

Knowledge, Concept of

Routledge Encyclopedia of Philosophy

Michael Hannon

University of Nottingham

Keywords: knowledge; ignorance; justification; scepticism

Article Summary

The word 'know' is exceptional for a number of reasons. It is one of the 10 most commonly used verbs in English, alongside basic verbs like 'be,' 'do,' 'say,' 'have,' and 'go.' It is also the most frequently used term in epistemic evaluation: we speak of 'knowing' far more often than we speak of 'justification,' 'reliability,' 'understanding,' 'wisdom,' and other intellectual traits or epistemic properties. Perhaps most strikingly, the word 'know' allegedly has a meaning-equivalent in *every* human language. Unlike almost every other word in English, linguists have identified 'know' as one of a very small number of words that are culturally universal (Goddard 2010). These facts suggest that knowledge is deeply important to human life.

Knowledge has also held a central place in epistemology. Indeed, the word 'epistemology' comes from the Greek word *epistēmê*, which is often translated as 'knowledge.' This is not to say that epistemologists are *only* interested in knowledge. They also investigate epistemic virtues like open-mindedness and intellectual humility, as well as properties of belief like being rational and justified (among many other things). Still, the enterprise of epistemology has largely been an investigation into the nature, significance, sources, and extent of human knowledge.

But what is knowledge? Why do we value it? How is it acquired? And how much of it do we have?

In the late 20th century, one of the central questions asked by epistemologists was: When does a true belief count as knowledge? It was widely assumed that knowledge is a form of true belief plus some additional requirement(s), such as justification or reliability. While this view about the nature of knowledge is still popular, it came under scrutiny at the turn of the 21st century. Instead of thinking that knowledge must be analysed in terms of more basic components like truth, belief, and justification, Timothy Williamson (2000) suggested that we should take knowledge as basic and use *it* to understand belief, evidence, and other things.

This reversal of the traditional approach coincided with a renewed interest in the *value* of knowledge. The problem of explaining why knowledge is valuable goes back at least to Plato's *Meno*, but epistemologists are now systematically investigating this question. The value of knowledge also bears on one of the most famous of all philosophical problems: scepticism. The history of epistemology is, in large part, an attempt to reply to the sceptic's claim that knowledge is impossible. But whether we should care about scepticism depends on whether knowledge is valuable. Some philosophers have argued that knowledge has no distinctive value (e.g., Kaplan 1985), while others have claimed that knowledge is vital for human survival, cooperation, and flourishing (e.g., Craig 1990).

1. What is Knowledge?

The question “What is knowledge?” has often been understood as: what is the correct analysis or definition of the *concept* of knowledge? The basic idea is that we can analyse knowledge by limning the structure of the concept of knowledge, and the ideal result is an analysis formulated in terms of the concept’s individually necessary and jointly sufficient conditions. However, other theorists take a metaphysical, or non-conceptual approach. Instead of asking what it takes for something to satisfy our *concept* of knowledge, they ask *what knowledge is* (see Kornblith 2002). To analyse knowledge, on this interpretation, is to identify the components of knowledge itself.

Unfortunately, philosophers are often unclear about whether they are engaged in the conceptual or metaphysical project. Is the subject matter of epistemology knowledge itself, or our concept of knowledge, or the word ‘knows’? How best to answer the question “What is knowledge?” will likely depend on what kind of thing we take knowledge to be. Is it a natural kind, like gold or water, which calls for a scientific investigation (akin to a chemist who analyses chemical compositions)? Is it a mental state that is best studied by psychologists or philosophers? Is it a pragmatic concept that we use to evaluate the epistemic standing of others, but which does not refer to any particular mental state or natural kind? Philosophers disagree not only about the nature of knowledge but also how to investigate it.

Plausibly, there are different *types* of knowledge. I can know *how* to ride a bicycle (this is called ‘know-how’). I can know *a person*, like knowing my wife (this is called ‘knowledge by acquaintance’). I can also know facts, like knowing *that* dogs are mammals (this is called ‘know-that’ or ‘propositional knowledge’). In the first example, I possess a skill; in the second, I am acquainted with someone; in the third, I know a piece of information.

The relationships between these types of knowledge are disputed. Some think that knowledge-how reduces to knowledge that (Stanley and Williamson 2001), while others deny this (Ryle 1949). Some have construed knowing a person as equivalent to knowing facts about them and possessing the skill of being able to distinguish that person from other objects (see also [Knowledge, Concept of - version 1](#)). Whether it is possible to reduce one form of knowledge to another is an ongoing debate amongst epistemologists.

By and large, analyses of propositional knowledge have overshadowed attempts to elucidate other kinds of knowledge. We might question whether it is right to make propositional knowledge the central focus of epistemology. According to Colin McGinn (1984), it is a “dubious procedure” to confine our attention to propositional knowledge, given that the concept of knowledge occurs in a variety of different locutions—knowing how, knowing who (which, where, etc.), knowing that. McGinn says, “it is a condition of adequacy upon an account of knowledge that it display the unity in this family of locutions” (1984: 529). But we might reject this idea because languages other than English do not always use the same word for both propositional knowledge and other types of ‘knowledge.’ For example, most romance languages have a different word for knowing a person, place, or thing vs. knowledge of facts. So perhaps we shouldn’t be optimistic about a unified analysis. Still, we might wonder why English has the same word to pick out these different things.

2. Is Knowledge Justified True Belief?

An interest in analysing knowledge dates back to Plato, but it reached its climax in the late 20th century, following the publication of Edmund Gettier's influential article in 1963. According to Gettier, the traditional view of knowledge is false. The traditional view, which Gettier attributes to [Plato](#), [A. J. Ayer](#), and [Roderick Chisholm](#), is that knowledge has three components: belief, truth, and justification. In other words, a person S knows some proposition p if and only if S has a justified true belief that p. However, Gettier described two hypothetical cases in which a person has a justified true belief that does not qualify as knowledge. Here's an example of such a case (though not Gettier's own): A person looks at a clock that stopped twelve hours ago and luckily forms a true belief that it is now two o'clock. Such a person intuitively does not have knowledge, yet they seem to have a justified true belief. These sort of cases left philosophers with the famous '[Gettier problem](#),' which is the problem of identifying what must be added to true belief (or justified true belief) to have knowledge.

Gettier showed that belief, truth, and justification are *insufficient* for knowledge, but he did not show they are *inessential* for knowledge. Intuitively, you cannot know a proposition unless you believe it (but see Radford 1966 for an objection). For example, "I *know* that this table is brown, but I don't *believe* that this table is brown" sounds incoherent. Moreover, you cannot know what is false. Nobody can know that Shakespeare wrote *The Iliad* because he did not write it. Finally, true beliefs must be arrived at *in the right way* to qualify as knowledge. After all, a lucky guess would not suffice for knowledge. Thus, we need something like *justification* for our beliefs.

There is considerable disagreement about what the relevant sort of justification consists in. According to many historical figures (ranging from the ancient Stoics to Descartes), knowledge must be based on infallible foundations. These foundations have been characterized in different ways, but the general idea is that knowledge requires the highest possible degree of justification—enough to *guarantee* that the belief is true. Contemporary thinkers like Peter Unger (1975) and Laurence Bonjour (2010) have defended infallibilist views of knowledge. Unger argues that knowledge requires absolute certainty (see also [Certainty](#)), whereas Bonjour maintains that justification must entail truth to give us knowledge. By strengthening the justification condition in this way, Bonjour says we can escape the Gettier problem. Infallibilist justification would guarantee the truth of our belief, thereby removing luck and avoiding the Gettier problem.

While infallibilism might escape the Gettier problem, it pushes us towards scepticism (see also [Scepticism](#)). We humans rarely possess infallible justification or absolute certainty for the beliefs we take to constitute knowledge. Infallible justification would therefore imply that we know nothing, or almost nothing. For this reason, most epistemologists are fallibilists (see also [Fallibilism](#)). A fallibilist believes that we can have knowledge on the basis of justification that does not guarantee our beliefs are correct. (This is often called 'defeasible justification.') We can know that a particular claim is true, on this view, even when our justification is less than fully conclusive.

There are many related questions about the nature of justification and knowledge, such as the debate between [internalism and externalism in epistemology](#). Internalists think that justification is determined solely by factors that are internal to a believer, such as introspective awareness or

reflective access. Externalists, by contrast, claim that a believer need not have internal access or cognitive grasp of any reasons or facts that make their belief justified. Another debate is about the structure of justification. According to [foundationalism](#), all knowledge or justified belief rests ultimately on a foundation of noninferential knowledge or justified belief (i.e. beliefs that are not justified by other beliefs). Coherentists deny this (see [Justification, coherence theory of](#)). The coherence theory of justification asserts that a belief is justifiably held when it coheres with a set of beliefs that form a coherent system. There was a lively debate between foundationalists and coherentists in the late 20th century (see Sosa 1980), but the philosophical interest in this topic has waned somewhat. That said, coherentism has resurfaced in recent work in the epistemology of understanding (see Kvanvig 2003).

3. Theories of Knowledge

It is widely accepted that Edmund Gettier refuted the traditional (justified true belief) analysis of knowledge in 1963. Since then, much philosophical work has been devoted to finding an analysis of knowledge in terms of true belief plus some other factor (or factors). While these solutions differ in their details, they often presume that the traditional account was roughly right, but in need of modification to deal with Gettier-type counterexamples.

The earliest attempt to modify the traditional account of knowledge was the ‘no false belief’ theory (Clark 1963). According to this view, knowledge is a justified true belief that is not inferred from any falsehood. In Gettier’s original cases, the people who lack knowledge seem to rely on some crucial false belief that (luckily) leads them to truth. Thus, a simple fix would be to add the following condition to the traditional analysis of knowledge: one must form one’s belief *on true grounds*. However, this view has been rejected for two reasons: first, it seems possible to get knowledge even when one’s belief is partly based on a falsehood; second, there are Gettier cases that involve no inference from a false belief (Nagel 2014: ch.4).

A more sophisticated version of the ‘no false belief’ analysis is the ‘no defeater’ view (Lehrer and Paxton 1969). The basic idea is that a justified true belief counts as knowledge if and only if there is no unpossessed evidence that, had the subject known it, would have undermined their justification for the belief. In other words, S knows that p only if there is no defeater for S’s justification for believing that p. Richard Foley (2012) defends a related idea. He says that knowledge requires one to truly believe that p and also have “adequate information.” Whenever someone has a true belief but not knowledge, there will be important information they lack. However, both the ‘no defeater’ view and the ‘adequate information’ view have been challenged.

A key feature of Gettier cases is the lucky way in which the agent arrives at a justified true belief. For this reason, epistemologists widely agree that knowledge is incompatible with at least some types of luck (see also [Epistemic luck](#)). Peter Unger (1968) suggests a straightforward way to analyse knowledge in light of this fact: a belief is not knowledge if it is true *only by accident*. In other words, S knows that p if and only if S has a justified true belief that p and it is *not at all accidental (or lucky) that S’s belief is true*. However, it is unclear precisely how to spell out this ‘anti-luck’ condition. If knowledge is incompatible with *any* luck, then must our beliefs be infallibly justified? As mentioned in §2, few epistemologists accept such infallibilist theories of knowledge.

One kind of luck occurs when there is a gap between the source of one's justification and the fact that makes one's belief true. A good theory of knowledge would close this gap. To accomplish this, Alvin Goldman (1967) replaces the justification condition in the traditional theory with the following causal condition: one's belief that *p* is *caused by the fact* that *p*. According to this view, *S* knows that *p* if and only if *S*'s true belief that *p* is appropriately causally connected to the fact that *p*. A benefit of this theory is that it seems to allow us to escape the Gettier problem. In Gettier cases, there is no causal connection between the subject's belief and the fact that makes their belief true.

But Goldman himself realized there are cases in which one's belief is luckily true, not knowledge, and is nevertheless appropriately caused by the relevant fact (see Goldman 1979). This led Goldman to abandon the causal theory of knowledge in favor of a *reliability* account of knowing (see also [Reliabilism](#)). Knowledge, Goldman says, must arise out of a reliable belief-forming process.

There are now a variety of approaches that look at the *processes* or *faculties* that produce or sustain belief. The approach is popular with 'naturalistic' philosophers who seek to analyse knowledge in terms of concepts that wouldn't be out of place in science (see also [Naturalized epistemology](#)). One popular idea is that true belief must be the product of an intellectual "virtue" or "ability" (see also [Intellectual virtue](#); [Virtue epistemology](#); Greco 2010; Sosa 2007; Zagzebski 1999). Another is that the subject's belief must track the truth in close counterfactual situations (Nozick 1981). These views have all been criticized, revised, and further criticized. Some find these views objectionable because they entail externalism (see §2; also [Internalism and externalism in epistemology](#)). It is a contested issue whether or not a belief can constitute knowledge without the believer having access to evidence of their reliability.

4. Beyond Analysing Knowledge

What must be added to a true belief in order to make it knowledge? As we've seen (in §3), epistemologists have no shortage of answers to this question. Some theorists maintain that a true belief must be the product of a reliable cognitive process. Others maintain that a true belief qualifies as knowledge only if it is creditable to one's cognitive abilities or intellectual virtues. Others still think that a true belief amounts to knowledge only if it is 'undefeated' or is 'safe' in the sense that one's belief could not have easily been false. This is just a small sample of views, all of which assume that what must be added to true belief in order to have knowledge is something related to true belief but distinct from it.

For better or worse, all attempts to analyse knowledge in this way have succumbed to a pattern of counterexamples. There is, at present, no convincing reason to expect knowledge to be analysable into necessary, sufficient, and informative conditions. As a result, a growing number of philosophers are distancing themselves from the traditional attempts to analyse knowledge in this way. Instead of assuming that traditional analyses were basically on the right track, philosophers have been developing new ways of doing epistemology outside the paradigm of the traditional approach (e.g., Craig 1990 and Williamson 2000).

Peter Strawson (1992) suggests that we adopt a less ambitious approach to investigating knowledge. Instead of analysing knowledge in terms of more basic concepts, he says we should seek connections between a system of interrelated concepts, such that the function of each concept could be properly understood only by grasping its connection with other concepts. The aim, then, would be to construct an illuminating conceptual map of a domain of concepts without attempting to reduce some concepts to others. On this view, conceptual analysis should be holistic instead of reductive. Timothy Williamson (2000) says we should reject the assumption that knowledge is analysable in terms of more basic notions, like belief and justification, and instead we should treat knowledge as a basic, unanalysable notion that is used to shed light on other concepts, like belief and evidence. Further, we can look at how knowledge relates to other matters of interest, such as assertion and practical reasoning.

The study of knowledge *ascriptions* has also become a central focus of epistemology (see Brown and Gerken 2012). One of the prevailing questions in contemporary epistemology is whether the semantics of knowledge ascriptions is invariant or context sensitive. According to *contextualists*, the standards for someone to truly count as a 'knower' vary in certain ways according to features of the conversational context (DeRose 1995; Lewis 1996; Cohen 1988). Invariantists deny this. According to *insensitive invariantists*, what counts as being in a sufficiently good epistemic position to know some proposition does not vary – is not sensitive to – any facts about an individual's practical interests at the time in question, whether it be those of the subject, the attributor, or the evaluator of a knowledge claim (see Rysiew 2001 and Brown 2006). According to *sensitive invariantists*, the truth-value of a knowledge claim partly depends on facts about the subject's practical interests, such as the cost of being wrong (Hawthorne 2004; Stanley 2005; Fantl and McGrath 2009). This debate is closely connected to a more general debate about whether knowledge – or true knowledge attributions – depends on 'purely epistemic factors' (e.g., whether a belief is formed in a reliable way) or also 'practical factors' (e.g., how much is at stake) (see also [Pragmatic encroachment](#)).

5. The Value of Knowledge

Knowledge has been the primary focus of epistemology. Presumably, this would not be so if we thought knowledge had little value. As Laurence Bonjour (2010: 58) says, "knowledge is the *epistemic summum bonum*," a supremely valuable cognitive state that marks the pinnacle of intellectual achievement. While most epistemologists do not claim that knowledge is "supremely valuable", it is widely agreed that knowledge is importantly valuable.

But some epistemologists claim knowledge has little, if any, value. Mark Kaplan (1985) argues that knowledge has no value because it does nothing to advance or clarify the proper conduct of inquiry. From the perspective of an individual inquirer, there is no difference between determining whether one believes something with justification or knows it. Less radically, Robert Pasnau (2017) argues that knowledge is a cognitive state that falls short of the epistemic ideals described in the works of great philosophers like [Aristotle](#), [Aquinas](#), [Descartes](#), and [Locke](#). Pasnau argues that contemporary philosophers have become too concerned with analysing our everyday concept of knowledge instead of describing the epistemic ideal that humans might hope to achieve.

We can ask a variety of questions about the the value of knowledge. For example, we can ask whether knowledge is more valuable than mere true belief, given that true belief seems to guide behaviour just as reliably as knowledge. As Plato observed, a true belief about the correct way to Larissa will get you there just as well as knowing the correct way (see *Theatetus*). Why, then, should we prefer knowledge to true belief? We can also ask whether knowledge is more valuable than any other epistemic standing that falls short of knowledge, such as justified true belief. Duncan Pritchard (2007) calls this *the secondary value problem*. Further, we can ask whether knowledge is more valuable than other cognitive states, such as understanding or wisdom. According to Jonathan Kvanvig (2003), knowledge is no more valuable than justified true belief, so the focus of epistemology should not be knowledge but rather understanding, which is allegedly more valuable than knowledge (see Elgin 2017). However, others have argued that understanding is merely a species of knowing and therefore has no distinctive value beyond knowledge (e.g., Grimm 2006).

A growing consensus in epistemology is that an analysis of knowledge should make it clear why knowledge is something we care about (see Kvanvig 2003; Sosa 2000; Williamson 2000; and Zagzebski 1999). According to Bonjour (2010), reflecting on the value of knowledge should lead us to reject fallibilism. He says there is no level of justification short of infallibility that would make sense of knowledge's value. According to Craig (1990), we can better understand the value of (fallible) knowledge by reflecting on the importance of the *concept* of knowledge in human life. His central hypothesis is that the concept of knowledge plays the valuable role of allowing us to identify reliable informants. But other theorists say we should not be concerned with questions about the value of concepts at all (DePaul 2009).

6. The Extent of Our Knowledge

We tend to suppose that we know a lot. I know (or, at least, I think I know) that Ottawa is the capital of Canada; that Plato was a student of Socrates; that blue whales are the largest animals on Earth; and much else besides. You probably think you know many things, too. But how much do we know, really?

According to some powerful sceptical arguments, we know nothing—or almost nothing. There are many forms of scepticism; for instance, we can be sceptics about [induction](#), [other minds](#), [memory](#), or the external world (see also [Scepticism](#)). There are also a variety of sceptical arguments. According to the ancient Pyrrhonists, every argument has an equal and opposing argument, so we should suspend judgment on any issue (see also [Pyrrhonism](#)). According to Descartes, we cannot know anything about the world until we remove all possible doubts (see also [Doubt](#); [Descartes, René](#)). According to [David Hume](#), knowledge of unobserved facts ultimately rests on question-begging assumptions about the reliability of induction. Others claim that scepticism follows from uncontroversial principles about knowledge (see also [Deductive closure principle](#)). Almost as soon as philosophers began asking “What is knowledge?” they found themselves confronted with powerful sceptical challenges. Thus, a large part of the epistemological enterprise has been devoted to evaluating the sceptic's reasoning and resisting the sceptic's conclusion.

While scepticism comes in many forms, they all tend to orbit around the following idea: we humans have far less knowledge (or justification) than we think. Indeed, sceptics purport to show not only

that we lack knowledge, but also that knowledge is *impossible*. We fallible creatures are just too cognitively limited to know the many things that we ordinarily claim to know. And nothing we do will improve our epistemic lot.

Scepticism is intimately connected with questions about the nature of knowledge. This is because how much we know will depend on what knowledge is. If knowledge requires infallible justification, then we know little, if anything, about the world (see also [Certainty](#)). We rarely possess infallible justification, conclusive reasons, or a perfectly reliable basis for those beliefs we take to constitute knowledge. The *value* of knowledge also bears on sceptical worries. If knowledge is not actually valuable, then why care about the truth of scepticism? Scepticism only matters if knowledge does. But despite the best efforts of epistemologists, there is no widespread consensus on how to banish the sceptic.

7. The Purpose(s) of Knowledge

Many philosophers think an adequate theory of knowledge should fit plausible assumptions about the role of knowledge in human life. We may regard this as a “functionalist turn” in epistemology. The idea, put roughly, is that we should try to reveal the nature and value of knowledge by reflecting on the practical importance of knowledge (or the concept of knowledge).

We find this idea in Edward Craig’s work (1990). Instead of analysing knowledge into necessary and sufficient conditions, Craig recommends that we investigate the concept of knowledge by asking, first, what it does for us (what its role is) and then, second, what a concept having that role would look like (what conditions would govern its application). This contrasts with the usual focus in epistemology. Scholars investigating the nature of knowledge have tended to focus on identifying the criteria for knowledge (or the application conditions for the concept of knowledge). But largely absent from this debate has been any reflection on why knowledge (or the concept of knowledge) would come equipped with such criteria in the first place.

There have been a variety of proposals about what role or functions knowledge plays in deliberation and epistemic evaluation; for instance, it has been suggested that knowledge ascriptions identify reliable informants (Craig 1990), signal the appropriate end of inquiry (Kvanvig 2009), provide assurance (Lawlor 2014), track the epistemic norm of assertion (Williamson 2000) and practical reasoning (Hawthorne 2004), encourage good testimony (Reynolds 2002), and indicate that one is certain (BonJour 2010). This plurality of views should make us wonder whether knowledge (or the concept of knowledge) has just one primary function or whether we should be “pluralists” about the functional roles of knowledge (see Hannon 2019).

These hypotheses may also shed new light on epistemic value. For example, John Hawthorne (2004) argues that knowledge is valuable because it plays a vital role in practical reasoning: that is, one should use a proposition *p* as a premise in one's practical reasoning only if one knows *p*. Relatedly, Kvanvig (2009) argues that knowledge is valuable because it signals the point of legitimate inquiry closure. There is an ongoing debate in epistemology about the social functions of knowledge and how this connects to epistemic value. However, the idea that we can derive substantial

epistemological insights by reflecting on the purpose of knowledge is increasingly popular in philosophy.

But we cannot fully grasp the social functions of knowledge without considering the connections between knowledge, power, and oppression. As feminist epistemologists have long emphasized, ethical and political values influence our understanding of knowledge, the production of knowledge, and our ability to recognize individuals as knowers (see Alcoff and Potter 1993). For example, Miranda Fricker (2007) argues that a distinctively *epistemic injustice* occurs when someone is ignored or not believed because of a prejudice against their gender, race, or another aspect of their identity. This illustrates that ascriptions of knowledge are often used – consciously or not – for nefarious purposes. We commit a ‘testimonial injustice’ when “prejudice causes a hearer to give a deflated level of credibility to a speaker’s word” (Fricker 2007: 1). By contrast, a ‘hermeneutical injustice’ occurs when speakers lack the conceptual resources to express their knowledge (either to others or even themselves) due to their exclusion from the very activities that shape which concepts become well known.

Bibliography and Further Reading

Alcoff, L. M. and Potter, E. (1993) *Feminist Epistemologies*, New York: Routledge.

(This anthology contains essays from the leading feminist epistemologists of the time and considers topics ranging from the subjectivity of individual knowers to epistemological communities, including discussions of marginalization and privilege.)

BonJour, L. (2010) 'The Myth of Knowledge,' *Philosophical Perspectives* 24 (1): 57-83.

(Argues against fallibilist conceptions of knowledge on the grounds that we cannot make sense of why fallible knowledge would be valuable.)

Brown, J. (2006) 'Contextualism and Warranted Assertability Maneuvers,' *Philosophical Studies* 130 (3): 407-435.

(An early defense of invariantism against contextualist accounts of knowledge.)

Brown, J. and Gerken, M. (2012) *Knowledge Ascriptions*, Oxford: Oxford University Press.

(This anthology brings together a number of diverse strands of contemporary research that have focused on knowledge ascriptions, including the 'know-how' debate, contextualism, and the social function of knowledge ascriptions.)

Clark, M. (1963) 'Knowledge and Grounds: A Comment on Mr. Gettier's Paper,' *Analysis* 24 (2): 46-48.

(The first published response to Gettier 1963. Clark argues that knowledge requires a justified true belief that is not inferred from any falsehood.)

Cohen, S. (1988) 'How to Be a Fallibilist,' *Philosophical Perspectives* 2: 91-123.

(A classic defence of epistemic contextualism and an attempt to solve the sceptical challenge by appealing to the notion of a 'relevant alternative.')

Craig, E. (1990) *Knowledge and the State of Nature*, Oxford: Oxford University Press.

(The first major work to reflect on the social function of knowledge. Craig argues that humans have a concept of knowledge to identify good informants, which allows us to pool and share reliable information.)

DePaul, M. (2009) 'Ugly Analyses and Value,' in A. Haddock, A. Millar & D. Pritchard (eds.), *Epistemic Value*, Oxford: Oxford University Press.

(An examination of the idea that any analysis of knowledge which is 'ugly' or a 'hodgepodge' cannot make sense of the value of knowledge. DePaul rejects this kind of argument.)

DeRose, D. (1995) 'Solving the Skeptical Problem,' *Philosophical Review* 104 (1): 1-52.

(One of the most influential statements and defenses of contextualism, as well as how this view might resolve the problem of philosophical skepticism.)

Elgin, C. (2017) *True Enough*, Cambridge, MA: MIT Press.

(Elgin develops a holistic epistemology that emphasizes understanding of broad ranges of phenomena rather than knowledge of individual facts, and she claims that understanding deserves to be a central object of theorizing among epistemologists.)

Foley, R. (2012) *When Is True Belief Knowledge?* Princeton, NJ: Princeton University Press.
(An original and strikingly simple theory of knowledge: a subject S knows some proposition p if and only if S truly believes that p and does not lack any important information. Foley argues that his view solves the Gettier problem, the lottery paradox, the value problem, and the problem of scepticism.)

Fricker, M. (2007) *Epistemic Injustice*, Oxford: Oxford University Press.
(Identifies the primary forms of epistemic injustice and highlights the importance of the corresponding virtue of epistemic justice. Epistemic injustice includes (a) not taking someone seriously in their capacity as a knower and (b) depriving someone of the conceptual resources needed to understand their experiences.)

Gettier, E. (1963) 'Is Justified True Belief Knowledge?' *Analysis* 23 (6): 121-123.
(A hugely influential work in contemporary epistemology. Gettier argues against the traditional view that knowledge is justified true belief, which left epistemologists with the famous 'Gettier problem.')

Goddard, C. (2010) 'Universals and Variation in the Lexicon of Mental State Concepts,' in B. Malt and P. Wolff (eds.), *Words and the Mind*. Oxford: Oxford University Press.
(A work in empirical linguistics arguing that the word 'know' is a universal mental state concept.)

Goldman, A. I. (1979) 'What Is justified Belief?' in G. Pappas (ed.), *Justification and Knowledge*, Springer, Dordrecht, pp. 1-23.
(An early defense of reliabilism. Goldman argues that a belief is justified only if it is produced by a reliable process.)

----- (1967) 'A Causal Theory of Knowing,' *Journal of Philosophy* 64 (12): 357-372.
(An attempted solution to the Gettier problem. Goldman says that knowledge requires a true belief that is causally connected in an appropriate way with the relevant fact.)

Greco, J. (2010) *Achieving Knowledge: A Virtue-Theoretic Account of Epistemic Normativity*, Cambridge: Cambridge University Press.
(Argues that knowledge is a kind of achievement, as opposed to mere lucky success. The fundamental idea is that one knows that p when one ends up believing truly that p as a result of the exercise of an intellectual ability or 'virtue.')

Grimm, S. (2006) 'Is Understanding a Species of Knowledge?' *British Journal for the Philosophy of Science* 57 (3): 515-535.
(An influential defence of the idea that understanding is merely a species of knowledge.)

Hannon, M. (2019) *What's the Point of Knowledge?* New York: Oxford University Press.
(An extensive defense of the idea that we can shed light on the nature and value of knowledge by reflecting on the social role or function of the concept of knowledge in human life.)

Hawthorne, J. (2004) *Knowledge and Lotteries*, Oxford: Oxford University Press.

(This book explores a number of central questions concerning the nature and importance of knowledge, including the relationship between knowledge, assertion, and practical reasoning, as well as the way in which knowledge partly depends on practical interests.)

Kornblith, H. (2002) *Knowledge and its Place in Nature*, Oxford: Oxford University Press.

(Argues that conceptual analysis should be rejected in favour of a more naturalistic approach to epistemology.)

Kaplan, M. (1985) 'It's Not What You Know That Counts,' *Journal of Philosophy*, vol. 82, pp. 350-363.

(Criticizes the project of analysing knowledge on the grounds that a theory of knowledge will do nothing to clarify or advance the proper conduct of inquiry.)

Kvanvig, J. (2009) 'The Value of Understanding,' in D. Pritchard, A. Haddock, and A. Miller (eds.), *Epistemic Value*, Oxford: Oxford University Press.

(Argues that understanding has a special kind of value that knowledge lacks, and that understanding should replace knowledge as the primary focus of epistemology.)

----- (2003) *The Value of Knowledge and the Pursuit of Understanding*, Cambridge: Cambridge University Press.

(This book questions one of widely held assumption that knowledge is always more valuable than lesser epistemic states.)

Lawlor, K. (2014) *Assurance*, Oxford: Oxford University Press.

(This book argues that the function of knowledge ascriptions is to give hearers assurance; that is, to provide 'exclusionary reason' that will appropriately end inquiry.)

Lehrer, K. and Paxson, T. (1969) 'Knowledge: Undefeated Justified True Belief,' *Journal of Philosophy* 66 (8): 225-237.

(A defense of the 'no defeater' view of knowledge according to which justified true belief counts as knowledge if and only if there is no unpossessed evidence that, had the subject known it, would have undermined their justification for the belief.)

Lewis, D. K. (1996) 'Elusive Knowledge,' *Australasian Journal of Philosophy* 74 (4):549-567.

(A defence of the 'contextualist' view that the truth-conditions for knowledge claims depend on features of the conversational context. Lewis uses this idea to shed light on philosophical scepticism.)

McGinn, C. (1984) 'The Concept of Knowledge,' *Midwest Studies in Philosophy* 9 (1): 529-554.

(Argues that a true belief counts as knowledge just in case it is produced by a reliable method. McGinn also attacks the standard analysis of propositional knowledge on the grounds that we should consider a wider range of types of knowledge.)

Nagel, J. (2014) *Knowledge: A Very Short Introduction*, Oxford: Oxford University Press.

(An excellent introductory book to the theory of knowledge. Very short and easy to read.)

Nozick, R. (1981) *Philosophical Explanations*, Cambridge, MA: Harvard University Press.
(An advanced discussion of some fundamental questions of philosophy, including topics in epistemology and ethics. Nozick's discussions of knowledge and scepticism have received much critical attention.)

Pasnau, R. (2017) *After Certainty: A History of Our Epistemic Ideals and Illusions*. Oxford University Press.
(A thought-provoking analysis of more than two millennia of epistemological thought. Pasnau argues that epistemology today has become a much narrower and specialized field, and has lost sight of the epistemic ideals to which humans aspire.)

Plato. (1997) 'Meno' and 'Theaetetus' in J. Cooper (ed.), *Plato: Complete Works*, Cambridge: Hackett Publishing.
(Two classic dialogues in which Plato analyses the nature of knowledge. A starting point for much epistemology.)

Pritchard, D. (2007) 'Recent Work on Epistemic Value,' *American Philosophical Quarterly* 44(2): 85–110.
(An excellent survey of recent work on epistemic value, with a particular focus on the value of knowledge. Pritchard disambiguates between multiple senses in which knowledge might be regarded as valuable.)

Radford, C. (1966) 'Knowledge—By Examples,' *Analysis* 27 (1): 1-11.
(A critique of the justified true belief account of knowledge. Radford argues that knowledge does not require belief.)

Reynolds, S. (2002) 'Testimony, Knowledge, and Epistemic Goals,' *Philosophical Studies* 110 (2): 139-161.
(Argues that the aim of improving testimony explains why we have a concept of knowledge.)

Ryle, G. (1949) *The Concept of Mind*, Chicago: The University of Chicago Press.
(This book introduced the idea that propositional knowledge is distinct from 'knowing how', although the focus of the book is much broader.)

Rysiew, P. (2001) 'The Context-Sensitivity of Knowledge Attributions,' *Noûs* 35 (4): 477-514.
(A compelling argument that non-sceptical invariantism about knowledge is compatible with the fact that people tend to ascribe knowledge in context-sensitive ways.)

Sosa, E. (2007) *Apt Belief and Reflective Knowledge, Volume 1: A Virtue Epistemology*, Oxford: Oxford University Press.
(This book defends a virtue epistemology that distinguishes two levels of knowledge: the animal and the reflective. Sosa uses this account of knowledge to shed light on some of the oldest and most gripping problems of philosophy, such as scepticism, the role of intuitions, and epistemic normativity.)

----- (2000) 'Scepticism and Contextualism,' *Philosophical Issues*, 10: 1-18.

(An important critique of contextualism. Sosa argues that the truth of contextualism has little, if any, relevance to epistemology and scepticism.)

----- (1980) 'The Raft and the Pyramid: Coherence versus Foundations in the Theory of Knowledge', in *Studies in Epistemology. Midwest Studies in Philosophy*, Notre Dame, IN: University of Notre Dame Press, vol. 5.

(An excellent paper that tries to better understand the nature of the controversy between internalism and externalism in epistemology.)

Stanley, J. (2005) *Knowledge and Practical Interests*, Oxford: Oxford University Press.

(A defense of the provocative claim that whether or not someone knows something is partly influenced by one's practical interests, i.e. by how much is at stake for a particular individual.)

Stanley, J. and Williamson, T. (2001) 'Knowing How,' *Journal of Philosophy* 98 (8): 411-444.

(This paper argues against the view that know-how and know-that are distinct types of knowledge. Stanley and Williamson claim that knowing how is a matter of being in a relation to a proposition, that is, that knowing how is a species of knowing that.)

Strawson, P. (1992) *Analysis and Metaphysics*, Oxford: Oxford University Press.

(An introduction to the nature of analytic philosophy. Strawson rejects an older, reductive conception of philosophical method in favor of elucidating the interconnections between notions that form the structure of our thinking.)

Unger, P. (1975) *Ignorance: A Case for Skepticism*, Oxford: Oxford University Press.

(Argues for the extremely skeptical view that, not only is it impossible to know anything, but no one can ever have any reason at all for anything.)

Unger, P. (1968) 'An Analysis of Factual Knowledge,' *Journal of Philosophy* 65 (6): 157-170.

(A defense of the view that knowledge requires true belief that is not at all accidental.)

Williamson, T. (2000) *Knowledge and Its Limits*, Oxford: Oxford University Press.

(A radical and promising reversal of some traditional epistemological assumptions. Williamson argues that the concept of knowledge cannot be analyzed but that we can nevertheless provide an illuminating account of knowledge by using this notion to explain other things.)

Zagzebski, L. (1999) 'What Is Knowledge?' in J. Greco and E. Sosa (eds.), *Epistemology*, Oxford: Blackwell, pp. 92-116.

(An excellent introduction to the philosophical analysis of the nature of knowledge.)