# Chapter 1

# The Analysis of Knowledge

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# **Chapter Learning Outcomes**

Upon completion of this chapter, readers will be able to:

- 1. *Identify* the main types of knowledge, the relationships among them, and their distinguishing characteristics.
- 2. Evaluate analyses of concepts, in particular the traditional analysis of knowledge.
- 3. Assess the value of conceptual analysis, including its relevance to other topics in epistemology.
- 4. Explain the role of analysis in shaping the history of the field.

#### **Introduction: Conceptual Analysis**

Knowledge is the central concept of traditional epistemology. But what *is* knowledge? This is the most basic question about the central concept, hence the appropriate starting place. Answers traditionally come in the form of **conceptual analysis**: a set of more basic concepts out of which the analyzed concept is built, arranged to form a definition. The concept *square*, for example, is analyzable into components such as *four-sided figure*, *right-angled*, and *equilateral*.<sup>1</sup> Our focus here is the analysis of knowledge. But we'll also consider critiques of this focus, which yield useful insights and motivate new directions. The chapter closes with reflection on the value of epistemological conceptual analysis.

### Kinds of Knowledge

Before undertaking analysis, our target concept needs refinement. "Knowledge" is an umbrella term, capturing a family of related meanings:

- 1. **Ability knowledge**: knowledge-how (e.g., I know how to ride a bike.)
- 2. **Phenomenal knowledge**: knowing "what it's like" to have a given experience (e.g., She knows what strawberries taste like.)
- 3. **Acquaintance knowledge**: knowing a person, place, or thing (e.g., Plato knew Socrates. He also knew Athens well.)
- 4. **Propositional knowledge**: knowledge-*that* (e.g., Everybody reading this chapter knows that it is about knowledge.)

What the first three have in common is that they require direct experience with their objects. I know how to ride a bike because I've had practice. I don't know how to fly a plane, since I lack training—despite having memorized the manual. She knows what strawberries taste like having tasted them, but not what it's like to be a bat given her lack of batty experiences (to use Nagel's famous 1974 example).

Plato knew Socrates and Athens because he studied under him there; Plato knew neither Homer nor London because he neither met the man nor visited the place. Plato knew *of* Homer, and propositions *about* him, but nothing concerning London.<sup>2</sup>

Whereas experiential knowledge receives emphasis in Eastern and some recent Western philosophy (see Poole on feminist epistemologies in Chapter 8), traditional Western epistemology emphasizes propositional knowledge.<sup>3</sup> Such knowledge can be expressed with a *that*-clause, which expresses a **proposition**: a statement or claim—something with a **truth value** (true or false).<sup>4</sup> The proposition that this chapter is about knowledge is true; the proposition that it's about waterfall photography is false.<sup>5</sup>

Propositional knowledge can be interpersonally communicated or acquired by evidence or argument. By contrast, experiential knowledge can be neither argued for nor linguistically transferred. Try as I might to describe the taste of strawberries to someone who hasn't had the pleasure, it won't suffice for knowing what it's like. One will still learn something new upon first bite.

Despite the importance of experiential knowledge, we'll explore the traditional approach here. For brevity's sake, then, let "knowledge" refer to the propositional variety.

#### The Traditional Analysis

The most influential analysis of propositional knowledge derives from Plato (c. 429–347 BCE). In his *Meno* dialogue, Plato's character Socrates (modeled after his real-life teacher) argues that "knowledge differs from correct opinion in being tied down" by "an account of the reason why" (98a). This translates into modern parlance as given in Table 1.

Table 1 – Platonic to	Modern	Translation

Platonic Term	Modern Term	Abbreviation
Opinion	Belief	В
Correct	True	Т
Account of the reason why	Justification	J
Knowledge	Knowledge	K

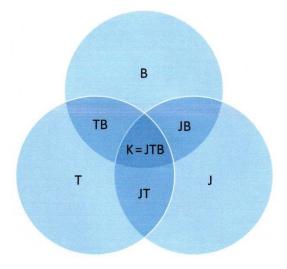


Figure 1 – The Traditional Analysis

This translation yields the **Traditional Analysis** (or **JTB Analysis**): Knowledge is justified true belief. On this account, there are three concepts that pairwise overlap, and knowledge is the convergence of all three (see Figure 1). Let's consider each in turn.

#### A. Belief

Belief (in this context<sup>6</sup>) means accepting the proposition as true (equivalently: assenting to the proposition, thinking that it's true, agreeing with it, or holding it as an opinion/view). Belief can range from a slight leaning to moderate assurance to absolute certainty—the entire positive half of the confidence spectrum (see Lopez on degrees of belief in Chapter 6).<sup>7</sup> Belief excludes both the negative half of the spectrum (disbelief, or belief that the proposition is false) and the neutral, halfway point (withholding/suspending judgment).<sup>8</sup> Belief, disbelief, and suspension are the main doxastic attitudes (stances on the truth value of a proposition).

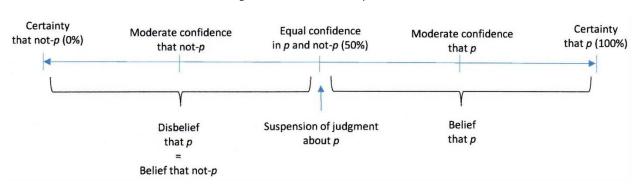


Figure 2 – The Doxastic Spectrum

On the traditional analysis, knowing a proposition requires believing it. If a truth you've never thought of is "out there" awaiting discovery, you don't know that truth. If you are now thinking about it but form no opinion (suspension), you still do not know. This is why, when asked about the truth value in cases of suspension, the natural answer is "I don't know." And if you have settled your opinion against the proposition (disbelief), you again do not know it. Suppose I ask, "Do you know that Marie Curie led the underground railroad?" You won't say "Yes, I do know that." Instead, you'll deny it, perhaps offer a correction. What you know are related propositions you believe: that Curie did not do so but Harriet Tubman did.

A word of caution: people often speak loosely. **Loose talk** is language that is inaccurate by strict literal standards—e.g., metaphor, hyperbole, approximation, and ellipsis (word omission). This phenomenon sometimes causes mistaken evaluations of conceptual analyses, since the aim of analysis is the strict literal truth. Consider the expression "I don't believe it; I know it." A natural interpretation is that one doesn't *merely* believe it, where "merely" is omitted to achieve brevity. We use such elliptical speech routinely. Consider: "She's not good at math; she's great!" But if she's not even good, she's not great, since greatness is a degree of goodness. Let's rephrase: "She's not *just* good at math; she's great." This illuminates what was previously disguised—that the "not" negates a lesser degree rather than goodness altogether.<sup>9</sup>

#### B. Truth

Belief is one thing; truth is another. There are unbelieved truths (the Earth was an oblate spheroid long before it occurred to anyone) and believed falsehoods (Ptolemy's view that the Sun orbits the Earth). The problematic phrase "true for me" causes confusion on this issue. Ptolemy's view may have been "true for him," but this merely means he accepted it, not that it's actually true.

Acceptance and truth can come apart because human opinion is not a perfect measure of reality. We are capable of mistake. Acknowledging this is not a weakness but an expression of intellectual virtues, such as intellectual honesty and humility. This motivates inquiry, open-mindedness, collaboration, and change-of-opinion. Just as we sometimes recognize our own mistakes, we sometimes recognize others are mistaken. The situation may require speaking up about this (in an appropriate fashion); other times we should keep it to ourselves. Either way, prospective falsehood is why it's a bad idea to believe just anything anyone says. We often need to reflect for ourselves and formulate beliefs independently. Between intellectual deference and autonomy lies virtuous inquiry. (For more on social dimensions, see Rowley on social epistemology, Chapter 7.)

But what is truth? In Aristotle's famous words,

"To say of what is that it is not, or of what is not that it is, is false, while to say of what is that it is, and of what is not that it is not, is true." (1011b)

This is an ancient precursor to a popular modern starting point—the **Correspondence Theory**: a proposition is true if it corresponds to reality, and false otherwise. While there are alternative theories, it is possible to interpret them as different takes on "correspondence." Details won't matter here. <sup>10</sup>

Only true beliefs can qualify as knowledge on the traditional analysis. Suppose you claim to know the answer to a trivia question. The answer is revealed and you got it wrong. Your friend exclaims, "See, you didn't know it!" This reaction is perfectly natural because false belief isn't knowledge. This explains why teachers grade multiple choice questions based on whether students choose a correct answer: the purpose is to test knowledge, and whether students answer correctly is such a test.

Again, loose talk skews intuition. Several books and a Weird Al Yankovic album are titled *Everything You Know Is Wrong*. Even Mark Twain purportedly quipped "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." However, if it ain't so, you don't really know it. You merely mistakenly *think* you know it. Knowledge is **factive** (entails truth), whereas belief is non-factive (possibly wrong).<sup>11</sup>

## C. Justification

We've seen that knowledge requires true belief. But even true beliefs can be unjustified. A **justification** is a good reason for belief (see Long, Chapter 2, for theoretical accounts). On the traditional analysis, justification is necessary for knowledge. To understand why, suppose you are playing trivia again (apparently, you're hooked):

"What is the name of those tiny bumps on blackberries?"
Your guess: Choice D – Druplets.
Desperate to win, you rationalize: "Yeah, this has to be right."
The answer is revealed, prompting your proud reaction: "See, I knew it!"
Your friend remarks, "No, you didn't. You were just guessing!"

Your friend's response is natural. Absent good reason, one does not know.

Plato offered an explanation. He observed that knowledge is something stable (unlike mere opinion). It requires an anchor to the truth. Plato likened true opinion to the statues of Daedalus, which were so realistic they could fly away. You never knew where to find them. Justification is akin to tethering them

down, facilitating reliable location. This makes evident why justification plays a role in the value of knowledge (see Axtell, Chapter 5, on epistemic value).

Here, too, loose talk misleads: "The thermometer 'knows' the temperature"—but surely lacks justification. The justification condition is also dubious if inflated, as in Plato's description. Knowledge doesn't require "an account of the reason why" so much as a "reason-that." One can know that a computer works but be clueless why. A reason-that need not be sophisticated. No argument or scientific demonstration is necessary. Just turn on the computer and see it working, recall this from memory, or be told by the technician testing it. Nor do good reasons have to be perfect. The concept good is weaker than perfect (maximally good). If perfect reasons were required, justification would be impossible (mere mortals are always subject to error). Tolerating imperfect reasons fits everyday judgments. In grade school, I had reason to believe Newtonian physics (testimony from trustworthy teachers and textbooks without reason to suspect oversimplification). My belief was justified—a belief I now recognize is false given quantum mechanics and Einsteinian relativity. Justified beliefs can be false—a view called fallibilism. For this reason, a separate truth condition on knowledge is not redundant.

Another challenge to the justification condition is infant/animal knowledge. Is this mere loose talk? It's unclear. Do they have a kind of weak justification? Difficult to say. Perhaps they know without justification. If so, we can distinguish two kinds of knowledge. Infants and animals have **lightweight knowledge** (true belief) but lack **heavyweight knowledge**—the kind we seek beyond mere correct opinion, where guessing and poor reasoning are precluded (Hawthorne 2002). The traditional analysis is meant to capture this heavyweight variety.

Table 2 – Justification: The Fine Print

To equate the justification condition with having good reasons is a simplification. According to standard fine print, the belief must be:	Explanation	Examples
Properly based on	It is possible to have a justification but fail to use it. One might instead base one's belief on something unjustified. Knowledge requires believing because of good reasons.	I know a mathematical proof of the Pythagorean Theorem. But suppose I don't care about that. I like the word "Pythagorean" and have an odd habit of believing anything appealingly expressed. My belief would not be not properly based.
good epistemic reasons	Some reasons are <b>pragmatic</b> (provide a practical benefit). Knowledge requires <b>epistemic reasons</b> (ones that are truth-directed).	I believe my favorite sports team will win because the thought makes me happy. This is a pragmatic reason, not epistemic. It won't help me know who will win. If I discover the game has been rigged in my team's favor, I won't be happy. This reason is not pragmatic, but it is epistemic: it could give me knowledge of who will win.

of sufficient strength	Good epistemic reasons can be weak (e.g., making the proposition more slightly probable than not). Knowledge may require sufficiently strong justification (though how this degree is determined is up for debate).	There is a 51% chance that the next marble randomly drawn from the urn will be blue. I have a weak epistemic reason but do not know that it will be blue.
that are <b>undefeated</b> .	Even strong epistemic reasons can be outweighed or undermined by competing reasons (defeaters). If so, one's justification is defeated. Only undefeated justification can supply knowledge.	I see the flower before me. It appears rose-colored. I have strong epistemic reason for believing it is rose-colored until I realize someone has planted rose-colored glasses on my face. My initial reason is defeated, and I don't know whether the flower is really rose-colored (even if luckily it is).

## Counterexamples to the Traditional Analysis

Since justification seems to distinguish mere true belief from (heavyweight) knowledge, its addition completes the analysis—or so it seemed to many for 2400 years! It became Western heritage until Edmund Gettier (1927–) in 1963 with his three-page article.<sup>13</sup>

Gettier argued against the traditional analysis by **counterexamples** (examples that refute). His counterexamples are cases of JTB that aren't knowledge. Since the original examples are intricate, we will consider more straightforward examples with the same gist. Such examples are called **Gettier cases**.

You're driving through sheep country. Passing a field, you seemingly see a sheep and think "There's a sheep in the field." Normally, this suffices for knowledge: you have a belief, a visual perception supports it, and there's a sheep in the field. The kicker: you're looking at a sheep-shaped rock, or a wolf in sheep's clothing! There's no way to tell from your angle. You have no reason to suspect. How is it true, then, that there's a sheep in the field? Unbeknownst to you, there happens to be one out of sight, in some far-off corner of the field. Intuitively, you don't know there's a sheep.

You may not initially share this intuition (I didn't at first). Sometimes intuitions need to be massaged or pumped before they surface. Here's an **intuition pump**. Consider a revised scenario: the real sheep is removed. Since it was out of sight, you won't be able to detect any change. So, *for all you know* nothing has changed. This means your state of knowledge should be the same as before. But in the revised scenario, it's clear you don't know. Since your state of knowledge is untouched by the revision, you didn't know in the first place. A sheep of which you know not can't help you know there's a sheep.

Thinkers had discovered this problem before Gettier made it famous, including the 14<sup>th</sup>-century Italian logician Peter of Mantua (Boh 1985). As early as the 8<sup>th</sup> century CE, the Indian philosopher Dharmottara devised a case: a desert traveler seeing a water mirage where there is real water underneath a rock has a justified true belief without knowledge (Dreyfus 1997). Spanning time and culture, such intuitions are widely and independently attested.

Lottery cases present a further challenge to the JTB analysis (Hawthorne 2003). Suppose you have a ticket in the state lottery. You haven't checked whether it has won. But you reason that it's a losing ticket, given that it's only one of many millions. And you're right: you lost. You have a justified true belief, but as the New York State lottery motto says, "Hey, you never know." Assuming the motto is apt, one might explain lack of knowledge via the JTB analysis by denying justification for the belief that you lost. Perhaps what's justified is the belief that you probably lost. Unfortunately, this subtle move doesn't solve the problem so much as shift it to justification. Either way, what's troubling here is that all beliefs seem based on some uncertainty (assuming fallibilism). Even after you check the numbers, you could have misread them, they could have been misreported, or you are dreaming. The lottery problem thus potentially threatens that we literally "never know"—anything. One escape route is to maintain that we do know in lottery cases. After all, many people never bother with lottery tickets. When explaining why, it can seem natural to say something like "There's never a real chance of winning those things. To be realistic, I know I'd lose." On the other hand, few would bother purchasing tickets if they knew they'd lose ahead of time. So, it appears, intuition can cut both ways. What do you think about knowledge-attributions in lottery cases?

### **Revised Analyses**

Gettier prompted the search for a fourth condition. On this view, knowledge is JTB plus some condition to rule out problematic cases—JTB+ accounts. There's insufficient space to review these proposals here. Suffice it to say that the extra condition remains elusive. Perhaps the problem is that JTB+ carves up knowledge such that the + fails to match any natural concept. Cut out all the best-decorated pieces from a birthday cake, those portions may be nice. But the remainder has no identifiable shape.

Returning to Plato's footsteps, it may be more promising to seek what distinguishes true belief from knowledge—a TB+ account. **Warrant** is that which when added (in sufficient degree) to true belief yields knowledge (Plantinga 1992). Knowledge is (sufficiently) warranted true belief (sWTB). Now our question shifts: What is warrant?

This shift has potential advantages. First, while sWTB is compatible with JTB+ accounts, it is also compatible with abandoning the justification condition, as some prefer. So, sWTB may bypass this debate. Second, there's a kind of unity to warrant that justification lacks. Gettier cases are ones in which good luck cancels bad (Zagzebski 1994). In the sheep case, you're unluckily misled by a sheep shape hither, but luckily made right by a real sheep thither. By contrast, lottery cases seem better construed as involving a single element of chance. Luck in Gettier and lottery cases doesn't threaten justification. So, plausibly, the luck involved in acquiring truth via unjustified belief (e.g., pure guesswork) is a further kind.

Matters aren't so simple. Let **epistemic luck** be any kind of luck that affects one's epistemic status. Some epistemic luck *contributes positively* to knowledge. Suppose you read a newspaper and tell me all about it. I attribute knowledge to you. When I find out that you only read it because you luckily won a free subscription in a drawing, I am not inclined to retract my knowledge attribution. This knowledge is founded on good epistemic luck. So, let **veritic luck** be the problematic kind: knowledge-precluding luck (Engel 1992). One alluring aspect of warrant is that it would rule out all and only veritic luck.

But what connection between belief and truth accomplishes this? We don't have space to explore them all. I'll mention one promising direction as an example, which draws the parallel to action. Imagine an expert archer, Artemis. Her aim is perfect. The arrow is going to hit the bullseye—until the last moment when an earthquake shifts the target. A simultaneous gust of wind alters the arrow's path, correcting course. In this scenario, skill is not the reason for success. When success is attributable to skill, it is to Artemis's credit rather than by luck. Similarly, perhaps knowledge is "credit for true belief" (Greco 2003). Knowledge is achieved when intellectual skill/excellence/virtue manifests in success (truth). So, knowledge is virtuously achieved true belief (Sosa 1980). From this originates virtue epistemology.

## Conclusion: Post-Gettier Epistemology

Fast-forward several decades. Thousands of pages of ink have been spilled on the fourth condition, warrant, veritic luck, the knowledge-yielding virtues, etc. Some believe they have the solution. Others continue to pursue new solutions. Perhaps you will be the one to find it! For now, there's no agreed-upon answer. We live in a post-Gettier age: the problem no longer occupies center stage. Still, it inspired what came next.

In the aftermath, some epistemologists came to suspect that knowledge is not subject to analysis—that no component can be added to (J)TB to get knowledge (Zagzebski 1994). If true, this doesn't render knowledge mysterious. Some concepts are basic, and perhaps knowledge is one of them. Yes, knowledge may entail JTB, but this does not mean it can be divvied into neat chunks that seamlessly reassemble without remainder. This gave birth to **knowledge-first epistemology** (Williamson 2000).

Others abandoned concern with knowledge altogether. What Gettier (and lottery) reveal, they say, is that knowledge is a concept with quirks. Who cares whether one is Gettiered (or "lotteried")? What matters is acquiring the truth, having good reasons, or achieving **intellectual virtue** more generally (e.g., understanding, open-mindedness, curiosity, humility). Thus, virtue epistemologists began investigating the intellectual virtues themselves (Zagzebski 1996).

Whatever tack one takes, there is one remarkable thing on which we can agree: Gettier's little paper permanently transformed the world of epistemology. It planted seeds in an ever-growing garden of fruitful new directions, producing some of the most fascinating work the field has seen: work on epistemic luck, epistemic value, intellectual virtue, and more. Thus, conceptual analysis, even when unsuccessful, reveals insight. Much of what follows in this book we owe in large part to that.

#### Questions for Reflection

- 1. Practice the idea of analysis. Choose a concept that seems relatively easy to break into a short list of components (e.g., a mathematical object). First, produce a simplistic analysis. Second, offer a counterexample. Third, revise the analysis to avoid the counterexample. Repeat the process until you are satisfied with the result.
- 2. Return to Figure 1. Notice that there are eight distinct bounded regions in the Venn diagram (including the space outside all three circles, which represents unjustified false non-beliefs). State one proposition that you can confidently place in each region.

- 3. In Philosophy 101, students are often reluctant to formulate their own philosophical views. One oftcited reason is that the arguments for a given view, though strong, are not "definitive." They don't "prove" the conclusion with "100% certainty." Given what was said about justification in this chapter, what epistemological mistake(s) might this exhibit?
- 4. Consider the following speech excerpt from former U.S. Secretary of State Donald Rumsfeld (during a 2002 press conference about weapons of mass destruction and the War in Iraq):

As we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don't know we don't know. (Graham 2014)

Write a few paragraphs analyzing Rumsfeld's claims about knowledge. What do they mean (setting aside political context)? Do you agree? Try to use examples and the JTB analysis (as an approximation to knowledge) to justify your view.

- 5. Construct your own Gettier case. Hint: Use Zagzebski's recipe: (a) start with something you think you know but could possibly be wrong about; (b) add an element of bad luck to make your belief turn out false; then (c) add a second element of good luck to cancel out the bad luck, making it true after all.
- 6. The Gettier Game: Whenever you or someone you know has good reason to believe something but finds out later that something weird happened that made it turn out to be true by some sheer act of dumb luck, record it on a sheet of paper. Do this until you've found several Gettier cases. Then reflect on the rate. How common do such cases occur in real life? Given the frequency, do you think JTB is at least a good working approximation for knowledge?
  - (Note: In graduate school at the University of Rochester, my fellow grad students and I played something like this game. We kept a running tally in our department lounge of days since one of us had been Gettiered. As soon as it happened, we'd reset the tally to zero. It never got very high.)
- 7. What is the value of analyzing concepts? Would an analysis of knowledge (whether partial or complete) be useful for answering other epistemological questions? Can failed attempts to provide an analysis nevertheless provide some illumination? Keep these questions in mind as you read further chapters in this volume.

### **Further Readings**

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## Glossary

Ability knowledge: knowledge-how

Acquaintance knowledge: knowing a person, place, or thing

Belief-that: acceptance of a proposition's truth

Conceptual analysis: the breaking down of a concept into more basic conceptual components, arranged

to form a definition

Correspondence Theory: the view that a proposition is true when it corresponds to reality and false

otherwise

**Counterexample:** an example that refutes a claim or argument

**Defeater:** that which cancels justification (a justification-defeater) or knowledge (a knowledge-defeater)

**Disbelief:** belief that the corresponding proposition is false

Doxastic attitude: a stance on the truth value of a proposition (belief, disbelief, or suspension of

judgment)

**Epistemic justification**: the kind of justification necessary for knowledge, requiring good epistemic

reasons

**Epistemic luck:** any kind of luck that positively or negatively affects one's epistemic status

Epistemic reason: a truth-indicative reason—the kind necessary for epistemic justification

Factive: that which entails the truth of its propositional object

Fallibilism: the view that justification does not entail truth (fallibilism about justification) or that

knowledge-level justification does not entail truth (fallibilism about knowledge)

Gettier case: a case of the sort introduced by Gettier (when an element of bad epistemic luck is

canceled by good epistemic luck, so that it is a justified true belief but not knowledge)

Gettier problem: the problem of how to handle Gettier cases in the analysis of knowledge

Heavyweight knowledge: the kind of knowledge that requires more than mere correct opinion

**Intellectual virtue:** a good intellectual trait, such as open-mindedness, intellectual humility, intellectual honesty, curiosity, or understanding

**Intuition pump:** a device that helps bring out or strengthen an intuition

JTB Analysis or the Traditional Analysis: the view that knowledge is justified true belief—a modern interpretation of Plato's view

**JTB+ account:** the view that knowledge is justified true belief plus some fourth condition to rule out Gettier cases (and perhaps lottery cases)

Justification: good reasons for belief

**Knowledge-first epistemology**: the view that knowledge is conceptually basic (and hence the starting point for epistemological theorizing), usually in conjunction with the claim that knowledge is of primary epistemic value (rather than, say, justification)

**Lightweight knowledge:** true belief

Loose talk: speech that is not strictly true (e.g., figurative, hyperbolic, approximate, or elliptical speech)

**Lottery case:** a case in which a justified belief is true on probabilistic grounds (often thought to be a counterexample to the JTB analysis)

Lottery problem: the problem of how to handle lottery cases in the theory of knowledge

Phenomenal knowledge: knowledge of what it's like to have a given experience

**Pragmatic justification:** the kind of justification provided by good pragmatic reasons

**Pragmatic reason:** a practical benefit of a belief or action

**Proper-basing condition:** the requirement that a belief be formed or held in the right way for the right reasons

**Proposition:** a statement or claim—something which has a truth value (true or false)

**Propositional knowledge:** knowledge-that (where the that-clause expresses a proposition)

**Suspension (withholding) of judgment**: remaining neutral about whether or not a proposition is true, neither believing nor disbelieving the proposition

Truth value: true or false

**Veritic luck:** knowledge-precluding luck

Virtue epistemology: the study of intellectual virtue

Warrant: that which when added (in sufficient degree) to true belief yields knowledge

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<sup>&</sup>lt;sup>1</sup> See Sangeetha, Chapter 3 of this volume, for more on concepts and their relationship to truth and knowledge.

<sup>2</sup> The view expressed here (that experiential knowledge does not reduce to some amount of propositional knowledge) has become standard, beginning with Ryle (1949) on ability knowledge and Nagel (1974) on phenomenal knowledge.

<sup>3</sup> Zen emphasizes non-conceptual, non-dualistic awareness. Daoism emphasizes *wuwei* (action that flows freely and spontaneous from one's nature without interruption by propositional deliberation). Confucianism emphasizes learning-*how* over (or in addition to) learning-*that*, as well as ritual participation to achieve ethical cultivation (training one's emotions and habits of action) rather than propositional argumentation about ethical truths.

<sup>4</sup> The "that" is sometimes omitted from the *that*-clause in statements about propositional knowledge, but such sentences can always be accurately rephrased with the "that" included: "Readers know this chapter is about knowledge" means "Readers know *that* this chapter is about knowledge."

<sup>5</sup> I have omitted knowledge-wh: knowledge -who, -what, -where, -when, -why, -which, -whether, and -how. Some subtypes of knowledge-wh are identical to those I already cover (e.g., knowledge-how). The others arguably reduce to the kinds I cover. For example, to know-why is to know-that, where the that-clause expresses a correct answer to the why-question. I have also omitted self-knowledge. The Oracle at Delphi directed one to "Know thyself." Clearly, this is more than acquaintance with oneself. It is arguable whether it consists merely in knowing certain truths about oneself, or requires some special self-illuminating experience. Finally, there is no discussion in this chapter about "group knowledge" (e.g., what the scientific community knows)—a recent and controversial topic in social epistemology. Traditional epistemology focuses on an individual's knowledge.

<sup>6</sup>This is belief-*that*, which takes propositions as objects. I set aside belief-*in*, which can have non-propositional objects (e.g., "I believe in you."). Belief-*in* isn't purely cognitive. It has an affective component (e.g., hope or trust). This is an important distinction in religious epistemology, since many religious believers emphasize the kind of faith that requires belief-*in* rather than mere belief-*that*.

<sup>7</sup> However, it may be that the kind of belief required for knowledge is restricted to a specific degree of confidence. For example, if one is barely inclined to think a proposition is true, perhaps one doesn't really *know* it's true. Alternatively, perhaps one does know—just not *for sure*. This approach would have knowing for sure as only one type of knowing more generally. Aside from matters of degree, a further unclarity pertaining to belief arises when we aren't thinking about a proposition (e.g., Do you know that 2+2 = 4 while sleeping?). One may say that we hold unconscious (stored) beliefs. Another possibility is that we have mere dispositions to believe, which get activated into beliefs when the propositions come to mind. This is a contentious issue. But whatever one thinks of it, one can plausibly say the same thing about justification and knowledge (unconscious justification/knowledge vs. a disposition to have justification/knowledge when prompted). So, there shouldn't be a problem here for the analysis of knowledge per se.

<sup>8</sup> Rather than pinpoint suspension of judgment to an exact 50% degree of confidence, some epistemologists prefer to extend it to a range (perhaps one with vague or contextually determined boundaries). It is also possible to be off the doxastic map altogether, avoiding even suspension—e.g., if one has never even considered the proposition in question.

- <sup>9</sup> Cf. Radford (1966), who challenges the belief requirement.
- <sup>10</sup> For an overview of the various theories of truth, and their pros and cons, see Glanzberg (2018).
- <sup>11</sup> Cf. Hazlett (2010), who challenges the truth requirement on knowledge.
- <sup>12</sup> Global skeptics will embrace this conclusion, but very few are attracted to such a strong form of skepticism. See Massey, Chapter 4, for an overview of skepticism.
- <sup>13</sup> Plantinga (1992) gives an alternative historical perspective on Gettier's significance: that it is mere contemporary "lore."
- <sup>14</sup> I borrow Earl Conee's humorous adaptation (in p.c.) of Chisholm's (1966) famous example.
- <sup>15</sup> The justification condition was abandoned primarily by those who use the term in a certain way. There are those who inflate it (as earlier described). A fine line away, there are those who inflate the concept of "good reasons" to something unnecessary for knowledge (usually externalists who understand reasons as exclusively internalist—see Long, Chapter 2). Still others came to use "justification" so that it is by definition a requirement on knowledge: whatever it is that distinguishes true belief from knowledge (rendering it equivalent to warrant). However, there is at least one way of using these terms that neither inflates nor trivializes. And this is the most common usage, which I adopt in this chapter.
- <sup>16</sup> Others prefer to bite the bullet, dig in their heels, and revert to pre-Gettier tradition. Gettier and lottery, they say, have led us astray. Yes, intuitions favor them. But sometimes intuitions are wrong. By utilizing standard

explanatory criteria for evaluating theories (e.g., overall theoretical simplicity, coherence, and other explanatory virtues), Weatherson (2003) argues that the JTB analysis is the best theory of knowledge and dismisses intuitive counterexamples as weird conceptual hiccups.