy, motivation, and interest with which the student does the coursework.

Causational Awareness

Causational awareness refers to developing an instinct for unearthing the *why* behind a pattern, action, or phenomenon by examining the participants' explanations, motivations, and overall subjective interpretation and significance (Saldaña, 2015). Saldaña (2015) states that cause and effect has been overgeneralized as being a dynamic that is exclusively related to quantitative studies and which entails examining a unilateral and singular cause and effect. He, therefore, reframes his stance to causality as a multi-faceted process of examining "influences and affects" that can lead to inferences of "causal chains" based on the "participants' objectives, motives, drives, needs, wants, desires, agendas, subtexts, shortcomings, and so on" (2015, p. 40). This is illustrated in the table below through the questions that guide the practice of causational awareness for examining the patterns in the two participants' objectives, feelings, reasoning, and drive which could inform their approach to attendance and coursework.

Table 2

Example: Illustration of Practicing Causational Awareness

Pattern	Meaning created by students	Causational Awareness
Robin is absent only for excused reasons.	They understand and abide by the rules.	Why does Robin abide by the attendance policy?
Avery attends classes more regularly before exams to borrow notes.	Attendance before exams gives the student a sense of control that helps with academic preparedness and managing anxiety.	What conditions contribute to students feeling more assured in their academic preparedness when they attend school before exams? Why does this ritual result in reduced anxiety?
Avery and Robin submit assignments and take exams.	Students fulfil certain responsibilities as enrolled students.	What are the differences between the participants' approach to coursework?
Avery feels intimidated by a teacher and becomes anxious about the assignment and exams for their class.	The learning environment in that teacher's class appears threatening and that influences the efficacy, motivation, and interest with which the student does the coursework.	Why does the participant feel intimidated by the teacher?



An important point of consideration in approaching causal insights is in the positioning of those as knowledge. As stated earlier in the discussion on critical realism and interpretivism, knowledge is context-bound and cannot be widely generalized to other situations or sites. Instead, the focus of investigating and presenting such causal claims is to closely, critically, and comprehensively examine the research problem (Erickson, 2012). Hence, the curiosity about why something happens should be practiced abductively as one approaches the literature, the conceptual framework, planning of research design and crafting of the research methods (interviews etc.), and collecting, organizing, and analyzing data. It should be inculcated and practiced more as a pursuit that can lead into several inductive and abductive alleys into the data than as a search for a final destination.

Example Bank: Equipping Your Research Avatar's Toolkit with Awareness

Guidelines for Using the Examples

1. The objective of the questions included in the examples is to prompt the cultivation of awareness by inviting you to explore different avenues of thinking about the text.
2. This exploration is intended to lay the foundation for later stages of analysis and not to produce explanations or conclusions.
3. The illustrations of awareness with the use of sample data excerpts could also be applied to the reviewing of the literature, particularly when examining patterns, classifications, and causal directions in other studies.

Technology & Engineering

Context: AI-powered tools among baby boomers

Sample Data Excerpt 1: “I use the voice assistant mostly for simple things—like setting reminders or checking the weather. I tried using it for health tracking once, but I stopped. It felt like too much information, and I wasn’t sure what it was doing with it.”

Questions to Prompt Intuitive Awareness

- What feelings or reactions do the participant express when describing their experience with health tracking apps?
- Is there a sense of discomfort, uncertainty, or hesitation in this account?

Questions to Prompt Categorical Awareness

- Can ideas such as ease of use and convenience be used to organize this account? Are there any other concepts that represent the participant’s account better?

Questions to Prompt Causational Awareness

- Why does the health tracking app feel different from other convenience-based apps (such as reminders)?
- What about the information in the health tracking app inhibits the participant from using it?
- What about the use of voice assistant for setting reminders makes it user-friendly for the participant?

Sample Data Excerpt 2: “My son set it up for me, and I do like how quick it is. But if something goes wrong, I just wait until he visits again. I don’t like pressing buttons when I don’t understand what they do.”

❓ Questions to Prompt Pattern Awareness

- Do other participants also describe such reliance on others for learning how to use such technology? What are the differences and similarities in the ways the participants depend on others?

❓ Questions to Prompt Reflexive Awareness

- How might my assumptions about age, competence, or learning shape how I interpret this reliance on others?
- Am I inclined to see this as lack of skill, a rational choice, or something else—and why?

Business and Management

Context: Return-to-work post-pandemic

Sample Data Excerpt: “I was actually looking forward to seeing people again. But I still worry about getting sick, especially when meetings are packed. I follow the policy, but I’m on edge most days.”

Questions to Prompt Intuitive Awareness

- How does this feeling of “being on edge” affect their adjustment to the new work modality?
- How does the enthusiasm about meeting people in-person influence their adjustment in the back-to-work setting?
- What would make the participant less anxious about returning to work?

Questions to Prompt Categorical Awareness

- What provisional categories might help organize this experience (e.g., health concerns, social connection)?
- How can this contradiction of enthusiasm and concern be categorized?

Questions to Prompt Pattern Awareness

- Are there any other instances of the coexistence of eagerness and anxiety in this or other participants’ accounts? What are the different ways in which this contradiction shapes their adjustment?

Questions to Prompt Causal Awareness

- What other conditions might produce both enthusiasm and anxiety at the same time?

- Why does the participant continue to feel anxious about their health despite following the rules?

❓ *Questions to Prompt Reflexive Awareness*

- How might my approach to health and safety in the return-to-work scenario influence my understanding of the participant's experience?



Psychology & Social Sciences

Context: Isolation and connectedness among teenagers

Sample Data Excerpt: “I’m always talking to people online, but it still feels like I’m not really part of anything. Everyone else seem to be more connected than I am.”

? *Questions to Prompt Intuitive Awareness*

- What kind of interactions does the participant engage in online platforms?
- Who is the participant interacting with online? Are those virtual acquaintances or known to her from her family and social environment?
- What does being “more connected” mean for the participant?

? *Questions to Prompt Pattern Awareness*

- What tentative ideas might help organize this experience (e.g., belonging, comparison, exclusion)?
- How does this account relate to other ways teenagers describe connection or isolation?

? *Questions to Prompt Categorical Awareness*

- Do other participants also experience such misalignment between interaction and belonging?
- What are the commonalities and differences in the way the participants experiencing such misalignment use social media platforms?

? *Questions to Prompt Causational Awareness*

- What conditions or social dynamics might contribute to feeling excluded even when socially engaged?

- Why is the participant always “talking to people online”?

❓ *Questions to Prompt Reflexive Awareness*

- Given my aversion to social media, what aspects of this experience do I consider to be unnecessary, problematic, and critically harmful for the participant?
- How might my own understanding of social connection influence how I interpret this account?
- Are there any aspects of this experience that I find relatable?

In a Nutshell

This section introduces different forms of qualitative awareness — ways of observing, questioning, and exploring the data, the literature, and your subjective experiences across the research process.

You are learning how researchers move between intuition, reasoning, pattern recognition, categorization, and reflexive critique as they make sense of complex social phenomena.

Key Take Away

Qualitative rigor emerges from sustained awareness and reflection, not from following fixed steps. These forms of awareness work together, evolve over time, and eventually become integral and instinctive to your thinking with practice.

Conclusion

The objective of this guide was to be your thinking companion as you learn to see differently as a doctoral researcher. In Part I, through a discussion of what constitutes as reality and knowledge (ontology), and how it can be known and created respectively (epistemology), the aim was to encourage you to reflect and evaluate on how you think about what appears real to you and how that thinking can be made more comprehensive and critical by recognizing what cannot be known or how the knowledge can be partial or even flawed.

Building on the foundation of what knowledge is and how it can be known and created, Part II of this guide offers how the ontological and epistemological assumptions can be operationalized in your research through the three paradigms of positivism, critical realism, and interpretivism. The worldviews encapsulated in these paradigms are further developed by examining their implications for your role as a researcher and by delineating the boundaries of what can be known about the social world we study.

Finally, Part III segues into illustrating how you can *research* the slice of social world delineated paradigmatically by practicing an awareness of how you think, question, find and explore the vast opus of knowledge in the form of the literature or raw data collected in the study. The typology of awareness is not a structured approach to analyzing or arriving at conclusions. Instead, it is a selection of the different ways in which we interact with literature, data, and ourselves by remaining curious, flexible, and exploratory before arriving at any conclusions.

A research sensibility characterized by such awareness is not something that is acquired once and applied mechanically; rather, it develops over time as you learn to

attend more carefully to how you think, interpret, and justify knowledge. In this sense, becoming an aware qualitative researcher is an ongoing process of reflection, engagement, and refinement rather than the mastery of a fixed set of techniques.

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