Awareness and the Substructure of Knowledge

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Preface

It is conventional in epistemology to treat ‘S is aware of the fact that p’ (and its contraction ‘S is aware that p’) as either expressing the same thought as ‘S knows that p’ or at least entailing it. Learning of the failure of conventional views is often both surprising and theoretically fruitful. This book provides a comprehensive case against the view that factual awareness just is knowledge or even essentially related to knowledge: factual awareness is not identical to, and it does not entail, knowing, being in a position to know, or being capable of knowing. It provides a systematic exploration of the relation between knowledge and factual awareness, arguing that knowledge is but one species of factual awareness and that we can understand the possession of objective reasons, the normativity of knowledge, and the nature of knowledge in terms of factual awareness. In this way, the state of factual awareness is, structurally and substantively, a more basic type of state than knowledge. If correct, this undermines a number of ways in which knowledge has been regarded as ‘first’ in recent epistemology.

The present bit of work on awareness grew out of puzzlement over epistemic paradoxes involving self-defeating beliefs (anti-expertise paradoxes). In such cases the belief requirement for knowing that p could not be satisfied. But it nevertheless seemed clear that one could, under certain conditions, be aware of the fact that p. Making the uncritical assumption that factual awareness entailed knowledge, I argued that knowledge must be a less demanding state than it’s typically thought to be. At the very least, knowledge must not require belief. These thoughts culminated in a project titled “Beliefless Knowing”. I now think that uncritical assumption was mistaken: factual awareness does not entail knowledge and reasons for thinking otherwise are uncompelling upon close inspection. Much of Chapters 3 and 4 are written to help readers understand why ‘aware of the fact that p’ as it is used in natural language does not entail knowledge that p. Once it becomes clear how and why we must separate knowledge from factual awareness, all kinds of previously unexplored questions present themselves, especially in relation to the last two decades of epistemological efforts to put knowledge first. For while knowledge and factual awareness are distinct, they remain closely related in being epistemically significant factive states.

Some of these questions about the epistemic significance of factual awareness have been addressed in earlier work: “Possessing reasons” and “Basic knowledge and the normativity of knowledge”. The former arguing that possessing a fact as a reason for a response was a matter of being in a position to be aware of it (Chapter 6), while the latter argued that factual awareness could fortify the standard view that knowledge is a state that is constitutively grounded in the possession of reasons, especially in relation to Kurt Sylvan’s near-compelling attack on this assumption (Chapter 7). While these papers eventually succeeded in gaining traction with referees, referees were typically in the grip of the uncritical assumption mentioned above and couldn’t see their way to separating factual awareness from knowledge. These papers succeeded only after I started using ‘aware of the fact that p’ to stipulatively refer to a state of non-accidental true representation reached by way of a generalization from knowledge. Chapter 5 explains how and why this use of ‘aware of the fact that p’ coincides with its use in natural language. Once knowledge was separated from factual awareness it became an open question whether or not we could
understand the nature of knowledge in terms of factual awareness. This turned out to be not only possible, but surprisingly plausible (Chapters 8 and 9)...or so I argue.

In any event, my hope is that this book is one of the good things to emerge from the pandemic. I wrote it joyfully in 2020-2021 during the long periods of lockdown in my Sülz apartment. Paige and our children were ever around me. Their interruptions were no burden. I'm grateful and blessed almost beyond belief to have had such a flexible job over that period of time.

Exceptional thanks are owed to Sven Bernecker and Ram Neta. Both provided me with critical feedback and enthusiastic support on earlier versions of this work. I needed both to see this project through. Special thanks are owed to Clayton Littlejohn, Luis Rosa, Peter Baumann, Stefanie Grüne, Thomas Grundmann, Anna-Maria Asunta Eder, Wes Siscoe, Svenja Schimmelpfennig, Francesco Praolini, Daniel Fogal, Mona Simion, Adam Bricker, Eyal Tal, Adam Carter, Giulia Napolitano, Christoph Kelp, John Keller, Philip Atkins, the OUP readers, and the many referees who took the time to comment on my early work on awareness. I am also indebted to audiences at the talks I've given on awareness. The Alexander von Humboldt Foundation is owed a generous thanks for their generous financial support of CONCEPT, without which this book would not have been written. Small portions of Chapters 2, 3, and 4 previously appeared in “Beliefless Knowing”, The Pacific Philosophical Quarterly. Chapter 6 is a revised version “Possessing reasons: why the awareness-first approach is better than the knowledge-first approach”, Synthese. Chapter 7 is a revised version of “Basic knowledge and the normativity of knowledge: The awareness-first solution”, Philosophy and Phenomenological Research. Thanks to all these journals for allowing the republication of this material.
Chapter 1: Towards an Awareness-First Epistemology

The expression ‘aware of the fact that’ is a commonplace, not at all a philosopher’s term of art. We often criticize each other in terms of awareness: “You were aware of the fact that it was wrong, but you did it anyway!” We sometimes seek to excuse ourselves from wrongdoing in terms of awareness: “I’m sorry, I wasn’t aware of the fact that you would be hurt by my action.” We admonish each other in terms of awareness: “You should be aware of the fact that you can easily offend Germans by making casual jokes about their soccer.” Were we to suspect a person of being ignorant of an important detail we might naturally seek to inform them of both their ignorance and the important detail with a question about awareness: “Are you aware of the fact that the borders have been closed?” These are not oblique expressions that call out for artful interpretation. When these expressions are used for the purposes of criticizing, excusing, admonishing, and informing they are meant to be understood straightforwardly in terms of sentence-meaning. Such uses presuppose the existence of a state of awareness that one can be in or fail to be in with regard to some fact. Here lies the phenomenon of factual awareness.

With a limited number of exceptions explored in Chapter 3, epistemologists have given little-to-no attention to questions about the general place and epistemic significance of factual awareness. There is no widely shared, no widely discussed, and no systematically explored answer to the following question:

The Awareness Question. What is it to be aware of a fact, and what is the place of such awareness in epistemology?

Part of the reason this question has been overlooked is owed to the fact that questions about the awareness of facts sound a lot like questions about knowledge of facts. It is difficult to hear the difference between someone claiming that “S knows that p” and “S is aware of the fact that p.” Indeed, it seems like the aforementioned acts of criticizing, excusing, admonishing, and informing that rely on expressions involving ‘aware’ could all be re-expressed using ‘knows’. Accordingly, understanding the significance of the Awareness Question depends on getting a grip on the target concept of factual awareness and how it might begin to depart from knowledge.

There are two ways of isolating a relevant concept of awareness on which questions about the awareness of facts do not immediately collapse into questions about knowledge of facts. The first way is anchored in ordinary language and involves reflection on specific modes of factual awareness that can fall short of knowledge. For example, Bernecker’s (2010) seminal work on memory advanced the idea that remembering that p is distinct from having memorial knowledge that p because remembering that p does not require belief that p, or ultimate facie justification to believe that p, or the absence of all forms of knowledge-compromising luck. Since remembering that p is a way of being aware of the fact that p it follows that remembering that p is a way of being aware of the fact that p which is distinct from knowing that p. Similarly, many have argued that
seeing that $p$ is distinct from paradigmatic instances of visual knowledge because seeing that $p$ does not require belief that $p$, or ultimae facie justification to believe that $p$, or the absence of all forms of knowledge-compromising luck. Since seeing that $p$ is a way of being aware of the fact that $p$ it follows that seeing that $p$ is a way of being aware of the fact that $p$ which is distinct from knowing that $p$. For a final example, a priori insight that $p$ and $p$’s being self-evident to an agent are naturally understood as a kind of awareness of facts that fall short of knowledge in that such awareness does not require a belief that $p$ or ultima facie justification to believe that $p$. There is well-known resistance to these claims and they are explored and addressed in Chapter 4. This chapter also produces new cases where inferential factual awareness separates from knowledge. For now, notice that if these claims are right then one can be aware of the fact that $p$ without knowing that $p$.

The second way of isolating a concept of factual awareness on which it does not immediately collapse into knowledge uses ‘factual awareness’ to refer to a relation that is a modest generalization of knowledge. On virtually all accounts of knowledge, part of what it is to know that $p$ is to have a non-accidentally true belief that $p$. Beliefs that are non-accidentally true are beliefs that are held or formed in such a way that their truth is not a matter of chance in some epistemically relevant sense. A belief’s being reliably formed, or being safely formed, or being sensitively formed, or being justified by the facts one possesses each illustrate ways of being non-accidental in this broad sense.

Further, on virtually all accounts, knowledge is a kind of non-accidental true representation. This is because knowledge is a kind of belief state and belief states are representational states (Chapter 2). But believing that $p$ is not the only way of hosting a mental state that represents $p$. There are more ways for minds to represent the world than by believing propositions about the world, and these ways of representing the world can all stand in the same general type of non-accidentality relations to facts that knowledge stands in to facts. These observations, if correct, imply that knowledge is but one type of non-accidental true representation. So if we use ‘factual awareness’ to refer to this state of non-accidental true representation that we reached via a modest generalization from knowledge it will trivially follow that knowledge is but one kind of factual awareness. Much of the theoretical work in what follows could be rested on this stipulative use of the term ‘factual awareness’. The significance of this cannot be overstated since the existence of a class of states of ‘factual awareness’ that are distinct from knowledge follows from minimal and reasonably uncontroversial assumptions about knowledge, representation, and non-accidentality. Chapter 5 defends this way of isolating a concept of factual awareness.

These two ways of isolating a relevant concept of factual awareness that is distinct from knowledge needn’t be at odds. Seeing that $p$, remembering that $p$, having an a priori insight that $p$ are akin to knowing that $p$ is in being a kind of representational state that requires the satisfaction of some kind of non-accidintality condition. Provided there is overlap in the non-accidintality relation required for knowledge and these other states, we will have the makings for an argument that knowing that $p$, seeing that $p$, remembering that $p$, etc. are distinct kinds of factual awareness. Chapter 5 defends this claim and unifies these two approaches to isolating a relation of factual awareness that is distinct from knowledge.

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3 Previous work on the theoretical value of factual awareness used ‘awareness’ to refer to the indicated generalization of knowledge (Silva 2021a, 2021b).
The view that knowledge is but one kind of factual awareness generates a range of questions. What kinds of non-accidentality relations are necessary for being factually aware? Is mere reliably produced true representation enough for factual awareness, or is some kind of virtue-theoretic condition required, or are more robust modal or explanatory conditions called for? Are there sufficient conditions for factual awareness that are not themselves necessary conditions? What is the relation between factual awareness and notions like being in a position to know and being capable of knowing? These questions are taken up in Chapters 5 and 9.

While Chapters 2-5 lay the groundwork for distinguishing knowledge from factual awareness, Chapters 6-9 put factual awareness to work. Chapter 6 takes up the question of possessing objective reasons (facts, true propositions). In recent years, a significant body of literature has converged on the idea that knowledge is somehow central to understanding what it takes to possess a fact as a reason for a response. This chapter explains how and why factual awareness provides a novel and theoretically preferable account of the epistemic condition for possessing objective reasons. The resulting view is that the reasons one possesses are, roughly, the usable facts that one is in a position to be aware of.

Chapter 7 takes up the question of the normativity of knowledge in relation to the awareness-centric theory of possession developed in Chapter 6. A very wide range of epistemologists have held that knowledge is a constitutively normative state, i.e. a state that is grounded in the possession of reasons. But many epistemologists have found it plausible that certain cases of basic knowledge exist, e.g. proprioceptive knowledge, knowledge despite forgotten evidence, self-evident knowledge. These and other cases of basic knowledge seem not to be grounded in the possession of reasons and, thus, form a primary objection to the idea that knowledge is a constitutively normative state. This chapter offers a way through the apparent dilemma of having to choose between basic knowledge and the constitutive normativity of knowledge. Central to resolving this dilemma is the thesis that the reasons one possesses are, roughly, the usable facts that one is in a position to be aware of.

Chapter 8 isolates a range of desiderata that a theory of factual awareness and knowledge should satisfy. Chapter 9 provides a theory that satisfies them. The basic idea is that factual awareness is to be understood along virtue-theoretic lines while knowledge is to be understood in terms of safe belief for sufficient reasons. The result is an ideologically unique normative, anti-luck, virtue epistemology whose motivations are natural and grounded in insights about the nature of factual awareness and widely shared insights about the nature of knowledge. The emergent view of knowledge has much in common with Dretske’s (1971, 2017) view that knowledge is belief for conclusive reason, and Schroeder’s (2015a,b; cf. 2021) view that knowledge is belief for sufficient reason. But the theory of knowledge offered in Chapter 9 differs from both in key respects. The fact that factual awareness is sharply distinguished from knowledge affords the emergent theory of knowledge a range of explanatory advantages that make it far more resilient to objections than existing theories of knowledge.

As Williamson (2000) observed, the history of past failures to provide an adequate reductive analysis of knowledge suggests something disheartening about the possibility of any future success. However, what I hope to convince you of is that we have, in different ways, been expecting too much from a theory of knowledge. For no theory of a species should be expected to explain every fact about its genus, nor should it be expected to explain every fact about other distinct species of that genus. But in failing to clearly distinguish knowledge from factual awareness
epistemologists have often done exactly that. The result being that theories of knowledge get pushed around by competing and incompatible pressures. The way forward is to better understand the substructure of knowledge given by its genus, or so I will argue.

Despite my optimism that we can provide a reductive analysis of both knowledge and factual awareness, Chapter 9 concludes with a discussion of what would happen if we took factual awareness to be beyond reductive analysis in the way that some knowledge-first epistemologists have taken knowledge to be. The upshot is that all the main lessons from Chapters 2-8 would remain in place and, arguably, the proposed reductive theory of knowledge would remain in place as well.

Readers will doubtless realize that the main thesis of this book, if correct, raises a sweeping and intriguing range of new and unexplored questions. Generally, in any case where some interesting epistemic thesis makes knowing that \( p \) necessary and/or sufficient for a condition \( c \), we can ask whether or not (mere) awareness of the fact that \( p \) is instead necessary and/or sufficient for \( c \). For example, is it knowledge or factual awareness that is needed to specify the nature of ignorance, the nature and norms of inquiry, the nature of understanding, the epistemic norm(s) of action and assertion, and the correctness conditions of belief? What might awareness have to do with “learning” new information in the sense relevant for rational belief updates? What is the nature of factual awareness for group agents? Are extended mind hypotheses better understood in terms of factual awareness or knowledge, assuming that epistemically significant extensions of our minds don’t extend our beliefs (Farkas 2015)? Is awareness of moral facts easier to come by than knowledge of moral facts due to the modal fragility of our moral attitudes (Silva 2020)? Could it be that knowledge, but not awareness generally, is subject to pragmatic encroachment, and thus explains the sustained debate over (im)purism in recent epistemology? These are among the questions to be addressed after the fundamental issues raised in this volume have been scrutinized by the wider epistemological community. My aim with this volume is to carefully and systematically defend a set of opening moves that provide the foundation for a much larger discussion, one that promises to resolve old problems as well as to open up new avenues of research.
Chapter 2: Belief Fundamentalism and Representational Pluralism

2.1 Introduction

The core thesis of this book is that knowledge is but one type of a more general epistemic kind: factual awareness. Eventually, this will be defended in the form of the following genus-species claim:

The Generality of Awareness. Factual awareness is a genus of which knowledge is but one species.

Since genus-species relations can only obtain between non-identical kinds, this thesis cannot be true if factual awareness just is knowledge. So the first step in arguing for the Generality of Awareness lies in showing that knowledge and factual awareness cannot be identified. But to show the non-identity of these two states we need to establish some facts about knowledge that can be used to differentiate them. This chapter is a defense of one of the least controversial and most widely accepted facts about knowledge: that knowing that $p$ requires believing that $p$. The reason for devoting a chapter to the defense of this intuitive and entrenched thesis is that one could seek to uphold the idea that knowledge and factual awareness are identical by denying the belief requirement on knowledge. What we will see in what follows is just how costly and unmotivated such a move is.

At the end of this chapter we will discuss the idea that belief is not the only kind of representational state that exists. That is, the following obtains:

Representational Pluralism. (Rough) There are representational states that are not beliefs states.

This matters because factual awareness is a representational state. So if factual awareness can exist in the absence of belief (Chapter 4), then there must be some other mode of representation involved when one is aware of a fact. The point of this final section is to draw attention to the antecedent plausibility of the existence of representational states that are not belief states.
2.2 Characterizing Belief

According to both folk psychology and the standard model of belief in the philosophy of mind, beliefs are representational states with a dispositional profile of some sort.\(^4\) Zimmerman (2007) sought to capture the core aspect of the folk view of belief with the following condition:

\[ S \text{ believes that } p \text{ if: (A) } S \text{ is in some state } R \text{ that represents that } p; \text{ and (B1) } S's \text{ occupying } R \text{ is contingent upon the availability of undefeated epistemic reasons; and it is in virtue of } S's \text{ being in } R \text{ that: (B2) } S \text{ is (subject to conceptual limitations) disposed to believe obvious implications of } p, \text{ (B3) } S \text{ is so disposed that she would feel surprise were she to discover that not } p, \text{ (B4) } S \text{ is disposed to act so as to satisfy those of her desires concerning which } p \text{ represents an available way (or means) of satisfaction, and (again subject to conceptual limitations) (B5) } S \text{ believes that she believes that } p. \text{ (Zimmerman 2007: 65-66)} \]

This is just a sufficient condition for belief, and Zimmerman (2007: 65) only defends the claim that this captures the “most central platitudes that we can extract from our ordinary practices of belief attribution,” making room for a theoretical characterization of the nature of belief to diverge if necessary.

Yet the dominant perspective on the nature of belief in the philosophy of mind takes much of this commonsense view of belief to be largely indicative of the very nature of belief: belief just is a representational state with a certain dispositional profile.\(^5\) Lyons (2009: 71; cf. 72-74), for example, describes the widely endorsed representationalist-functionalist view of belief in the philosophy of mind, writing that believing that \( p \) is “a matter of standing in a certain functional relation to a representation, \( R \), which has the content that \( p \),” where the relevant functional relation involving the representation \( R \) is such that “\( R \) is poised to have [=disposed to have] the causal role definitive of belief: \( R \) is used as a premise for inference, for practical syllogisms, and the like.”

Epistemologists do not always pause to comment on the nature of belief, but when they do what they have to say is in keeping with this picture from the philosophy of mind and folk psychology—especially when it comes to the dispositional profile of belief. For example, Ross and Schroeder (2014: 267-8) argue that “at least part of the functional role of belief is that believing that \( p \) defeasibly disposes the believer to treat \( p \) as true in her [practical and theoretical] reasoning.” Also emphasizing the dispositional character of belief, Weisberg (2020: 4) writes of two principal characteristics of belief: First, in believing \( p \) “we become disposed to rely on \( p \)–to use it as a premise in future reasoning, to assume it in decision-making, and to assert it. ... Second, we become resistant to reopening deliberation–we treat the question whether \( p \) as settled.” While resistant to the idea that belief, in all instances, requires an inner representational state with propositional content, Schützgebel (2002, 2013) nevertheless agrees that belief is a kind of dispositional state to be understood in terms of certain behavioral dispositions (dispositions to act and assert), certain

\(^4\) The target notion of a “representational state” used in this book is clarified in section 2.6.

cognitive dispositions (dispositions to infer), and certain affective dispositions (the disposition to feel surprise should one’s belief turn out false).

All of this raises questions about the exact set of dispositions that should be taken as necessary and (or) sufficient for belief. While this is an important question in the theory of belief, we can set it aside. What is important is that lacking a disposition to act on p, and lacking a disposition to assert p, and lacking a disposition to draw inferences on the basis of p will, on leading views of belief, imply that one does not believe that p. I will assume that this much is correct in what follows, but much of what follows can stand on alternative views of belief provided these alternative views of belief don’t imply that every representational state is a belief state.

2.3 Belief Fundamentalism: the View

What is the relation between knowing and believing? Orthodox epistemology gives the following partial answer: knowing that p requires believing that p.\(^6\) The relevant sense in which knowledge is claimed to require belief is now often specified as dispositional belief and is distinguished from the narrower concept of occurrent belief.

The idea behind dispositional belief is not the idea that believing that p requires having certain dispositions when it comes to, for example, assertion, action, and inference as discussed above. Rather, the concept of dispositional belief is meant to track the fact that there are two conditions a belief state might be in in relation to those constitutive dispositions. There is a kind of resting state a belief is in when its dispositional profile is inactive. This happens when the belief’s constitutive dispositions are untriggered. For instance, while believing that p requires having a disposition to act on p, if one is asleep or focused solely on non-p matters then one’s disposition to act on p will not be triggered and one will not act on p. This condition can be described as a belief being available for use even if it is not currently in use.\(^7\) In contrast, a belief might be in use, as when an agent is actually engaged in the process of asserting p, acting on p, or drawing inferences on the basis of p from a disposition to do just that. When a belief is in use it is referred to as an occurrent belief. The term ‘dispositional belief’ is intended to cover both conditions: the condition of being merely available for use as well as the condition of actually being in use. In other words, the notion of dispositional belief covers both occurrent and non-occurrent conditions of belief.

Knowledge is standardly taken to require only dispositional belief because at any given moment the vast majority of our knowledge-constituting beliefs are non-occurrent. Accordingly, an occurrent belief requirement on knowledge would yield a strange and sweeping form of skepticism, with knowledge flickering in-and-out of existence with beliefs switching from an occurrent state to a non-occurrent state. For convenience I will leave the ‘dispositional’ qualifier implicit in what follows when talking about the belief requirement on knowledge. Thus, the claim that knowledge requires belief is always to be understood as knowledge requiring dispositional belief.

To say that knowledge requires belief is only to assert a modal relation between the state of knowing and the state of believing. But what explains that modal relation? One explanation for the

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\(^7\) Audi (1994), Rose and Schaffer (2013), and Buckwalter, Rose, and Turri (2015).
belief requirement on knowledge is that knowledge is a species of belief. On this view, believing stands to knowing like being a table stands to being a table in a room: knowledge is just belief in certain circumstances. Alternatively, it might be that believing stands in a compositional relation to knowing. When distinct objects compose a whole the whole is literally something more than its parts. The relation between belief and knowledge is more complex on a compositional view: for if believing is a compositional part of knowing, then knowing is no more a species of belief than a table is a species of table leg. We will return to this issue and its significance below.

Whether one prefers a species view or a compositional view, believing is fundamental to knowing in the sense that the state of believing that $p$ is an essential constituent part of the state of knowing that $p$, and thus a part that explains the existence of knowledge that $p$. Accordingly, we have the following thesis:

**Belief Fundamentalism.** The state of believing that $p$ is fundamental to knowing that $p$.

In what follows we will discuss several arguments in support of Belief Fundamentalism and find answers to its most pressing objections.

### 2.4 Belief Fundamentalism: the Defense

The first step in defense of Belief Fundamentalism is a defense of orthodox epistemology’s idea that there is an important modal connection between knowing and believing:

$$(K \rightarrow B) \text{ Necessarily, } S \text{ knows that } p \text{ only if } S \text{ believes that } p.$$ 

Belief Fundamentalism entails $(K \rightarrow B)$, but $(K \rightarrow B)$ does not itself entail Belief Fundamentalism. Belief Fundamentalism is a stronger thesis. But, as we’ll see, some of the arguments for $(K \rightarrow B)$ double as arguments for Belief Fundamentalism.

Philosophers frequently regard $(K \rightarrow B)$ as self-evident and not in need of further argument. For example, Feldman (2003: 13) writes: “If you know something, then you must believe it or accept it.” After clarifying his target concept of belief as a very general state of acceptance or thinking something is true, his very next statement is “It is clear, then, that knowledge requires belief. If you do not even think a statement is true, then you do not believe it.” An uncharitable way of reading this is as a premise-circular argument because the conclusion is nothing more than the premise restated. More charitably interpreted, this is as an expression of the self-evident character of the claim that knowledge requires belief once that claim has been properly understood. Claims of self-evidence are nothing to ignore, sometimes we have little else to go on in philosophy. Fortunately, there are also arguments to be found in defense of $(K \rightarrow B)$.

Consider first the fact that believing that $p$ always accompanies paradigmatic cases of knowledge that $p$. That is, when we think of clear and uncontroversial instances of knowledge, we find they are all cases of belief. For example, I know that I am now typing, I know that I owned a computer five years ago, I know that $2+2=4$, and so forth. I also believe all these things. Similarly, when I consider what I take you and others to plainly know I likewise find, or would find, that

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8 See van Inwagen (1990) and Markosian (2008).
belief accompanies this knowledge. For instance, I think it is clearly and uncontroversially the case that you know that you are reading sentences of English, that you know that 2+2=4, etc. If I were to inquire whether you also believe these things I would find that you do. So just as observing many instances of ravens that are black in diverse circumstances gives us non-trivial reason to think something is a raven only if it is black, observing sufficiently many diverse paradigmatic instances of knowledge where knowledge that p and belief that p coincide gives us non-trivial reason to think that one knows that p only if one believes that p. Thus, we have non-trivial inductive support for (K→B).

Second, consider next the fact that assertions like “I know that p, but I don’t believe it,” have a deeply unnatural sound to them. That is, they have the kind of sound that often suggests some kind of inconsistency is in the neighborhood. The belief requirement on knowledge, (K→B), would explain this. Of course, speakers really do say things like “I know that he won the election, I just don’t believe it.” But such expressions are typically used to communicate a high degree of surprise at how things turned out, not sincere non-belief.⁹

Third, knowing that p is a representational state that is of practical value. A person who knows that p represents the world as being such that p and is poised to act on p, assert p, and draw inferences from p in deliberation. Accordingly, a knower is poised to respond to the world as it is and in ways that are of practical value. That knowledge is of practical value in these ways is widely taken for granted in discussions of the practical value of knowledge (Haddock, Millar, Pritchard 2010; Hyman 2017). Thus, knowledge is at least as practically valuable as true belief. (K→B) can explain this fact. For according to the standard model of belief, believing p is a representational state that involves being disposed to act on p, assert p, and draw inferences on the basis of p. Accordingly, the belief requirement can explain the fact that knowing is not just a representational state, but one with practical value for the knower. Notably, this particular argument for (K→B) doubles as an argument for Belief Fundamentalism. For if Belief Fundamentalism is true then we can easily explain why knowledge is at least as practically valuable as true belief by appealing to the fact that believing is a part of knowing.

Fourth, if knowledge is to be a genuine (and at least partially) psychological phenomenon it seems like it must have some kind of cognitive basis within the knower. Arguably, belief is the best place to locate the cognitive basis of knowledge. For knowledge is a representational state that is truth-entailing, non-accidentally tethered to the truth in some sense, and is of at least as much practical value as true belief. The thesis that knowledge is fundamental to belief can explain how and why knowledge is (at least partially) a psychological state with the aforementioned properties: for belief is a representational mental state that can be true and non-accidentally tethered to the truth; and if believing is fundamental to knowing and knowing is factive, then it we can easily explain why knowledge has at least as much practical value as true belief. If there is no other psychological state like belief in these respects, then believing is arguably required for knowing. Notably, this particular argument for a belief requirement doubles as an argument for Belief Fundamentalism. For if belief is the psychological seat of knowledge as just described, then believing must be a part of knowing in some way.

⁹ This is closely associated with the previous point that (K→B) is regarded as self-evident or intuitively correct. But it is a distinct point. To claim that concrete counterexamples to a general condition are counterintuitive is not to claim that a general condition is intuitive.
Lastly, if we are able to couple the previous considerations in favor of \((K \rightarrow B)\) with a failure to find clear counterexamples where one knows that \(p\) but fails to believe that \(p\) (see next section) then we will have the makings for a very strong argument in defense of \((K \rightarrow B)\) as well as what seems to be the best explanation of \((K \rightarrow B)\): Belief Fundamentalism.

### 2.5 Belief Fundamentalism: the Opposition

Belief Fundamentalism is not without objections. Some old, some new. First, it has been argued that the belief requirement on knowledge really does have counterexamples. Some argued for such counterexamples in the mid-twentieth century,\(^{10}\) but this resistance to the belief requirement was relatively short-lived and failed to persuade the philosophical community.\(^{11}\)

More recently, potential counterexamples to the belief requirement have emerged in experimental philosophy: Meyers-Schulz and Schwitzgebel (2013) and Murray, Sytsma, and Livengood (2013) claimed that their experimental work demonstrated that lay subjects are inclined to think that people can know that \(p\) without believing that \(p\). For example, Meyers-Schulz and Schwitzgebel (2013) conducted an experimental study involving a permutation of Radford’s (1966) underconfident examinee:

**Unconfident examinee:** Kate is taking a history test. She had studied carefully and has been doing well on all the questions so far. She has now reached the final question, which reads ‘What year did Queen Elizabeth die?’ As Kate reads this question she feels relief, since she had expected this question and memorized the answer. But before Kate can pause to recall the date, the teacher interrupts and announces that there is only one minute left. Now Kate panics. Her grip tightens around her pen. Her mind goes blank, and nothing comes to her. She feels that she can only guess. So, feeling shaken and dejected, she writes “1603”—which is of course exactly the right answer.

The results of their experimental study indicated that a majority of participants ascribed knowledge while a very high proportion failed to ascribe belief. This is likely due to the detail that Kate felt no confidence in her answer. Accordingly, a high proportion of their participants were relatively comfortable with the idea that agents can have knowledge that \(p\) without belief that \(p\).

However, these experimental findings against the belief requirement on knowledge have been undermined by additional experimental work where subjects were given the conceptual tools to distinguish different senses of belief. Specifically, Rose and Schaffer (2013) showed that when subjects were taught the concept of dispositional belief they tended to ascribe knowledge only if they ascribed dispositional belief. Similarly, Buckwalter et al. (2015) showed that when subjects were taught the concept of thin belief \((\approx\) dispositional belief that \(p\) in the absence of any particularly positive affective attitudes towards \(p\)) they tended to ascribe knowledge only if they ascribed thin belief. As Buckwalter et al. indicate: thin, dispositional belief is what epistemologists have tended to mean when they use the term ‘belief’ when upholding a belief requirement on knowledge. The overarching point to appreciate is that these later studies have, for the time being,

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\(^{10}\) Radford (1966), Annis (1969), and Mannison (1976).

\(^{11}\) For early defenses of the belief requirement on knowledge against these early challenges see Lehrer (1968), Armstrong (1969), Sorensen (1982), and Dartnall (1986).
effectively neutralized the experimental threat to \((K\rightarrow B)\) and, by extension, Belief Fundamentalism.

The second objection to Belief Fundamentalism stems from recent empirical evidence on knowledge attributions. One might think that if belief is part of knowledge, then belief ascriptions will be in some way more basic than knowledge ascriptions. Jennifer Nagel (2013) was perhaps the first to draw attention to the significance of the empirical literature on knowledge attributions in thinking about the relation between knowledge and belief, arguing that it supports the idea that the concept of knowledge is more basic than the concept of belief.

In a recent, massive, cross-disciplinary review of the empirical literature Phillips et al. (2021) have confirmed Nagel’s thesis. As they summarize it:

...most of the empirical evidence to date points in the opposite direction: the capacity to attribute knowledge is more basic than the capacity to attribute belief. ... This evidence indicates that nonhuman primates attribute knowledge but not belief (Section 4.1), that the capacity to attribute knowledge arises earlier in human development than the capacity to attribute belief does (Section 4.2), that implicit knowledge attributions are made more automatically than belief attributions (Section 4.3), that the capacity to represent knowledge may remain intact in patient populations, even when belief representation is disrupted (Section 4.4), and that explicit knowledge attributions do not depend on belief attributions (Sections 5.1 and 5.2) and are made more quickly than belief attributions (Section 5.3). Together these converging lines of evidence indicate that knowledge, rather than belief, is the more basic mental state used to represent other minds. (Phillips et al. 2021: 2)

If knowledge attributions are in these ways more fundamental than belief attributions one might be led to think that the concept of knowledge cannot be fundamental to the concept of belief, and thus that the state of knowledge cannot itself be analyzed in terms of belief.

But trying to move from these empirical observations to a rejection of Belief Fundamentalism is not at all straightforward. Notice that Belief Fundamentalism is not about, and does not entail anything about, the conceptual relation between knowledge and belief. In other words, we should not conflate the following two theses:

**Belief Fundamentalism.** The state of believing that \(p\) is fundamental to the state of knowing that \(p\).

**Conceptual Belief Fundamentalism.** The concept of believing that \(p\) is fundamental to the concept of knowing that \(p\) because the concept of believing is a part of the concept of knowing.

If Conceptual Belief Fundamentalism were true, it would arguably be impossible to possess the concept KNOWLEDGE and to coherently apply that concept to an individual without thereby applying the concept BELIEF to the same individual. This puts Conceptual Belief Fundamentalism at odds with the empirical work examined by Nagel (2013) and Phillips, et al.
(2021). But the same is not true of Belief Fundamentalism, which is a metaphysical thesis about the nature of knowledge and its relation to belief.

To help appreciate the fact that Belief Fundamentalism doesn’t involve a commitment to Conceptual Belief Fundamentalism consider an analogy. Children can have the concept A DRAWING OF A CIRCLE ON A PIECE OF PAPER without having any concept of the myriad of conditions metaphysically necessary for that concept to correctly apply to an object. For example, paper is made of pulped and pressed plant material (wood, cotton, bamboo, flax, etc.). But children acquire the concept of PAPER long before they acquire the concept PULPED AND PRESSED PLANT MATERIAL. Similarly, a circle is a geometrical figure on a euclidean plane whose every point along its perimeter is equidistant from a central point. So, necessarily, if something is a drawing of a circle it is a drawing of such a figure. But children needn’t have the capacity to conceptualize this complex geometrical statement of the nature of a perfect circle in order to have the concept DRAWING OF A CIRCLE ON A PIECE OF PAPER. The lesson here is that one can possess a concept $F$ and correctly apply $F$ to an object without also possessing the concepts needed to specify the conditions that metaphysically secure the correct application of $F$ to an object.\(^{12}\)

Accordingly, there is no clear inconsistency between the empirical observations of Nagel and Phillips et al. and Belief Fundamentalism. The empirical observations appear at most to be evidence against Conceptual Belief Fundamentalism. This is not to say that these empirical observations are theoretically idle. For, as Nagel and Phillips et al. point out, they do support Williamson’s (2000: 2-4) thesis that the concept of belief is secondary to and dependent on the concept of knowledge. On Williamson’s view, the concept of mere belief is the concept of botched knowledge. But even so, this conceptual priority does not dictate metaphysical priority.

The third objection to Belief Fundamentalism stems from arguments about the respective objects of knowledge and belief. Endorsing an argument made by Vendler (1972), Hyman (2017) writes that:

Vendler points out that philosophers who hold that knowledge is a species of belief take it for granted that ‘knowledge (at least in the sense of knowing that) can have the same object as belief—that is, that it is possible to believe and to know exactly the same thing’ (Vendler 1972, p. 90). But, he argues, this assumption is false. For what one believes is a proposition, whereas what one knows is a fact, and a fact is not a proposition. For example, the proposition that snow is white is one thing and the fact that snow is white is quite another thing, although of course we use the same sentence, ‘Snow is white’, to refer to both. (Hyman 2017: 269)

Hyman spends a considerable amount of space fortifying Vendler’s thesis that facts cannot be identified with true propositions. He ends up defending a novel view on which facts are abstract particulars of a certain sort, distinct from both concrete particulars and propositions. Let us grant that knowledge is a relation to facts, that belief is a relation to propositions, and that facts cannot be identified with true propositions. To what extent would this supposition, if true, problematize Belief Fundamentalism?

\(^{12}\) Compare Ichikawa and Jenkins (2017).
Everything turns on the nature of the relation between knowledge and belief. Take the idea that knowledge is just a species of belief. On this view believing stands to knowing like being a table stands to being a red table: the more specific property (being a red table) is simply the conjunction of the less specific property (being a table) and some independent properties (being red). Hyman is certainly correct that it is hard to see how knowledge could be a species of belief while not sharing the relata of belief. For on the species view, knowledge is not something more than belief in the right circumstances. If knowledge is not something more than belief in this way, then it is hard to see how knowledge could be a relation to a fact if belief is not also relation to a fact.

But the species view does not exhaust the options for Belief Fundamentalism. For it might be that believing stands in a compositional relation to knowing. When distinct objects compose a whole, the whole is something more than its parts (van Inwagen 1990; Markosian 2008). Take a table that is composed of five parts: four table legs and a tabletop. The total region of space occupied by those five parts includes six objects: the five parts of the table and the table itself. Wholes often inherit many of the properties of their parts, e.g. mass, velocity, color, location. But it is crucial to observe that wholes can have properties their parts lack. A table can be sturdy, well-balanced, symmetrical, aesthetically pleasing, etc. even if none of its proper parts have these properties. Similarly, wholes can have different modal properties than their parts, e.g. wholes can persist through the replacement and destruction of their parts. The relation between belief and knowledge is more complex on a compositional view: for if believing is a compositional part of knowing, then knowing is no more a species of belief than a table is a species of table leg. Furthermore, it is not necessarily true that every property of belief (e.g. its relational properties) directly carries over to knowledge on a compositional view. To insist that this is the case without argument is to commit the fallacy of composition.

Why think that belief stands in a compositional relation to knowledge? There is a kind of cumulative case argument we are now in a position to make. We’ve seen a wide range of reasons in the previous section to think that Belief Fundamentalism is true. And the compositional view of the knowledge-belief relation would not only explain why Belief Fundamentalism is true, but it can do so while also explaining how knowledge and belief have different objects.13 For readers convinced that knowledge is a relation to facts and that facts cannot be identified with true propositions, the compositional view of the belief-knowledge relation provides an elegant way of explaining why knowledge requires belief despite their difference in relata.

The last objection to Belief Fundamentalism stems from the possibility of factual awareness without belief (Silva 2019). The basic structure of the argument runs like this. There are cases where agents know some premises and competently and consciously deduce some conclusion from them. Yet belief in the conclusion will sometimes temporally follow the recognition that the conclusion is entailed by what one knows. That is, there will be some period of time between (i)

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13 Another potential reason comes from Williamson’s (2000: 65-92) thesis that knowledge is prime. That is, knowing cannot be broken into the mere co-occurrence of wholly ‘internal’ factors (like justified belief) and wholly ‘external’ factors (like truth) such that to know is to satisfy both the internal factor and some independent external factor. Rather, to know is to have the internal factors needed for knowing connected in the right kind of way to the external factors needed for knowing. When a special connection is required, we have some reason for thinking that a compositional relation obtains. For example, composite physical objects you might find in a home are not simply objects with parts that are located adjacent to each other; rather, such composite objects have their parts connected in a special way (Markosian 2008).
one’s coming to know that a conclusion \( p \) follows from some known premise \( q \) and (ii) one’s formation of a belief in \( p \) on that basis. The existence of this temporal gap is metaphysically inevitable since the activity of updating one’s beliefs is a causal process and therefore requires some amount of time to elapse from cause to effect (Wedgwood 2014: 332-34). Despite the necessity of a temporal gap, the updating process will in most instances be short, though it can be lengthened or even entirely halted for various reasons, e.g. irrationality, self-doubt, or death.

Chapter 4 discusses an example of this phenomenon in more detail. For now let us ask the question: what is an agent’s epistemic position in regard to \( p \) during the temporal gap? When an agent knowingly completes a deduction to some previously unobserved conclusion \( p \) from a known premise set, it is intuitive to claim that they are aware of the fact that \( p \). Since such awareness will precede belief in the conclusion this is a case of awareness of a fact without a corresponding belief. Now, Dretske (1993) and Littlejohn (2015) have pointed out that it is intuitive to think that factual awareness entails knowledge, and thus:

\[(A\rightarrow K) \text{ Necessarily, if } S \text{ is aware of the fact that } p, \text{ then } S \text{ knows that } p.\]

If this is correct then it follows that in cases of deduction where there is a gap between deducing \( p \) and believing that \( p \), one can know that \( p \) without believing that \( p \).

This once seemed convincing (Silva 2019). No longer. The problem lies with its too-quick endorsement of \((A\rightarrow K)\), which is not as well-founded as it seems. \((A\rightarrow K)\) is the topic of the next chapter. Ultimately, the argument will be that we should run a modus tollens here: given (i) all the reasons there are to think that knowledge requires belief, and (ii) given the insufficient linguistic evidence for \((A\rightarrow K)\), and (iii) given the other counterexamples that exist to \((A\rightarrow K)\), the conclusion we should draw from these cases where inferential factual awareness precedes belief is not that knowledge doesn’t require belief, but that factual awareness doesn’t require knowledge. We should, in other words, treat these cases of inferential awareness without belief as counterexamples to \((A\rightarrow K)\). Condition (i) was discussed above. Condition (ii) is defended in Chapter 3, while condition (iii) is defended in Chapter 4.

## 2.6 Representational Pluralism

Believing that \( p \) is a state that represents, or describes, or indicates the world as being such that \( p \). If you believe that your mother is home, you’re in a state that represents the world as being such that your mother is home. If your mother is not home, then there is something defective about your belief state because your belief misrepresents the world when at least part of its function, or aim, is to accurately represent the world. The set of non-representational states includes states like hoping that \( p \), desiring that \( p \), wondering whether \( p \). These are not states that purport to describe the world as being such that \( p \), and they are not states that are defective when the world turns out to be such that \( p \) is false. To borrow Ramsey’s (1931) map metaphor, the belief that \( p \) is a guide to the \( p \)-related geography of the world. When \( p \) is false, it is a defective map.\(^{14}\)

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\(^{14}\) For some discussions of this way of thinking about belief see Dretske (1986), Millikan (1989), Huemer (2001), Peacocke (2004), Kriegel (2013), and Bengson (2015). This way of thinking about belief is also, arguably, driving discussions of belief’s “direction of fit” (Humberstone 1992) and its “aim” (Velleman 2000, Wedgwood 2002).
Beliefs are not alone in being representational in the way just described. Many have argued that there is a subset of perceptual states, memory states, introspective states, and rational intuitions that form a class of states that can represent the fact that \( p \) despite failing to be states that are, constitutively, belief-that-\( p \) states.\(^\text{15}\) Yet what such states are supposed to have in common with belief is that they all represent the world as matching their content in some way. To return to the map metaphor, representational states all present themselves as partial maps of the world; they purport to be a guide to the \( p \)-related geography of the world. The key difference between beliefs and these other representational states is that our beliefs are the maps we work with.\(^\text{16}\)

We need not take a stand on the exact extent of our set of representational states. What matters for the purposes of this book is that the set of representational states not be limited to belief states, that is:

**Representational Pluralism.**

(Rough) There are representational mental states that are not belief states.

(Precise) There are representational mental states that represent the fact that \( p \) that are: neither belief-that-\( p \) states nor constituted by belief-that-\( p \) states.

In discussing Representational Pluralism it will be expressively convenient to use the rough formulation, but it is always a shorthand for the precise formulation. The need for the precise formulation is just to set aside uninteresting forms of pluralism about representational states. For example, since knowing that \( p \) is a state that constitutively involves believing that \( p \), and since believing that \( p \) is not identical to knowing that \( p \), a pluralism about representational states follows—at least if knowledge is a mental state (Williamson 2000). But this is not the robust kind of pluralism that is at issue when philosophers argue, for example, that perceptual experience can represent that \( p \) and that this representational state is not a belief-that-\( p \) state. So the relevant kind of pluralism is that expressed by (Precise).

As far as I know Representational Pluralism is an uncontroversial thesis. Where controversy exists, it typically exists over the extent and phenomenal character of specific representational states. The more expansive one’s view of the set of representational states, the more ways there will be for agents to be aware of facts without knowing them. For the purposes of this book I will assume only two broad kinds of representational states that are not belief states: seeming states and inferential representations.

\(^{15}\) For literature spanning discussions of these points see Siegel (2016) in the case perception, see Michaelian (2017: Section 5) and Bernecker (2010) in the case of memory, and see Pust (2019) in the case of intuition. Notably, the mode of representation needn’t always involve a propositional attitude. Some have thought that iconic or image-like states as well as certain imaginative states can be representational states. For more on iconic representation see Camp (2007), Burge (2018), and Quilty-Dunn (2020). For imaginative representation see Munro (2021).

\(^{16}\) Dretske (1986), Millikan (1989), Bengson (2015) and others use the term ‘representational’ as I do here. Huemer’s (2001: 53-54) term for this class of states is ‘apprehensions.’ It is worth keeping in mind that some authors, especially in the philosophy of mind, use the term ‘representational state’ to refer to any state with propositional content (cf. Fodor 1987: 17). On this more permissive use of the term hoping that \( p \) and desiring that \( p \) will count as ‘representational states.’
2.6.1 Direct Representation Without Belief: The Case of Seemings

Beliefs may be thought of as “direct” representational states in the sense that believing that \( p \) represents the world as being such that \( p \) by having \( p \) as its content. But belief is not the only kind of direct representational state. It has been widely argued that, at least for human agents with the conceptual capacities for linguistic thought, a proposition \( p \) can seem true even if one fails to believe \( p \).\(^{17}\) When a proposition \( p \) seems true one is in a state that purports to represent the world as being such that \( p \). Such seeming states are often referenced with our descriptive use of phrases like: ‘it seems as if \( p \),’ ‘\( p \) seems true,’ and ‘it appears to be the case that \( p \).’

The idea that there exist seeming states which cannot be identified with beliefs has been defended by appeal to examples where seemings and believings separate. The typically cited cases of separation involve propositions that seem true but are not believed. The Müller-Lyer lines and other cases of known visual illusions are often used to illustrate this. But consider a case of a merely suspected visual illusion. Suppose you know that I often, but not always, choose to illustrate the Müller-Lyer illusion with lines of unequal lengths. In such cases it is not really the Müller-Lyer illusion I’m using since the real illusion involves only lines of equal length. But often enough I use the real illusion with lines of equal lengths. Now consider the lines in Figure 2.6.1.1 which, for all you know upon first glance may or may not be an instance of the Müller-Lyer illusion:

![Müller-Lyer Illusion](image)

Immediately upon seeing these lines it seems true that the bottom line is longer than the top line. But you did not immediately believe it. You knew that this might be an instance of the genuine Müller-Lyer illusion, so you withheld belief. But upon closer inspection you can see that the bottom line really is longer than the top line. Measure it. If you do so you will end up with the belief that the bottom line is longer than the top line. The important lesson here is that the proposition that the bottom line is longer than the top line seemed true to you even before you believed it. So this seeming is not a believing.\(^{18}\) This judgment is further supported by the fact that upon first looking at the lines and their striking you as of unequal length you lacked a disposition


\(^{18}\) Turri (2010) uses this kind of case to illustrate the idea that one can see that \( p \) without believing that \( p \). While I agree, my point here is about seemings, not sightings.
to assert, act on, and drawn inferences to new beliefs from the claim that the bottom line is longer than the top line. If such dispositions are required for belief, you did not believe. 19

This brings us to another point. Seeming states often precede and cause beliefs in their contents. That is, in some cases of belief formation a proposition first seems true, after which a belief in that proposition is formed in response to that seeming state. Bealer (2004: 13) again gives an apt example: “until Putnam we did not even have beliefs about twin earth, but directly upon encountering the example most of us had the intuition that there would be no water on twin earth and only thereafter formed the associated belief.”

A commitment to the existence of seeming states as distinct from belief states is importantly neutral on a wide variety of metaphysical questions. Appreciating this neutrality should mitigate worries about my reliance on seemings in what follows. First, commitment to the existence of seeming states as distinct from belief states is neutral on the exact relation that seeming states bear to beliefs states. One could take a view on which seemings and beliefs are independent representational states such that each can exist without the other. Alternatively, one could take a view on which belief states are constitutively a kind of seeming state, i.e. beliefs are just seemings that have the functional profile that is characteristic of belief. On this view, seemings are token identical to beliefs, and a seeming constitutes a belief when it has the relevant functional profile. This is the view Lyons (2009) outlines when he writes:

The standard argument for distinguishing percepts from beliefs only seems compelling if we assume that being a belief or not is an intrinsic or essential property of a mental state. But the dominant philosophical theory about the nature of belief gives us no good reason to believe this. Because functional roles can come and go, the property of being a belief is not an essential property of a state. In accordance with this view, I am suggesting that a representation may be tokened and for a time have a certain causal role that makes that representation a belief token; later that representation may trade that causal role for a different one, whereupon it ceases to be a belief and becomes a mere percept. (Lyons 2009: 72-73)

While Lyons’ comments are focused on the relation between perceptual beliefs and percepts (perceptual seemings). His points may generalize to belief in general. If correct, then constituting every belief state is a seeming state.

However, against this general idea Bealer (1998: 208) writes: “belief is not a seeming...there are many mathematical theorems that I believe (because I have seen the proofs) but that do not seem to me to be true and that do not seem to me to be false.” Similar examples could be given involving beliefs formed just on the basis of testimony: I believed that Caesar crossed the Rubicon upon being told by a history instructor, but it seems neither true nor false. If correct, then either not all beliefs are constituted by seeming states or, perhaps, Bealer has a special subset of seeming states in mind when he issued this example. In which case, one could reconcile the Lyons-Bealer dispute here by claiming that while every belief is constituted by a seeming, it need not be the case that every belief is constituted by the special kind of seeming Bealer had in mind. These are issues

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19 Ranalli (2014) resists the idea that seeing that p can separate from believing that p in such cases and his arguments would, if correct, undermine the claims made here. The error in his reasoning is discussed in Chapter 4.
that are orthogonal to Representational Pluralism. For even if Bealer (or Lyons) is mistaken on this issue, both are in agreement: it is possible for a proposition to seem true even if one fails to believe it. From this alone Representational Pluralism follows.

Second, and similarly, the idea that there are seeming states distinct from belief states is neutral on the relation seeming states bear to experiences. This is important as many have resisted the idea that seemings are constitutive of certain kinds of experiences, e.g. perceptual experiences (Travis 2021). But one can hold that propositions which seem true in connection with perceptual experience are in no way a constitutive part of perceptual experience. For example, Schellenberg (2014) writes:

*Association Thesis:* Every experience can be associated with (propositional) content in the sense that sentences can be articulated that describe how the environment seems to the subject, without the content expressed being a proper part of the experience.

Any account of experience can accept the Association Thesis. After all, any account of experience can accept the fact that an experience can be (at least partially) described. But this fact does not entail that the experience has the content that is expressed with the description. Certainly, it does not entail that perceptual experience is fundamentally a matter of representing the environment as being a certain way. (Schellenberg 2014: 201-202)

The upshot of this insight is that seemings theorists needn’t take a stand on the nature of perceptual experience when talking of perceptual seemings. This point of neutrality applies generally. Just because there may be seemings almost always associated with a given state $m$, does not entail that $m$ is constitutively a kind of seeming state.

Lastly, the idea that there are seemings states distinct from belief states is neutral on whether the diverse range of seeming states (perceptual seemings, introspective seemings, intuitive seemings, memorial seemings) are better thought of as *species* of a common genus or whether they are better thought of as *determinates* of a common determinable. On a genus-species view, all seemings are of one kind of representational state and what distinguishes them is some independent factor (e.g. being tokened by different cognitive systems: the perceptual system, the memory system, etc.). On the determinable-determinate view, the class of token seeming states might be as diverse as the class of determinate colors (black, white, orange, etc.). On this view one could treat perceptual seemings and introspective seemings as fundamentally different representational states whose primary common factor is that they are seeming states with propositional content.

So we can distinguish seemings from beliefs while remaining neutral on a range of issues, and these points of neutrality serve to eliminate most objections. There are, however, two lingering concerns with seemings to mention. First, there are those who would object to the thesis that seemings are *sui generis.* Second, there are those who object to the idea that whatever seemings are, they are not foundational sources of objective justification. The core theses of this book are neutral on the first issue; all that matters is that seemings are representational states that are not

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20 For example, those who think that seemings are inclinations to believe, e.g. Sosa (2007), Williamson (2007), Earlenbaugh and Molyneux (2009), and Taylor (2015).

21 See Tucker (2013) and McAllister (2018) discussion of these issues.
identical to beliefs. If seemings can be reduced to something else (inclinations to believe, high
credence, high conditional credence) while remaining representational states distinct from belief,
that will be enough. In regard to the second objection, I agree. Seemings are not foundational
sources of objective justification. Rather, it is the facts that we possess that are our foundational
sources of objective justification.

2.6.2 Indirect Representation Without Belief: Inferential
Representations
Beliefs and seemings are direct representational states in the sense that a belief that \( p \) and a seeming
that \( p \) represent the world as being such that \( p \) by having \( p \) as content. But this is not the only way
for an agent to be in a state that represents the world as being such that \( p \). Under suitable
conditions, one kind of condition can represent a variety of other distinct conditions. Gas gauges
represent facts about fuel levels, thermometers represent facts about temperatures, mental images
as of red cars can represent facts about red cars, and so on.\(^{22}\) Here we have “indirect”
representations. For our purposes, we’ll rely on a special case where indirect representations occur
in agents with inferential capacities who recognize the logical implications of their existing beliefs.\(^{23}\)

To warm up to this idea notice that if \( q \) entails \( p \), then the proposition \( q \) itself can be said to
indirectly represent \( p \) since \( q \) rules out all the \( \neg p \) possibilities. We might call this “propositional
representation.” But propositional representation can be of limited epistemic significance. For the
entailment between \( q \) and \( p \) might be so wildly complicated that you could not possibly appreciate
it. Indeed, since entailment is a relation among propositions and the entailment relation has no
categorical requirements, \( q \) might entail \( p \) even though \( p \) is beyond your understanding because
you lack the concepts required to entertain the thought that \( p \).

So consider a different type of case of propositional representation. Take a case where \( q \)
entails \( p \), you believe \( q \), and the following obtain: (i) you have the ability to recognize the entailment
between \( q \) and \( p \), and (ii) you also believe and come to know that \( q \) entails \( p \) from an exercise of that
ability. In such a case there is a clear sense in which you are indirectly representing the world as
being such that \( p \). For part of what it means to believe that \( q \) entails \( p \) is to believe that the world is
structured in such a way that there is no possible circumstance in which \( p \) is false when \( q \) is true.
Crucially, this indirect representation of \( p \) can exist even if you fail to believe \( p \).

How might one fail to believe \( p \) while believing \( q \) and believing that \( q \) entails \( p \)? In ordinary
cases, this happens whenever one consciously draws a new deductive inference to \( p \) from \( q \), and
then forms a new belief in \( p \) on that basis. Since the belief is new and based on a prior indirect
representation of \( p \), one hosted an indirect representation of \( p \) without believing \( p \). In other cases
one may fail to believe \( p \) upon recognizing that it is a deductive consequence of \( q \) because \( p \) is a very
surprising claim, or perhaps because \( p \) is a claim that one has some reason to doubt, or perhaps
because one has reason to doubt their inferential abilities in the moment due to fatigue, hypoxia, or
something else. The causes that explain why one does not believe \( p \) in such circumstances are highly
contingent and we can imagine others.

We can provide an analogy of indirect representation in visual cases. Consider pictures. Pictures
can provide us with a kind of visual (perhaps non-propositional) representation of the

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\(^{22}\) Millikan (1989), Dretske (1986), Huemer (2001), Camp (2007), Burge (2018), and Guity-Dunn
(2020).

\(^{23}\) See Huemer (2001: 55-57) and Silva (2021b).
world. Suppose you knew that some photograph \( P \) was a photograph of a photograph of the Mona Lisa. Arguably knowing that \( P \) is a photograph of a photograph of the Mona Lisa ensures that \( P \) visually represents the Mona Lisa to you despite not directly being a photograph of the Mona Lisa. The extent to which this second photograph, \( P \), represents the Mona Lisa will thus be a less direct sort of visual representation.

The importance of indirect representation will become apparent when we consider cases of inferential awareness in the following chapter. For now, note that Representational Pluralism is entailed by the existence of seeming states (as characterized above) as well as the existence of indirect representational states. Both kinds of representational states will play a role in what follows.
Chapter 3: Knowledge, Awareness, and Ordinary Language

3.1 Introduction

Once again, a core thesis of this book is that knowledge is but one type of a more general epistemic kind, as indicated by:

**The Generality of Awareness.** Factual awareness is a genus of which knowledge is but one species.

An alternative view of the relation between factual awareness and knowledge involves taking knowledge as the more general state and treating factual awareness as but one species of knowledge:

**The Generality of Knowledge.** Knowledge is a genus of which factual awareness is but one species.24

For another alternative, we could take knowledge and factual awareness to be identical states:

**The Identity View.** Factual awareness just is knowledge.

The observation to appreciate for the moment is that both alternatives to the Generality of Awareness imply that being aware of the fact that \( p \) entails knowing that \( p \):

\[(A \rightarrow K) \text{ Necessarily, } S \text{ is aware of the fact that } p \text{ only if } S \text{ knows that } p.\]

If \((A \rightarrow K)\) is true, then the Generality of Awareness is false. Conversely, if \((A \rightarrow K)\) is false then the Generality of Knowledge and the Identity View are false.

This chapter examines the connection between knowledge and factual awareness in ordinary usage and whether it supports \((A \rightarrow K)\). As it turns out, linguistic considerations are insufficient to establish it. Chapter 4 will then draw attention to a wide range of non-inferential and inferential counterexamples to \((A \rightarrow K)\). Once we have seen how and why \((A \rightarrow K)\) fails we will be in position to see how and why knowledge is but one species of factual awareness.

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24 We could add a pair of theses that substitute the genus-species claim with a determinable-determinate claim instead. I set this subtlety aside. In refuting the idea that factual awareness entails knowledge in Chapter 4, I refute both ways of formulating the Generality of Knowledge. In Chapter 5 I defend the genus-species claim made by the Generality of Awareness.
3.2 ‘Awareness’ in Ordinary Language

To repeat the introduction of this book: the expression ‘aware of the fact that’ is a commonplace, not at all a philosopher’s term of art. We often criticize each other in terms of awareness: “You were aware of the fact that it was wrong, but you did it anyway!” We sometimes seek to excuse ourselves from wrongdoing in terms of awareness: “I’m sorry, I wasn’t aware of the fact that you would be hurt by my action.” We admonish each other in terms of awareness: “You should be aware of the fact that you can easily offend Germans by making casual jokes about their soccer.” Were we to suspect a person of being ignorant of an important detail we might naturally seek to inform them of both their ignorance and the important detail with a question about awareness: “Are you aware of the fact that the borders have been closed?” These are not oblique expressions that call out for artful interpretation. When these expressions are used for the purposes of criticizing, excusing, admonishing, and informing they are meant to be understood straightforwardly in terms of sentence-meaning. Such uses presuppose the existence of a state of awareness that one can be in or fail to be in with regard to some fact. Here lies the phenomenon of factual awareness.

While these acts of criticizing, excusing, admonishing, and informing imply that ‘awareness’ is being used in a broadly epistemic sense, it is not the only sense the term takes. Dretske (1993) and later Huemer (2001) observed that awareness-talk need not be taken to refer to epistemically significant mental states at all. There is a sense of ‘aware’ that functions like ‘conscious’ such that to be in any occurrent mental state is to be aware or conscious. When ‘aware’ is used in this way awareness is, or can be, attributed to a subject without directly indicating any further object of which the subject is said to be aware.

Epistemically significant ascriptions involving the term ‘awareness’ arise when the referenced state of awareness involves an object. Syntactically, such claims take at least the following forms, where ‘S’ is an agent, ‘x’ a particular or an event, and ‘F’ and ‘G’ are predicates:

A. S is aware of x.
   ○ I’m aware of the computer.
   ○ She is aware of Fred.
B. S is aware of the [a] G that is F.
   ○ I’m aware of the cat that is sitting on a mat.
   ○ She is aware of a ball that is red.
C. S is aware of x’s F-ing [/being F].
   ○ I’m aware of Garfield sitting on the mat.
   ○ She is aware of the cat sitting on the mat.
D. S is aware of the [a] G’s F-ing [/being F].
   ○ I’m aware of the cat sitting on a mat.
   ○ She is aware of a guy named ‘Toby’ kicking the ball.

Instances of A-D are what Dretske (1993) called awareness of things and we’ll say a bit more about this shortly. Dretske contrasted awareness of things with the following:

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25 Though to my ears the sentence ‘S is aware’ sounds mildly infelicitous, implicitly demanding an answer to the question: aware of what? In contrast, the sentence ‘S is conscious’ sounds completely fine.
E. S is aware of the fact that p.
   ○ I’m aware of the fact that I’m hungry.
   ○ She is aware of the fact that 2+2=4.

F. S is aware that p.
   ○ I’m aware that I’m hungry.
   ○ She is aware that 2+2=4.

E and F are what Dretske (1993) called awareness of facts and he took them to be (or at least treated them as) semantically equivalent expressions. Dretske is not alone in this. Littlejohn (2015: 598), for example, explicitly identifies them: “There is no difference between being aware of the fact that oil prices are slumping and being aware that oil prices are slumping.” This idea that ‘aware that’ is a semantically equivalent contraction of the expression ‘aware of the fact that’ becomes increasingly compelling as one reflects on various concrete uses of these two expressions. We will assume this is correct in what follows.

Were the term ‘awareness’ in A-F replaced with the term ‘conscious’, meaningful sentences would result. However, identifying the expression ‘S is aware of the fact that p’ with ‘S is conscious of the fact that p’ is ill- advised as the latter has connections to attention that are to be avoided in what follows. One can be aware of facts without attending to them. Since I memorized my multiplication table I am now aware of the fact that the product of 5 and 5 is 25. But I was aware of that fact even before I drew my attention to that question moments ago. Thus, it is a fact that I was aware of but not one that I was directing any attention towards. Similarly, even before you consider the following claim you remembered: that you were (not) home last night. It is a fact that you were aware of even before directing your attention to it. In this way being aware of the fact that p should be distinguished from attending to or what seems equivalent, consciously attending to the fact that p.

The fact that our concept of factual awareness is an ordinary and non-technical concept that we are familiar with and skilled at correctly applying is not without significance. For just as our familiarity with the concept of knowledge puts us in a good position to reflectively assess a range of hypotheses about the nature of knowledge without first having an explicit theory of knowledge, our familiarity with the concept of factual awareness puts us in a good position to reflectively assess hypotheses about factual awareness without first having an explicit theory of factual awareness.

3.3 Awareness of Facts vs. Awareness of Things

Dretske (1993) argued that the relation of awareness found in instances of A-D is crucially different from the relation of awareness found in instances of E and F:

By contrasting our awareness of things (x) with our awareness of facts (that P) I mean to be distinguishing particular (spatial) objects and (temporal) events on the one hand from facts involving these things on the other. Clyde (a physical object), his piano (another object), and Clyde’s playing his piano (an event) are all things as I am using the word “thing”; that he is playing his piano is a fact. Things are neither true nor false though, in the case of events, states of affairs, and conditions, we sometimes speak of them as what makes a statement true. Facts are what we express in making true statements about things. We describe our awareness of facts by using a factive complement, a that-clause, after the verb;
we describe our awareness of things by using a (concrete) noun or noun phrase as direct object of the verb. We are aware of Clyde, his piano, and of Clyde’s playing his piano (things); we are also aware that he is playing the piano (a fact). (Dretske 1993: 264)

These two awareness relations correspond to Dretske’s (1969, 1979) two senses of seeing: simple seeing (e.g. seeing the nearby cat) and epistemic seeing (e.g. seeing that the cat is nearby by looking at it). The primary difference between these forms of seeing and these forms of awareness is that awareness is an amodal relation, i.e. a relation that is silent about how or the way in which one came into contact with a given fact or thing. In contrast, seeing a particular object and seeing-that are typically not silent on this issue. Thing-seeing always implicates sight as the means by which one made contact with the thing, while fact-seeing often implicates sight.²⁶

Can one be aware of Clyde playing the piano without being aware of the fact that he is doing so? Yes. If one lacks the concept PIANO one cannot become aware of the fact that Clyde is playing the piano because factual awareness requires the use of relevant concepts. Again, Dretske writes:

If S is aware that x is F, then S has the concept F and uses (applies) it in his awareness of x. If a person smells that the toast is burning, thus becoming aware that the toast is burning, this person applies the concept burning (perhaps also the concept toast) to what he smells. One cannot be conscious that the toast is burning unless one understands what toast is and what it means to burn—unless, that is, one has the concepts needed to classify objects and events in this way. (Dretske 1993: 265)²⁷

But there is more to factual awareness than being aware of a thing and applying one’s concepts to the things of which one is aware.

Suppose one took Clyde to be typing on a large computer when Clyde was in fact playing a piano. This kind of wild misrepresentation obstructs one from being aware of the fact that Clyde is playing a piano. Suppose, for another example, one took Clyde to be playing the piano on the basis of the piano music one was hearing, but the music one was hearing was from a radio and not from Clyde. In this case one will have deployed the relevant concepts needed for being aware of the fact that Clyde is playing the piano, but one will have failed to have become aware of that fact due to the accidental correctness of one’s application of their concepts. More dramatically, hallucinating Clyde playing the piano is not a way of becoming aware of the fact that Clyde is playing the piano even if one’s hallucination is veridical. All of this indicates that factual awareness requires that one’s conceptual representation of a fact be not only correct, but suitably non-accidental (Dretske 1993: 269-70; Huemer 2001:54ff; Littlejohn 2015).

What we have seen is that the awareness of facts and the awareness of things are, while distinct, closely related. First, both are world-implicating in the sense that being aware of an x implies the existence of x, and being aware of the fact that p implies the truth of p. Second, both kinds of awareness involve some non-accidental connection to the world: we cannot become aware of facts or objects in the world through utterly unreliable processes. Lastly, both imply an epistemic

²⁶ Fact-seeing does not always implicate sight because there is a purely epistemic use of ‘sees that p’ that does not do this. We’ll return to this in Chapter 4.
²⁷ See Littlejohn (2015: 599) for related remarks.
relation to the world has been achieved in so far as both ensure that an aspect of the world has been non-accidentally brought into view.28

While there is much to be said about the awareness of things, this book is not about that. This book is about the awareness of facts and its relation to knowledge.

3.4 Awareness of Facts = Knowledge of Facts?

What then is the relation between the awareness of facts and knowledge of facts? A partial answer to this question is self-evident: knowing that \( p \) ensures awareness of the fact that \( p \). That is:

\[(K \rightarrow A) \text{ Necessarily, } S \text{ knows that } p \text{ only if } S \text{ is aware of the fact that } p.\]

Most who have theorized about the relation between knowledge and factual awareness have found no reason to seriously consider its failure.29

Denials of \( (K \rightarrow A) \) are quite clearly infelicitous:

# I know that a piano is nearby, but I’m not aware of the fact that a piano is nearby.

## She knows that a piano is nearby, but she’s not aware of the fact that a piano is nearby.

These have the sinister sound of self-contradictory statements. The Identity View and the Generality of Awareness both predict this infelicity since each entails \( (K \rightarrow A) \). The Identity View entails \( (K \rightarrow A) \) given Leibniz’s Law, while the Generality of Awareness entails \( (K \rightarrow A) \) because the properties that define a genus are also properties that partially define each of its species.

In contrast, the Generality of Knowledge does not simply fail to entail \( (K \rightarrow A) \), it entails the denial of \( (K \rightarrow A) \). For the Generality of Knowledge indicates that one can know that \( p \) without being aware of the fact that \( p \) since it says that factual awareness is but one species of knowledge. The failure to uphold \( (K \rightarrow A) \) is a decisive objection to the Generality of Knowledge.30

The Identity View and the Generality of Awareness remain options, and the argument for the Identity View is nontrivial. First, as we’ve seen, it can explain \( (K \rightarrow A) \). Second, knowledge and factual awareness have much in common. For on virtually all accounts, knowledge is like factual awareness in being a non-accidental, epistemic, world-implicating relation. Additionally, both factual awareness and knowledge involve the exercise of our conceptual capacities. To know that a piano is nearby one must have and apply the concepts PIANO, IS, and NEARBY. Further,

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28 Though the specific sense of ‘being brought into view’ may well differ in the two cases. So the present claim here should be construed rather generically, indicating only that non-accidental mental contact with the world has in some way been achieved.

29 Dretske (1993), Huemer (2001), Littlejohn (2015), and Silva (2019). Nagel (2017) might be an exception, see the citation below.

30 One could, perhaps, modify the Generality of Knowledge so that every case of knowing is a case of factual awareness even though the two are distinct and awareness is a species of knowledge. If so, there must be some property that distinguishes these two states that is consistent with factual awareness being a species of knowledge. But no such difference-making properties are forthcoming, and the search for such a difference-maker is futile if the arguments made against \( (A \rightarrow K) \) in Chapter 4 stand.
knowledge is like factual awareness in being an amodal epistemic relation, i.e.
both are epistemic relations that are silent about the way in which one
came to know. When one wants to convey information about how one
came to know one must add qualifications: ‘S has perceptual
knowledge that p’, ‘S has introspective knowledge that p’, and so forth.
The same goes for factual awareness: ‘S is visually aware of the fact that p’, ‘S
is introspectively aware of the fact that p’, and so forth.

These considerations may seem to support the Identity View over the
Generality of Awareness. But they do not. The Generality of Awareness
also entails (K→A). For if knowledge is a
species of factual awareness, then every time an agent satisfies the conditions
needed for instantiating the species knowledge one also satisfies the conditions
needed for instantiating its genus factual awareness. The Generality of
Awareness can also explain the same overlap in properties between knowledge
and factual awareness. For every species has the properties that are
characteristic of its genus, and it would be absurd to identify a genus with its
species for that reason. Piano has all the characteristics that define the
genus stringed musical instrument. But we
cannot identify piano with stringed musical instrument.

An effective way to decide between the Identity View and the Generality
of Awareness is to assess the converse of (K→A):

\[(A→K)\] Necessarily, S is aware of the fact that p only if S knows that p.

If \((A→K)\) is true then the Generality of Awareness is false because the
Generality of Awareness says that knowledge is but one form of factual
awareness. Moreover, if \((A→K)\) is true then, in
conjunction with \((K→A)\), we get the necessary coextension of knowledge
and factual awareness. Together with the overlap in properties between
knowledge and factual awareness this would provide us with an excellent
argument for the Identity View. Conversely, if \((A→K)\) is false then the
Identity View cannot be true and we can begin to make the argument for the
Generality of Awareness.

So what should we think of \((A→K)\)? In the special case of perceptual factual
awareness (=seeing that p by looking), Dretske took its entailment of knowledge
to be the received view in epistemology:

It is conventional in epistemology to assume that when perceptual
verbs take factive nominals as complements, what is being described is not
just belief but knowledge. Seeing or smelling that the toast is
burning is a way of coming to know (or, at least, verifying the
knowledge) that the toast is burning. (Dretske 1993: 266)\(^{31}\)

Dretske didn’t seem to limit this to the special case of perceptual awareness,
but seemed to hold this of factual awareness in general. Along similar lines,
Jennifer Nagel writes:

Among factive mental states, knowledge seems to have a special status:
Williamson has influentially argued that it is distinguished as the most
general member of this class, and

\(^{31}\) The point of Dretske’s parenthetical ‘or, at least, verifying the
knowledge’ is to indicate that one
might have already had knowledge of the fact that the toast is
burning. In which case, seeing that its
burning is mere confirmation of that knowledge.
Indeed that it is entailed by all other members of the class. In this view, other factive mental states like seeing that \( p \) or being aware that \( q \) are simply more specific ways of knowing; these various factive mental states may differ from each other, so that, for example, perceiving that \( p \) does not necessarily entail being happy that \( p \), but every factive mental state entails knowing... (Nagel 2017: 530)

Relatedly, Unger (1972) writes that:

...it is natural to put forth boldly, at least to examine, the entirely general hypothesis:

Any sentence of the form ‘S-verbs-(that)-p’, where the verb entails its completing clause, is a sentence where the verb entails as much as the corresponding simple knowledge sentence.


‘Is aware that’ and ‘is aware of the fact that’ don’t make Unger’s list. They are also not verbs, but adjectives. Even so, anyone inclined to endorse the claim that all the cited factive verbs are knowledge-entailing would likely be inclined to lump factual awareness into a more general set of knowledge-entailing factives. It is not hard to transform an active sentence with a factive verb into a passive sentence with a factive adjective. We can exchange the expression ‘S knows (/recognizes, /notices, /remembers) that \( p \)’ with the expression ‘the fact that \( p \) is known (/recognized, /noticed, /remembered) by S’.

Endorsements are one thing, evidence is another. What evidence supports \((A\rightarrow K)\)? It is here that ordinary language seems to have something to say. The most obvious observation to make is that denials of the following sound infelicitous when \( \Phi \) is substituted with awareness or any of the factive stative attitudes Unger noted above:

\[(\Phi \rightarrow K) \text{ If } S \Phi s [/is \Phi] \text{ then } S \text{ knows that } p.\]

The apparent semantic infelicity of denying instances of \((\Phi \rightarrow K)\) is what undergirds the idea that factive attitudes are knowledge-entailing. So consider someone claiming:

? I am aware of the fact that a piano is nearby, but I don’t know it.

?? She is aware of the fact that a piano is nearby, but she doesn’t know it.

Admittedly, these sound odd and we can explain why these sound odd with \((A\rightarrow K)\).

The second observation is that usual patterns of knowledge-affirmation and awareness-denial seem to presuppose \((A\rightarrow K)\):

\[32\] Unger goes on to refine his conjecture, but this is to accommodate factive verbs like ‘forgets’, which entail the absence of knowledge.
(a) If asked “Did you know that a dog was barking?” one very natural way to affirm that you do know is to respond by affirming that you are aware: “I was aware that a dog was barking.”

(b) If asked “Were you aware that a dog was barking?” one very natural way to deny awareness is to deny knowledge: “I did not know that a dog was barking.”

The conversational upshot in (a) is to indicate that you know $p$ since you are aware of the fact that $p$, which is an instance of $(A \rightarrow K)$. And the conversational upshot in (b) is to indicate that you are not aware of the fact that $p$ since you don’t know it; the contrapositive of which is an instance of $(A \rightarrow K)$. Accordingly, $(A \rightarrow K)$ can explain why these patterns of affirmation and denial seem so intuitive.

### 3.5 Against the Ordinary Language Argument for $(A \rightarrow K)$

Admittedly, denials of $(A \rightarrow K)$ sound odd in the abstract. However, they sound decidedly less odd when paired with concrete cases where $(A \rightarrow K)$ clearly fails. Developing and defending such concrete cases is the project of Chapter 4. For now, let us consider whether advocates of the Generality of Awareness have any explanation for why it is that denials of $(A \rightarrow K)$ can sound so odd in the abstract, and why Dretske and others may have been so tempted to endorse it.

$(A \rightarrow K)$ is a universal generalization that relates factual awareness to knowledge. It tells us that every possible case of factual awareness is a case of knowledge. But there are generalizations that relate factual awareness to knowledge that are not universal generalizations. Some of these involve weaker forms of quantification: most, many, some, some proportion. But there is another kind of generalization without these forms of quantification: generic generalizations. Take, for example, a generic generalization that connects birds and flying: birds fly. This is not a disguised way of saying that all birds fly, or that most birds fly, or that many birds fly, or that 89% of birds fly. It just says that birds fly. And the truth of this generic is consistent with a very wide range of cases in which birds fail to fly (injured birds, very young birds, penguins). Similarly, generics such as dogs bark, mature female ducks lay eggs, and squirrels have longer tails than chipmunks are all true generics even though there are plenty of counter-instances to these claims. The fact that generic generalizations can be true despite the existence of many counter-instances is a surprising, but widely recognized, phenomenon in both linguistics and the philosophy of language (Leslie and Lerner 2016).

The general point to observe is that under certain conditions we can hear claims of the existence of counterinstances to generics as infelicitous when they are not. Specifically, this happens when counter-instances to a generic are surprising. The relevant notion of ‘surprise’ is connected to explanation: a condition is surprising when its obtaining requires some additional explanation. For example, that a flipped fair coin lands heads is unsurprising as we need no additional explanation for that fact. But suppose we learned that the flipped fair coin remained in midair, never falling. That is surprising. It is something that requires some additional explanation: that it was flipped in
outer space, that it is being suspended by a carefully placed fan, and so forth (Smith 2010; 2016; 2018). Now consider the generic: mature female ducks lay eggs. Learning that a particular mature female duck doesn’t lay eggs is surprising and requires some additional explanation. Its failure to produce eggs would surprise you and you’d expect there to be some explanation: it is infertile, it was killed before mating, it is isolated and lacked the opportunity to mate, and so forth.

Against an evidential background that supports a generic generalization to the effect that $Fs$ are $G$ where counter-instances are surprising, it will sound odd to claim that some particular $F$ is not $G$. Take the generic mature female ducks lay eggs. This is true. But now consider a counter-instance. Suppose I were to hold a mature female duck up to you and say:

$$
??? \text{Mature female ducks lay eggs, but this one doesn’t.}
$$

This would sound odd. Indeed, it sounds as odd as ? and ?? above.

Notice how this can explain patterns of affirmation and denial like the following:

(a) If asked “Does this duck lay eggs?” a natural way to affirm that it does lay eggs is to respond by affirming that it is a mature female duck: “This is a female duck.”

(b) If asked “Is this a mature female duck?” a natural way to deny that it is a mature female duck is to deny that it lays eggs: “It doesn’t lay eggs.”

But the naturalness of these patterns of affirmation and denial does not require the assumption that all mature female ducks lay eggs. It is enough that the generic mature female ducks lay eggs is true, or at least a shared part of the conversational background, and that counter-instances are surprising.

Now take the generic: agents who are aware of facts also know them. Counter-instances to this sound odd and call out for explanation. If someone is aware of the fact that Clyde is playing a piano but fails to know it, that is something that is striking and calls out for further explanation. Explanations will emerge below as we examine concrete cases that provide counterexamples to ($A \rightarrow K$): the failure to believe what one is aware of, environmental luck, self-defeating beliefs, misleading undercutting evidence, and temporal constraints on doxastic updates. For now the main point to observe is that the patterns of affirmation and denial that seemed to support ($A \rightarrow K$) are underdetermined. Without further explanation, the linguistic evidence does not decisively favor ($A \rightarrow K$) and thus does not give the Identity View an edge over the Generality of Awareness.
Chapter 4: Awareness Without Knowledge

4.1 Introduction

Two plausible views about the relation between knowledge and factual awareness have been isolated. One view identifies knowledge and factual awareness (the Identity View), the other view treats factual awareness as a more general kind of which knowledge is but one instance (the Generality of Awareness). Which of these two views is correct turns on the question of whether or not factual awareness entails knowledge, i.e. (A→K). This chapter defends a diverse range of inferential and non-inferential cases which collectively establish the following thesis:

**The Extension of Awareness.** It is possible for S to be aware of the fact that p even if: S does not believe that p, or S lacks justification (=sufficient reasons) to believe that p, or S is beset by environmental luck.

Since knowledge requires justified belief in the absence of environmental luck, the upshot of this chapter will be a diverse set of cases where factual awareness separates from knowledge. This will undermine both (A→K) and the Identity View as well as give us all the reason we need to pursue an awareness-first epistemology in later chapters.

It will, of course, occur to some readers to defend the Identity View by arguing that knowledge does not require belief, or justification, or the absence of environmental luck. But as we have seen in Chapter 2, the rejection of the belief requirement on knowledge is severely undermotivated. The justification requirement on knowledge will be defended against its most significant objection in Chapter 7, while the claim that knowledge requires the absence of environmental luck will be defended against its most pressing objection in Chapter 9.

4.2 The Non-Inferential Case Against (A→K)

Our primary focus in the next few sections will be on seeing that p and the way it separates from knowing that p. The reason for this is that there already exists a rich literature exploring the following thesis:

**Propositional Seeing Entails Knowing (S→K).** Necessarily, if S sees that p then S knows that p.

Visual awareness of the fact that p refers to seeing that p in the target sense involved in (S→K). Accordingly, counterexamples to (S→K) will be counterexamples to (A→K). While the focus of what follows will be on seeing that p, there will be discussion of related issues involving remembering that p and its being self-evident to one that p.
4.2.1 Against the Semantic Argument

It is widely recognized that ‘see’ is an extremely polysemous verb. This raises an interpretive question when it comes to assessing (S→K): what sense of ‘see’ is at issue in this thesis? French (2012; 2013) argues that once we disambiguate polysemous uses of ‘see’ we will find ourselves with an argument that supports (S→K). If correct, this would support (A→K). In what follows we will see just where French’s argument goes wrong.

French (2012; 2013) has us first consider three distinct uses of the term ‘see’ by having us reflect on pairs of claims like the following:

(1) I can see Jane on the balcony.
(2) I saw her walking down the street.

(3) I can see that Jane’s argument is valid.
(4) Jane saw that Peter was right.

(5) Jane saw through the window that Peter had crossed safely.
(6) Given the look on her face, Jane can see that she was angry.

Each are felicitous uses of the term ‘see’ in English and it takes only a moment to notice that each pair of sentences refers to different relations with the term ‘see’.

(1) and (2) relate an agent to a particular object or event. They are instances of “simple seeing” or “visual awareness of things” in Dretske’s terminology. Their truth only requires that an agent stand in good visual contact with the particular thing that they see.

In contrast, (3) and (4) relate an agent to a proposition and their truth does not require simple seeing. (3) and (4) involve a purely epistemic use of the term ‘see’; it is a seeing relation that even a blind person could stand in towards a proposition. Alm-Arvius (1993) claims that in cases like (3) and (4) ‘see’ functions as “a near synonym of understand, realize or grasp.” Gisborne (2010) and French (2012, 2013) both affirm this and point out that the use of the term ‘see’ at play in these purely epistemic cases can be successfully replaced without loss or change in meaning with purely epistemic terms like ‘understands that’ and ‘realizes that’:

(3*) I understand that Jane’s argument is valid.
(4*) Jane realized that Peter was right.

In contrast, (5) and (6) do require that an agent stand in a visual relation to a particular object or event. (5) cannot be true unless Jane sees Peter, and (6) cannot be true unless Jane sees the angry person. But (5) and (6) require more. They require that an agent stand in an epistemic relation to the propositions referenced in their that-clauses and that the agent stands in that epistemic relation in virtue of the visual relation they stand in to the target particulars. In this way, uses of the term ‘see’ in (5) and (6) are hybrid uses: they are uses whose truth requires that an agent stand in both a normal visual relation of the sort implicated in (1) and (2) as well as the kind of epistemic relation implicated in (3) and (4).

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Thus, French (2012; cf. 2013: 1745-48) claims that we can paraphrase claims like (5) and (6) in something like the following manner:

(5*) Having seen Peter through the window, Jane realized that he had crossed safely.
(6*) Having seen the look on her face, Jane understood that she was angry.

French (2013) argues that the aptness of such paraphrases lends strong support to (S→K):

...sentences of the form ‘S sees that p’, where ‘see’ has the epistemic perceptual sense, represent their subjects as knowledgeable—that is, as either knowing that p, or as being in a state, such as noticing that p, realizing that p, understanding that p, recognizing that p, and so on, which entails knowledge that p. (French 2013: 1744)

Take the following factive stative attitudes: noticing that, realizing that, understanding that, and recognizing that. French’s conjecture is that, whatever their differences, these attitudes are all knowledge-entailing attitudes. You cannot host any such attitude with respect to p unless you know that p. If French is right about this, (S→K) follows. (S→K) does not entail (A→K), owing to the fact that there are more ways to be aware of facts than by seeing them. Nevertheless, the success of (S→K) would provide non-trivial support for (A→K) by showing that visual factual awareness entails knowledge, and thus that the Identity Thesis cannot be refuted by cases of visual factual awareness.

Unsurprisingly, French’s defense of (S→K) is unconvincing in the present context. First, the claim that factive stative attitudes like noticing, realizing, understanding, and recognizing are all knowledge-entailing attitudes is an unargued assumption. French provides no substantive argument for it. Second, there is reason to resist it in the case of understanding that p. Many have objected that understanding that p is not knowledge-entailing on the grounds that knowledge-compromising environmental luck (e.g. fake barn cases) need not compromise understanding.\(^{34}\)

But the most important limitation of French’s semantic defense of (S→K) is that it is dialectically ineffective. It relies on the assumption that all factive stative attitudes, including factual awareness, are knowledge-entailing attitudes. So it assumes (A→K) is true. Only on this assumption do we arrive at the conclusion that there is no way to understand pure epistemic uses of ‘sees that p’ and hybrid epistemic uses of ‘sees that p’ without implicating knowledge that p. But once it is an open question whether factual awareness entails knowledge it becomes an open question whether there is a way of understanding these uses of ‘sees that p’ that are not knowledge-entailing. So we can and should set French’s semantic argument for (S→K) to the side.

4.2.2 In Defense of Beliefless Awareness

French drew our attention to two distinct uses of ‘sees that p’, purely epistemic uses and hybrid uses. The intended reading of (S→K) involves the hybrid use because it is this reading that is associated with the concept of visual factual awareness and because it is this reading that has been the intended interpretation in the literature assessing (S→K).

\(^{34}\) Zagzebski (2001), Kvanvig (2003), Hills (2016), and Pritchard (2010).
Let’s start with the question of whether or not seeing that \( p \) requires believing that \( p \). That is:

**Propositional Seeing Entails Belief (S→B).** Necessarily, if \( S \) sees that \( p \) then \( S \) believes that \( p \).

Without \((S→B)\) we cannot have \((S→K)\).

McDowell (2002) nicely articulates the attraction of rejecting \((S→B)\):

Stroud thinks some of what I say about [perceptual] impressions suggests that I do not think they can be, at their best, simply cases of perceiving, for instance seeing, that things are objectively thus and so...Stroud says: ‘A person who sees that it is raining judges or believes or otherwise puts it forward as true that it is raining.’ I think that is simply wrong about a perfectly intelligible notion of seeing that something is the case. And this other notion is the right one for my purposes.

Certainly one will not say one sees that \( p \) unless one accepts that \( p \). But one can see that \( p \) without being willing to say one does. Consider a person who thinks her visual experience does not put her in a position to say how things are in some respect. But she later realizes she was wrong about that, and says something on these lines:

I thought I was looking at the tie under one of those lights that make it impossible to tell what color things are, so I thought it merely looked green to me, but I now realize that I was seeing it to be green.

According to this quite intelligible remark, it was true at the relevant past time that she was seeing the tie to be green, but at that time she did not in any way put it forward as true that the tie was green. (McDowell 2002: 277-78)

There are two basic points here. First, we muddle our assessment of \((S→B)\) by conflating the question of whether it is possible for one to see that \( p \) while not believing that \( p \), with the distinct question of whether one can rationally believe that they see that \( p \) while not believing that \( p \). After all, seeing that \( p \) is an obviously factive relation: if you see that \( p \), then \( p \) is true. So if one believes that they see that \( p \) then it would typically be irrational to withhold belief. Arguably, rational thinkers will not typically find themselves in a situation where they take themselves to see that \( p \) but withhold belief that \( p \). So there is a kind of confusion brought on when we assess \((S→B)\) by looking at cases involving first-person present tense assessments.

Once we’ve turned our attention to past-tense assessments McDowell’s second basic point comes into view: it is intelligible to claim that someone can see that \( p \) without believing that \( p \) in cases of misleading information, and the intelligibility of this is further revealed by reactive

\[35\] Though cases of self-defeating beliefs will provide a kind of case where it is intelligible to presently regard oneself as being aware of a fact while not believing it.
retrospective judgements. Pritchard (2012b) makes this same observation in regard to the same sorts of cases described by McDowell, though he refers us to barns rather than green ties:

Suppose, for example, that one is in a situation in which one is genuinely visually presented with a barn and circumstances are in fact epistemically good (there’s no deception in play, one’s faculties are functioning correctly, and so on). But now suppose further that one has been told, by an otherwise reliable informant, that one is presently being deceived (that one is in barn façade county, say), even though this is in fact not the case. Clearly, in such a case one ought not to believe the target proposition, and hence one cannot possibly know this proposition either.

... suppose that one were to discover subsequently that the testimony one received was false, but that everything else one knows about the circumstances in which one was presented with this (apparent) barn remained the same. Wouldn’t one now retrospectively treat oneself as having earlier seen that there was a barn? Think, for example, about how one would describe one’s situation in this regard were one to be asked about it. Wouldn’t it be most natural to say that one did see that there was a barn in the field, rather than to ‘hedge’ one’s assertion by saying, for example, that one merely thought that one saw a barn? (Pritchard 2012b: 26)

There is real weight behind the thesis that we can intelligibly describe others as seeing that \(p\) while not believing that \(p\) and that we can intelligibly describe ourselves in the same way in retrospect.

However, the examples used to make these points can be improved on. For the kind of examples that McDowell (2002) and Pritchard (2012b) rely upon are ones where the agent is naturally interpreted as being convinced by the misleading evidence so that they believe that \(\neg p\). This is also a part of the cases used by Turri (2010) to make the same point against \((S\rightarrow B)\).

This is where intuitive resistance to their cases manifests. *Pace* McDowell, Pritchard, and Turri we must acknowledge that there is something odd about ascribing a belief that \(\neg p\) to an agent who sees that \(p\). We hear echoes of it in claims to the effect that:

Bob sees that Kat is home, but he believes she is not home.

This sounds about as bad as ascriptions of contradictory beliefs:

Bob believes that Kat is home, and he believes she is not home.

But we have to be careful about what ‘sounds’ we are tracking in these claims. It is not always easy to distinguish intuitions that track normative violations from intuitions that track semantic violations. It is the latter that are relevant for assessing \((S\rightarrow B)\).

Fortunately, we can push past this issue. We need only construct a case where there is no normative failing (or at most a non-egregious normative failing) and examine whether it still sounds deeply odd to claim that one sees that \(p\) while not believing that \(p\). Here is one such case:

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36 McDowell’s views have evolved and he has since appeared to distance himself from the claim made here. See, for instance, McDowell (2008). For an exposition of McDowell’s views across his many papers see Graham and Pedersen (2020).
Weak Misleading Evidence. Barney knows what barns are and he knows how to identify them in normal visual circumstances. He’s currently driving through a region that is filled with structures that include all and only barns. However, Barney has been given some reason to think he might be in fake barn country—a region populated with lots of fake barns that look just like real barns from the roadside. But Barney has been assured he’s very probably not in fake barn country. Indeed, he is not in fake barn country and he is looking directly at a barn. And it visually seems to him that the object he’s looking at is a barn. He’s also more confident than not that it is indeed a barn. But due to an overabundance of caution he withholds belief that a barn is nearby because he is focusing overly much on the highly unlikely possibility that he is in fake barn country. Accordingly, Barney sees that a barn is nearby but he does not believe it.\footnote{In Chapter 2 we saw how a seeming that $p$ can separate from a belief that $p$. That one can be more confident than not that $p$ without believing that $p$ is also a familiar and well-founded point. I’m more confident than not that a fairly cast 6 sided die, in normal conditions, will land 1 or 2 or 3 or 4. But I don’t believe such a die will land 1 or 2 or 3 or 4. After all, there’s a 1/3 probability that it will land 5 or 6 and my level of confidence that it will land 5 or 6 corresponds to that fact.}

Here it is much easier to recognize that Barney sees that a barn is nearby even though he does not believe it. And so it is hard, or at least much harder, to resist McDowell’s (2002: 277-78) claim that we have “a perfectly intelligible notion of seeing that something is the case” on which it is perfectly natural to claim that one sees that $p$ but does not believe it. This is a counterexample to ($S\rightarrow B$), and given the belief requirement on knowledge it is also a counterexample to ($S\rightarrow K$).

There are a few ways advocates of ($S\rightarrow K$) can respond to such cases. One is to reject the idea that knowledge requires belief. For if knowledge doesn’t require belief then cases of belieflessly seeing that $p$ cannot be counterexamples to ($S\rightarrow K$). While interesting, such a move has been substantially undermined by Chapter 2 and advocates of ($S\rightarrow K$) have not generally been attracted to this response.

A second way of defending ($S\rightarrow K$) in response to such cases comes from Williamson. Of cases such as the ones we are considering Williamson (2000: 38) warns us that we should not confuse seeing that $p$ with seeing a situation in which $p$. The later concept seems to be or to come quite close to Dretske’s notion of simple seeing: a visual relation an agent can stand in to particulars and events. For seeing a situation is, on a natural reading, a matter of seeing particulars or events that constitute a situation.

Williamson (2000: 38) then advises that we acknowledge the following constraint on seeing that $p$:

$$(W) \text{Necessarily, } S \text{ sees that } p \text{ only if } S \text{ knows that she sees a situation in which } p.$$

Williamson appears to treat this as self-evident and the intended (or, at least, the needed) upshot is that the consequent of ($W$) entails a belief that $p$.\footnote{That is, ($W\rightarrow B$): Necessarily, if $S$ knows that she sees a situation in which $p$ then $S$ believes that $p$. Without ($W\rightarrow B$), ($W$) is no help in resisting the idea that Barney sees that the object he’s looking at is a barn. ($W\rightarrow B$) appears sound provided $p$ is part of the descriptive content of the thought that one}
As we saw in the previous section, ‘sees that’ is polysemous and maybe there is a use of the term ‘sees that’ on which (W) is true. But it would not be the only sense and not obviously the only theoretically relevant sense. Recall purely epistemic uses of ‘sees that $p$’ discussed by French (2012, 2013) above:

(3) I can see that Jane’s argument is valid.
(4) Jane saw that Peter was right.

(W) cannot be true of such uses as (W) requires simple seeing, and simple seeing requires the exercise of one’s visual capacities. But one’s visual capacities are not implicated by (3) or (4). They are the kinds of claims that can be true even of the blind.

Since purely epistemic uses of ‘sees that $p$’ cannot have (W) as a requirement, perhaps they have something else in the neighborhood of (W). (W) is a higher-order requirement of sorts. It says seeing that $p$ (in the hybrid sense) involves knowing that one stands in a world-implicating relation to the fact that $p$. So perhaps (W)’s correlate in the case of pure epistemic seeing is a higher-order requirement along the lines of:

(W-KK) $S$ sees that $p$ [in the pure epistemic sense] only if $S$ knows that she knows [or understands, or realizes, or recognizes] that $p$.

This is, of course, too demanding even for Williamson (2000, Chapter 5). One can see that a proof is valid if one comes to know that it is valid and without simultaneously, or ever, coming to know that they know that it is valid. If pure epistemic uses of ‘sees that $p$’ have a higher-order requirement it is unclear what it is and where its plausibility lies.

Now take hybrid uses of ‘sees that $p$’ discussed by French:

(5) Jane saw through the window that Peter had crossed safely.
(6) Given the look on her face, Jane can see that she was angry.

Such uses require the exercise of one’s visual capacities, but they also require something like knowledge that $p$ (or understanding that $p$, or realizing that $p$, etc.). But if purely epistemic uses of ‘sees that $p$’ don’t require the satisfaction of (W) and if they don’t require something in the neighborhood of (W-KK), why should these hybrid uses in (5) and (6) have a higher-order requirement? If we are to rely on (W) in defense of (S→B) we need more reason to think it’s true than we have so far been given.

Further, advocates of (W) need to respond to its apparent demandingness. Turri (2010) rightly drew attention to this concern. Young children might well lack the concepts needed for having the thought (and knowing) I see a situation in which $p$ despite having perceptual knowledge (and so seeing that) $p$. Even those who have the conceptual capacity to have this thought needn’t deploy it every time they plausibly count as seeing that $p$. So, again, without further argument and clarification we should be skeptical of (W) and look for a defense of (S→B) elsewhere.

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*sees a situation in which $p$.* We should not, I think, feel too inclined to resist something along the lines of (W→B).
A final way of defending \((S \rightarrow B)\) against counterexamples like Weak Misleading Evidence involves arguing that Barney does believe that the object in front of him is a barn. To understand this move in defense of the entailment thesis we have to revisit a few facts about the nature of belief. Recall that beliefs are representational states. But agents who believe that \(p\) don’t simply represent the world as if \(p\) is true, they also have dispositions to act and think in certain ways: agents who believe that \(p\) are agents who have dispositions to act on \(p\), dispositions to assert that \(p\), and dispositions to draw inferences to new beliefs from \(p\) in circumstances where they take \(p\) to be relevant.

Ranalli’s (2014: 1242) conjecture is that it is possible that Barney does believe that the object in front of him is a barn, it is just that his belief’s dispositions are obstructed from producing their characteristic outcomes: Barney will not act on, assert, or draw inferences from the claim that a barn is nearby despite having a dispositions to do so because his sensitivity to the misleading evidence obstructs (masks) their manifestation. For this reason it merely appears that Barney does not believe, when in fact he does.

Doubtless it is possible to revise Weak Misleading Evidence so that Barney does not withhold belief that a barn is nearby, but rather Barney really does come to believe it. The effect of the weakly misleading evidence in such a revised case might well be just to obstruct the manifestation of the dispositions of Barney’s belief that \(p\). There is no reason to resist this possibility.

But notice that Weak Misleading Evidence, as described above, is perfectly intelligible as it stands. Defending \((S \rightarrow B)\) in the way advised by Ranalli requires the stronger thesis that Weakly Misleading Evidence is unintelligible or incoherent given that Barney’s lack of belief is an explicit feature of the case. It requires arguing that it is not possible to have specified the details of the case as we have and for Barney to have failed to both (i) come to represent the world as being such that he is looking at a barn, and (ii) to have developed the dispositions that are characteristic of belief. But I have no idea how exactly this argument could be made.

In trying to make such an argument readers should be careful not to conflate Barney having a disposition to form, and thus come to have, the dispositions characteristic of belief with having the dispositions that are characteristic of belief. The former does not entail the latter, and it is perfectly consistent to maintain that one cannot see that \(p\) without having the disposition to form the dispositions characteristic of belief. But this does not require that one have actually formed the dispositions characteristic of belief. More abstractly, we need to be careful not to confuse having a disposition to have a disposition to \(F\) and having a disposition to \(F\). It is my suspicion that whatever plausibility there was to Ranalli’s argument traded on a conflation between these two distinct, yet related, kinds of dispositions.

So there is a strong case to be made for the failure of \((S \rightarrow B)\) in Weakly Misleading Evidence and, thus, the failure of \((S \rightarrow K)\). If that fails, so does \((A \rightarrow K)\).

We needn’t rely just on the relation between visual factual awareness and belief to make this argument against \((A \rightarrow K)\). There are other modes of factual awareness that separate from belief in the way that visual factual awareness does. Many have argued that we have an intellectual parallel to perception when it comes to a priori insight and self-evident propositions. Audi (2008: 478), for instance, writes that self-evident propositions are “truths such that adequately understanding them is sufficient justification for believing them ..., and believing them on the basis of adequately understanding them entails knowing them.” Arguably, when a self-evident proposition, \(p\), seems
true to an individual just as a result of understanding $p$, that individual is aware of the fact that $p$. But this needn’t entail belief. As Bealer (2004: 13) illustrated, “until Putnam we did not even have beliefs about twin earth, but directly upon encountering the example most of us had the intuition that there would be no water on twin earth and only thereafter formed the associated belief.” Many others who have defended the possibility of a priori insight have also denied that it is belief-entailing.  

For another example of factual awareness without belief take the following case from Malcolm (1963: 213-214) and used by Bernecker (2010):

...at t2 $S$ suddenly finds himself with the thought that he has been kidnapped when he was a small boy (at t1). The idea that he has been kidnapped just pops into his head; it seems to come ‘out of the blue’. $S$ can’t make sense of this idea and takes it to be merely imaginary. After all the likelihood of being kidnapped is rather low. What is more, the idea in question is inferentially isolated from the large body of inferentially integrated beliefs to which $S$ has access. Nothing of what $S$ knows or believes about his past connects with the idea that he has been kidnapped. But now suppose that, unbeknownst to $S$, it is in fact the case that he has been kidnapped. The flashbulb thought is an instance of propositional memory. Perhaps because of the terror of the experience $S$ can’t allow himself to even consider the possibility that he had been the victim of kidnapping but instead takes himself to be making it up. (Bernecker 2010: 88)

Bernecker argues that Malcolm has here provided us with a case of remembering that $p$ without believing that $p$. Since remembering that $p$ is a way of being aware of the fact that $p$ we have yet another case of factual awareness without belief, and hence without knowledge.

Whether or not you find the particular case convincing it should be noted that the standard account of belief implies the possibility of such cases. For any memorial belief is a belief in virtue of being a representational state with the dispositional profile characteristic of belief. But the dispositional profile of a representational state can be lost while the representational state remains. In which case, one can have a representation that $p$ stored in memory (a memorial representation) without having the memorial belief. Provided that memorial representation that $p$ is suitably non-accidentally related to the fact that $p$ we can have, as Bernecker argues, a genuine memory that $p$ (=memorial awareness of the fact that $p$) without belief. And if one is without belief, they are without knowledge. So, once again, there appear to be modes of factual awareness other than visual factual awareness that provide us with reason to reject (A→K).

### 4.2.3 In Defense of Irrational Awareness

The next argument for the failure of (S→K) leans on previous sections. First, we have seen arguments for the idea that knowledge requires belief (Chapter 2). Second, we have seen arguments for the idea that one can see that $p$ without believing that $p$ (previous section). The next assumption needed to produce another argument against (S→K), and thus against (A→K),

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40 This is just the same point that Lyons (2009: 72-73) made in regard to perceptual beliefs noted in Chapter 2.6.1.
concerns the asymmetric force of undercutting defeat: namely that strong misleading evidence can undermine the rationality (justification) of believing that \( p \) while being consistent with the fact that one sees that \( p \).

Here’s a concrete case to motivate this idea:

*Trying to Mislead Barney.* Barney knows what barns are and he knows how to identify them in normal visual circumstances. He’s currently driving through a region that is filled with structures that include all and only barns. However, Barney has been given a strong reason to think he’s in fake barn country—a region populated with lots of fake barns that look just like real barns from the roadside. Specifically, he’s been told by a very reliable person that it is \( \Delta \) probable that he’s in this region. Even so, it is more probable than not that he’s in normal circumstances. And indeed, he is in normal circumstances: he’s not in fake barn country and at the moment he turns his head to look directly at a real barn.

Here is a case where Barney has significant reason to believe that he’s not looking at a barn, but a fake barn. Intuitively, it would not only be most rational for Barney to withhold belief about whether or not he’s looking at a barn, it would be irrational for Barney to believe that he’s looking at a barn.

Yet the irrationality of believing that he’s looking at a barn does not intuitively prevent it from being the case that he sees that a barn is before him (McDowell 2002; Pritchard 2012b; Turri 2010; Schroeder 2015d, cf. 2021). This is what McDowell (2002: 277) was getting at in the quote above when he wrote: “Certainly one will not say one sees that \( p \) unless one accepts that \( p \). But one can see that \( p \) without being willing to say one does. Consider a person who thinks her visual experience does not put her in a position to say how things are in some respect.” For, presumably, one’s unwillingness to say such a thing is due to their sensitivity to the irrationality of not believing that \( p \) while believing that one sees that \( p \). Pritchard (2012b) affirms this, writing:

Clearly, in such a case one *ought not* to believe the target proposition, and hence one cannot possibly know this proposition either. (Indeed, if one did continue to believe the target proposition even despite the presence of this undefeated defeater, then one would still lack knowledge.) Does it follow that one does not see that the target proposition obtains? I suggest not. (Pritchard 2012b: 26)

Schroeder (2015d) comfortably affirms the same, writing that it is “independently compelling” that one could see that \( p \) even if it is irrational to believe \( p \) due to false undercutting information.

Now we have the makings for the following argument against \((S \rightarrow K)\): It is possible for \( S \) to see that \( p \) even if it is irrational for \( S \) to believe that \( p \), while it is impossible for \( S \) to know that \( p \) if it is irrational for \( S \) to believe that \( p \). Therefore, it is possible for \( S \) to see that \( p \) and not know that \( p \). This refutes \((S \rightarrow K)\).

While the aim of this section has been to undermine \((A \rightarrow K)\) by undermining \((S \rightarrow K)\), it is worth pointing out that others have provided similar arguments in the case of other modes of factual awareness. For example, Bernecker argues that this kind of separation between visual awareness and knowledge can also be found in the case of memory. Bernecker provides the following example:
At t1, S learned that the Colosseum was completed in AD 80. He comes to know this fact about the Colosseum. At t2, S’s ‘friends’ play a practical joke on him. They tell him that the Colosseum was not completed until AD 90 and present him with plausible but misleading evidence to this effect. Given the incompatibility of justification with the presence of undefeated defeaters, S doesn’t know at t2 that the Colosseum was completed in AD 80, despite the fact that he still remembers this fact. This example shows that one can know at t1 that p, remember at t2 everything one knew at t1, and yet fail to know at t2 that p—even though one continues to truly believe that p—for the reason that one isn’t anymore justified in believing that p. (Bernecker 2010: 78)

Since remembering a fact is a way of being aware of a fact, the possibility that one remembers that p but fails to know it due to misleading undercutting information also supports the rejection of (A→K).

It may be contentious whether similar cases can be provided when it comes to the a priori. But consider the following case:

*Trying to Mislead Gödel.* Gödel is a 17 year old math prodigy. But he’s still not a credentialed mathematician and his professors at the University of Vienna are still more advanced than he is. Gödel is working on a proof of p and expertly derives p from axiom set A. Upon proving p from A he comes to know that his proof is valid. On this basis, Gödel forms the belief that A entails p. Indeed, Gödel is so talented at proofs of this sort that he could not have easily made a mistake in this case. But later Gödel’s work is being checked by Prof. Ackermann, who is envious of Gödel’s mathematical promise and a bit of a joker. Ackermann tells Gödel that his proof is invalid and Ackermann finds other professors to attest to this and promises to explain his error at a later time. Gödel knows that Ackermann and his cohort of professor-proof-checkers are better at math than he is, and Gödel has no reason to think they are lying to him.

Gödel’s belief that A entails p that he formed via deduction was an a priori insight that amounted to a priori knowledge prior to Ackermann’s antics. What was the epistemic impact of Ackermann’s antics? Above it was argued that one can have visual awareness of the fact that one is looking at a barn despite the presence of unwittingly misleading evidence which undermines the rationality of believing it. If that point about perceptual factual awareness is sound, then it seems that in Trying to Mislead Gödel we should draw a similar conclusion involving a priori factual awareness. That is, that Ackermann’s antics provided Gödel with a knowledge-defeater by defeating the rationality of continuing to believe that A entails p. This seems to me to be the correct conclusion to draw. Gödel lost knowledge, but not factual awareness. Accordingly, even when it comes to the a priori we can produce counterexamples to (A→K).

### 4.2.4 In Defense of Unlucky Awareness

Against (A→K) and (S→K) we can leverage cases of environmental luck. Take a run-of-the-mill fake barn scenario of the sort provided by Goldman (1976: 733):
Fake Barn. Using his reliable perceptual faculties, Barney non-inferentially forms a true belief that the object he’s looking at is a barn. Barney is indeed looking at a barn. However, unknown to Barney, the district he has just entered is full of paper-mache facsimiles of barns. These facsimiles look from the road exactly like barns, but are really just facades, without back walls or interiors, quite incapable of being used as barns. They are so cleverly constructed that travelers invariably mistake them for barns. Having just entered the district, Barney has not encountered any facsimiles; the object he sees is a genuine barn.

Despite forming a true belief from an exercise of his ability to identify barns, Barney does not know that the object he’s looking at is a barn. Had Barney been looking at any other barn-like structure in the area, as he easily might have, it would have been a non-barn and so he would have ended up with a false belief.

Preceding Goldman, Dretske (1969: 85) also identified problematic cases along the lines of Fake Barn:

Zippo Lighters. Fred Dretske completely forgot that he left his lighter on the table top before leaving to grab a drink. Upon returning to his table and seeing his lighter with his initials, ‘F.D.’, engraved upon it Dretske forms the true belief that the object he is looking at is his lighter. However, as it so happens, Francis Donovan is now sitting at the table and smoking. Dretske neither knows him nor that he also has the same kind of zippo lighter with his initials ‘F.D.’ engraved upon it.

Does Dretske know that the object he’s looking at is his lighter? Dretske (1969: 85) thought not, “at least not if...the particular way it looked...involved nothing more distinctive...than its being a Zippo with the initials ‘F.D.’ engraved on its side.”  

Following standard usage, the term ‘environmental luck’ will be used to refer to cases that resemble Fake Barn and Zippo Lighter. Many other cases of environmental luck appear in the epistemological literature, and there is a consensus in the epistemological literature surrounding the idea that cases of environmental luck are not cases of knowledge. The consensus is so strong that some have said that the incompatibility of knowledge and environmental luck is “virtually platitudinous” in contemporary epistemology. For now we will assume without argument that this view is correct. We will examine the integrity of resistance to this platitude in Chapters 8 and 9.

There are various anti-luck requirements that have been proposed as explanations for why knowledge is incompatible with environmental luck. To make the following discussion more concrete let’s focus on safety requirements as it is one of the most popular and promising conditions that explains why knowledge is absent in cases of environmental luck.

Safety requirements say that knowing that p requires that one’s belief could not have easily been false. There are different ways of making the thought that one’s belief “could not have easily been false” more precise as we will shortly see. But notice first that one of the principal motivations

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41 Dretske’s comments in the original passage concern the failure of seeing that p in cases of environmental luck. But given his view seeing that p is a kind of perceptual knowledge that p it is clear that he denied knowledge in this case as well.

42 Steup, Turri, Sosa (2014: 152). Many have observed that this is indeed a widespread tendency in the epistemology literature. See Kornblith (2009: 131), Steup (2014), Turri (2017: 105), and Kelp (2019: 49).
for endorsing a safety condition on knowledge is the ability of such conditions to explain why knowledge is absent in cases of environmental luck. In Fake Barn, had Barney been looking at any other barn-like structure in the area, as he easily could have, it would have been a non-barn. Barney need only have been driving a bit faster or looking in a slightly different direction at another barn-like structure. So Barney’s belief that he’s looking at a barn could easily have been false. Similarly, Dretske could easily have been looking at Donovan’s lighter, for it easily could have been the case that Dretske returned his lighter to his pocket and Donovan left his lighter out on the table. So a safety requirement on knowledge can give us the needed verdict that knowledge is absent in Fake Barn and Zippo Lighter.

Now if knowledge has a safety requirement and if seeing that \( p \) entails knowing that \( p \), then seeing that \( p \) also has a safety requirement:

\[(S \rightarrow \text{Safe}) \text{ Necessarily, if } S \text{ sees that } p \text{ then } S \text{’s belief that } p \text{ could not have easily been false.}\]

So another way of showing the failure of \( (S \rightarrow K) \) is to show that one can see that \( p \) without safely believing that \( p \).

Against \( (S \rightarrow \text{Safe}) \), Turri (2010) has argued that seeing that \( p \) is compatible with environmental luck. While Barney may not know that the object he’s looking at is a barn, he sees that the object in front of him is a barn. There is a strong case to be made for this. After all, Barney sees a barn in front of him and his seeing a barn triggers his capacity to reliably identify barns as barns when looking directly at barns in normal lighting conditions and normal bodily conditions (e.g. when not badly drunk, hallucinating, etc.). Given all of this it seems natural to claim that Barney sees that the object in front of him is a barn. So cases of environmental luck threaten to constitute a space of cases where seeing that \( p \) separates from knowing that \( p \). They are, a fortiori, counterexamples to \( (S \rightarrow \text{Safe}) \) and thus counterexamples to \( (A \rightarrow K) \) on the assumption that knowledge requires safety.

Rannalli (2014: 1228-32) has argued that this argument against \( (S \rightarrow K) \) actually supports \( (S \rightarrow K) \). His argument, however, tacitly relies on the following regimentation of the informal notion that a belief “could not have easily been false”:

**Actual Basis-Relative Safety.** \( S \)’s belief that \( p \) formed on basis \( b \) is safe iff in all nearby possible worlds in which \( S \) believes that \( p \) on basis \( b \), \( S \)’s belief that \( p \) is true.

While there are numerous formulations of safety principles in the literature, many of them seem to be in the spirit of this. Pritchard, for example, is a contemporary advocate of Actual Basis-Relative Safety, writing that:

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43 Obviously, if seeing that \( p \) does not require believing that \( p \) then \( (S \rightarrow \text{Safe}) \) is false. But there is an equally obvious position for the safety theorist to retreat to involving, not safe belief, but *being in a position* to safely believe. So we’ll set the beliefless seeing objection to \( (S \rightarrow \text{Safe}) \) aside in what follows.

44 At one point Sosa (1999: 124, 149) endorsed such a principle, and elsewhere Sosa (2008: 124) seemed to endorse an actual basis-relative formulation of a safety constraint on knowledge. But this is not presently Sosa’s considered view, which involves its rejection (Sosa 2007; 2015).
The crux of the matter is that we need to keep the subject’s actual evidential basis fixed, and of course his actual evidential basis for his belief is formed by consulting the reliable and unaffected clock. While it is lucky that the subject has this evidential basis (in that there are close possible worlds where it is absent), it is not lucky that she forms a true belief on this basis. Indeed, in all close possible worlds where she continues to enjoy the same evidential basis she continues to form a true belief. (Pritchard 2018: 3073)

But Ranalli rightly points out that this creates a tension in Pritchard’s view. For Fake Barn is supposed to be a kind of case where: (i) Barney sees that the object in front of him is a barn, (ii) believes that the object in front of him is a barn on the basis of the fact that he sees that the object in front of him is a barn, but (iii) Barney nevertheless fails to know that the object in front of him is a barn.

But (i) and (ii) entail that Barney’s belief satisfies Actual Basis-Relative Safety. This is due to the factivity of seeing that \( p \). For if Barney sees that the object in front of him is a barn, then it is logically impossible for Barney to falsely believe that the object in front of him is a barn. So there cannot be a world, nearby or otherwise, where Barney falsely holds his belief on its actual basis. So (i) and (ii) guarantee that Barney’s belief is safe in the sense specified by Actual Basis-Relative Safety. Thus Fake Barn is not a counterexample to \( (S \rightarrow \text{Safe}) \).

Advocates of the above regimentation of safety could resist this by maintaining that the basis of one’s belief is never a fact or a factive state. Rather, it is one’s non-factive mental states that serve as the bases of one’s beliefs. For example in the visual case, the visual seeming that one is looking at a barn could be taken to be the actual basis. As this is not a factive mental state it is not logically impossible for one to have that basis for one’s belief and for that belief to turn out to be false.

But there are alternative regimentations of the intuitive claim a belief “could not have easily been false” that do not require the exclusion of factive bases for belief. Williamson (2009), for example, disavows formulations in the neighborhood of Actual Basis-Relative Safety. According to Williamson, the notion of safety that is relevant for knowledge is one that assesses one’s belief at nearby worlds, but the nearby worlds to consider are not restricted to worlds where one holds his belief on the same basis as they do in the actual world. One may hold their belief on different bases so long as they are sufficiently similar to the actual basis.

Here is Williamson’s (2009: 325-26) preferred regimentation of the safety condition on knowledge:

**Similarity Basis-Relative Safety.** \( S \)'s belief that \( p \) is safe in \( a \) iff \( S \) believes \( p \) on basis \( b \) in \( a \), and in any case close to \( a \) in which \( S \) believes a proposition \( p^* \) close to \( p \) on a basis \( b^* \) close to \( b \), \( p^* \) is true.

This safety requirement does not limit the set of close cases to cases where one holds one’s belief just on one’s actual basis \( b \). It also includes cases where one believes \( p \) on a basis \( b^* \) such that \( b \neq b^* \). This is why Williamson (2009: 307-9) is able to claim that knowledge is absent in cases of environmental luck while allowing for factive bases. For example, in Fake Barn one’s actual basis for belief may involve the fact that one sees a barn, but the space of possible cases relevant for
evaluating the safety of one’s belief can involve cases where one’s basis involves the fact that one sees something that merely looks like a barn.\textsuperscript{45}

So without further argument, Ranalli’s defense of \((S \rightarrow \text{Safe})\) falters and the original objection to \((S \rightarrow \text{Safe})\) from unsafe seeing stands.

4.3 The Inferential Case Against \((A \rightarrow K)\)

The arguments above sought to demonstrate the failure of \((A \rightarrow K)\) by showing that one can be in a state of non-inferential factual awareness without also being in a corresponding knowledge state. The basic structure of the arguments against \((A \rightarrow K)\) to follow involve showing that one can be in a state of inferential factual awareness without being in a corresponding knowledge state. This is primarily due to the fact that inference can enable us to become aware of the fact that \(p\) without immediately, or ever, ensuring that we believe that \(p\).

4.3.1 The Argument from Explicit Deductive Updates

One way of becoming aware of facts is by deduction from existing knowledge. Here is an example. I know that:

\[
\text{G}: \text{North Rhine-Westphalia is the most populated state within Germany and that Germany has no more than 85 million residents.}
\]

This entails:

\[
\text{N}: \text{North Rhine-Westphalia has no more than 85 million residents.}
\]

Now deduction itself is not a belief-entailing activity. One can deduce \(p\) from \(q\) without coming to believe \(p\). Think of all the deductive exercises you were required to do with obviously false premises in order to help you get a grip on the difference between validity and soundness. When the premises were obviously false you did not believe their conclusions despite deducing them.

Now consider the fact that we sometimes update our beliefs in response to (and therefore after) recognizing entailments from our beliefs. That is:

\textbf{Explicit Deductive Updating}. It is possible for a thinker to first come to know \((q, \text{ and } q \text{ entails } p)\), and then in response begin her update process so that she later comes to believe that \(p\).\textsuperscript{46}

Explicit Deductive Updating identifies not just a possible way to update, but an ordinary one. To see this let’s continue with the example above.

\textsuperscript{45} Given his generality thesis, Williamson (2000) would not claim that one’s basis could involve the fact that one sees that one is looking at a barn in cases of environmental luck since that would entail one knows that one’s looking at a barn.

\textsuperscript{46} Obviously, not all deductive updating need be via explicit knowledge of entailment relations. One can also just come to believe \(p\) by deducing it from \(q\) while not registering the further fact that \(q\) entails \(p\).
It was, embarrassingly, not so long ago that I learned that North-Rhine Westphalia was a German state. So it was not so long ago that I failed to know (G). But even before knowing (G) I could easily have known that (G) entails (N) since (N) is a rather obvious deductive consequence of (G). To know it I need only have been presented with (G) and (N) and reflected on their logical relations. In such a case it is possible that I would first come to know that (G) entails (N), and then come to know (G), and then in response update my beliefs so that I believe and come to know (N). This is an explicit deductive update.

Explicit deductive updates are a two-stage process. They involve first recognizing an entailment from one’s knowledge and then later responding to that recognition by forming a new belief in the conclusion. Let us now ask: after deducing (N) from (G)—but before coming to believe (N)—what epistemic relation did I stand in to (N)?

It seems implausible to say that I was ignorant of, or blind to, (N). Clearly, ignorance of (N) is incompatible with consciously deducing (N) from my knowledge of (G). But if I’m not ignorant of (N), and if I know the premise (G), and if I have competently deduced (N) from it, then am I not aware of that fact? To my mind it is utterly natural and completely compelling to think so. That is, after deducing (N) from (G) but before coming to believe (N), I was aware of the fact that (N). But since I did not yet believe (N), I did not know it either. So inferential awareness can separate from knowledge. Hence we have a counterexample to (A→K).

In claiming that I am aware of (N) after deducing it from my knowledge of (G) but before coming to believe it I am implicitly relying on some kind of sufficiency condition for awareness. Perhaps something in the neighborhood of this is correct:

\[(\text{Sufficiency}) \text{ Necessarily, } S \text{ is aware of the fact that } p \text{ if: } S \text{ knows that } (q, \text{ and } q \text{ entails } p) \text{ and } S \text{ has competently deduced } p \text{ from that knowledge.}\]

If this principle is insufficiently compelling to you as a general principle, we can weaken it so that it only connects awareness to deductive inferences involving higher-order knowledge:

\[(\text{Sufficiency*}) S \text{ is aware of the fact that } p \text{ if: } S \text{ knows that } S \text{ knows that } (q, \text{ and that } q \text{ entails } p), \text{ and } S \text{ has competently deduced } p \text{ from that knowledge.}\]

It’s easy enough to update the example to make it clear that I know that I know (G) and that it entails (N). Higher-order knowledge is not that hard to come by.

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47 Do not confuse my having a disposition to believe (N) upon deducing it with actually believing (N) upon deducing it (cf. Section 4.2.2).

48 A reader pointed out to me that some might think that in these deductive cases the time-lag between deduction and belief is so short that it is plausible to hold that factual awareness does not arrive until one comes to believe the conclusion. This does not strike me as being at all plausible, especially in light of the next section’s case of inferential factual awareness without belief. For in that case one has inferential factual awareness, and one has it only if one fails to believe the deduced conclusion. If correct, this refutes the idea that a sufficiently long time-lag that ends with a belief in conclusion is a necessary requirement on inferential factual awareness.

49 Hawthorne (2014) observed that knowledge of one’s own knowledge should be at least as easy to come by as knowledge of other people’s knowledge. For example, if I see you grab a cup in normal conditions and am thereby able to come to know that you know where that cup was located, then, other things being equal, when I grab a cup in similar conditions I should be able to know that I know
You’ll doubtless recognize that (Sufficiency) and (Sufficiency*) have much in common with simple transmission and closure principles for knowledge. Perhaps you’ll be tempted to think that the problems with such principles for knowledge are also problems for these principles. But notice that in the case of myself and (G) and (N), there’s none of the funny business going on that has caused people to worry about transmission and closure principles for knowledge. (N) is not a “heavyweight” anti-skeptical proposition like “I’m not a BIV”; the inference to (N) is not epistemically circular in the sense that my justification for thinking (G) is true depends on me first having justification to believe (N); there’s no defeaters lurking in the background such that I have good reason to think (N) is false or that my inferential capacities are malfunctioning or whatever. So if you think that these general kinds of factors have to be screened-off in an adequate closure principle for knowledge and if you think that whatever threatens transmission and closure principles for knowledge also threatens these sufficiency principles for awareness, then build your own version of these sufficiency principles that takes account of that. The counterexample to (A→K) above will survive such qualifications.

4.3.2 The Argument from Self-Defeating Beliefs

Self-defeating beliefs, generally, involve those confident doxastic attitudes the having of which negatively impacts their likelihood of being true. In mild cases, the impact need not be great. Suppose that when we believe that our favorite candidate is a shoe-in, the odds that the candidate would win are slightly reduced since we would refrain from voting. Such cases are fairly common and are not especially noteworthy. The cases at the extreme are more interesting. There, the impact of a belief on its likelihood is radical. For instance, were I to believe that I have no beliefs, that belief would be false.

Self-defeating beliefs have been employed to generate puzzling situations in which no belief state seems rational. Here are a couple proposed examples:

A thirtieth century brain physiologist, T, knows that all of a person’s N-fibres fire if, and only if, the person judges that not all his N-fibres ever fire when he considers the matter for the first time. Knowing this, T considers for what he knows to be the first time: (a) All of T’s N-fibres will fire. (Conee 1982: 57)

...it might be observed that a particular student passes when and only when he studies and studies iff he is not sure whether he will pass. This description implies that he will pass iff he is not sure that he will pass. How should the student react to the observation? (Sorensen 1987: 305)

Such cases give us propositions that are false if one believes them, and true if one believes their negation, and moreover that one knows that this is the case. The prima facie upshot appears to be that the agent can occupy no belief state rationally. Upon adopting the relevant belief, the agent

where the cup was located. So denying oneself higher-order knowledge in such ordinary cases risks an implausible skepticism about the knowledge states of others. In any case, if one is a skeptic about actual higher-order knowledge there is still the fact that higher-order knowledge is possible. This is all that is needed.
would have conclusive evidence for the falsehood of the belief, and in the absence of the belief the agent would have conclusive evidence for its truth.\textsuperscript{50}

To see the pressure that cases of self-defeat can put on (A→K) let’s start with a case of self-defeat that takes its lead from John Buridan (\textit{Sophismata}, Sophism 13), who observed the self-defeating character of believing: that one doesn’t believe this very sentence. Here is an elaboration on Buridan’s idea:

Bob considers the following self-referential sentence:

(B) I do not believe (B).

Having never considered (B) before, Bob knows that he doesn’t yet believe it, and even as he continues to reflect on (B) he still doesn’t come to believe it for the following reason. Bob knows that if he believes (B), then (B) is false and so he’ll have a false belief; and if he refrains from believing (B) by believing not-(B), then (B) is true and so he’ll again have a false belief. So Bob knows that he is unable to take an attitude towards (B) that accurately represents (B)’s truth-value. In light of this, Bob ends up withholding belief in (B).

While this case of self-defeat depends on a self-referential sentence, Conee (1987: 324) has pointed out that we needn’t rely on self-referential sentences to generate the puzzle here. However, we’ll continue with this self-referential case for illustrative purposes.

(B) is logically equivalent to ‘(B), and I do not believe (B)’. Accordingly, this is just a special instance of the omissive Moore-paradoxical schema ‘p, and I do not believe p’ where both conjuncts are identical. Importantly, one cannot truly believe any present tense, first person omissive Moore-paradoxical statement of the form ‘p, and I do not believe p’. For believing the first conjunct (i.e. believing p) is incompatible with the truth of the second conjunct (i.e. I do not believe p).

Omissive Moore-paradoxical propositions are not unusual nor are they infrequently true of us. Indeed, our evidence often supports them. For anytime we gain evidence for some true claim, p, that we know we do not yet believe, we also gain evidence to think: p, but I don’t believe it. For example, I know that I have no beliefs about the 251st digit in the decimal expansion of π. So at the moment I get great evidence to think that that digit is n I also gain great evidence for the claim that: n is the 251st digit in the decimal expansion of π, but I do not believe it. Of course, if I properly update my beliefs in response to my evidence my situation changes: for I then believe that n is the 251st digit in the expansion of π, and I will often enough believe that I believe it. But just prior to that update it is possible to have recognizably great evidence for the Moore-paradoxical claim that: n is the 251st digit in the expansion of π, but I don’t believe it. What is distinctive about Bob’s case and what makes it useful for present purposes is that we can make perfect sense of Bob’s refusal to \textit{at any point in time} update his beliefs so that he believes (B) despite being aware that (B) is true.

Back to Bob. Recall that Bob suspended belief in (B). So (B) is true. How could Bob become aware that (B) is true? Here’s one way:

\textsuperscript{50} Sorensen (1987) has objected that one can never have sufficient evidence for a biconditional of the form ‘p iff I don’t believe it’. But this is implausible in the present case and others as well. For defense of the possibility of such evidence see Conee (1982, 1987), Richter (1990: 150ff), Kroon (1990), and Silva (2019).
Anti-Expert Inferential Awareness. Bob works with Sam in a lab with an infallible brain scanner. Sam and Bob have been working together for a while, and they both know that they are both adept at using this infallible brain scanner to come by knowledge of the mental states of their subjects. One day Bob subjects himself to a brain scan. The scanner reports that Bob doesn’t believe (B), and Sam sees this and thereby comes to know that Bob doesn’t believe (B). Bob witnesses this event, and thereby comes to know the following:

(B1) Sam knows that Bob doesn’t believe (B).

So Bob knows that Sam knows (B). Now, Bob’s a smart guy. He knows that knowledge is factive. Hence, Bob knows:

(B2) If Sam knows that Bob doesn’t believe (B), then Bob doesn’t believe B.

Despite knowing (B1), (B2), and that they entail (B) Bob doesn’t form a belief in (B) because he knows that believing (B) would yield a false belief. He continues to withhold belief in (B).

There is nothing problematic in claiming that Sam knows that Bob doesn’t believe (B). After all, Sam’s belief doesn’t impact the truth of (B). Moreover, Bob can know that Sam knows that Bob doesn’t believe (B) since it is possible to know that other people know p without immediately (or ever) believing p on the basis of that knowledge. Notice too that Bob withholding belief in (B) seems like the most rational response available to Bob. For he knows that if he were to believe (B) he would have a false belief; and he knows that if he were to disbelieve (B) he would likewise have a false disbelieve. So the most rational response he can make is one of withholding on (B), and that is just what he does.

If this is to be a genuine counterexample to (A→K) it has to be the case that Bob is aware that (B) is true despite not believing it. Why think that Bob is aware that (B) is true? Again, it seems implausible to say that Bob is ignorant of or blind to (B). Clearly, ignorance of (B) is incompatible with consciously deducing (B) from his knowledge of (B1) and (B2). But if he’s not ignorant of (B), and if he knows the premises (B1) and (B2), and if he has competently deduced (B) from them, is he not then aware of that fact? Yes. In further support of this judgment, the sufficiency principles discussed in the previous section imply the same. Hence we have another inferential counterexample to (A→K): while knowledge requires belief, inferential factual awareness does not.

4.4 Concluding Remarks

To recap. A core thesis of this book is that knowledge is but one type of a more general epistemic kind, i.e. factual awareness. The leading alternative is the Identity View that says factual awareness just is knowledge. But the Identity View requires (A→K) in two different ways. The first is metaphysical: the Identity View cannot be true unless (A→K) is true. The second is epistemic: if we lack sufficient reason to believe (A→K) then we lack sufficient reason to think the Identity View is true. Not only do considerations from ordinary language not provide sufficient support for
adopting (A→K), there are numerous counterexamples to it. This gives us all the justification we need to explore an epistemology that puts factual awareness first.
Chapter 5: Structural and Substantive Concepts of Awareness

5.1 Introduction

We have found reason to resist the idea that factual awareness just is knowledge as well as the idea that factual awareness is but one species of knowledge. We have, therefore, learned something about what factual awareness is not. But what is factual awareness and how is it related to knowledge?

The answer to this question will be developed incrementally over the remaining chapters. The first part of the answer involves an articulation and defense of a structural claim about the relation between knowledge and factual awareness:

The Generality of Awareness. Factual awareness is a genus of which knowledge is but one species.

This is a structural principle in the sense that it specifies the relation between factual awareness and knowledge without saying anything substantive about the nature of either state. Accordingly, this thesis is consistent with a variety of theories about the natures of both knowledge and factual awareness. The aim of this chapter is to defend this structural claim and to highlight the very wide variety of substantive ways that there are to endorse it. Along the way we will come upon adjacent epistemic relations: being in a position to know and being capable of knowing truths. The final section will explain why we cannot identify factual awareness with either of these knowledge-centric relations.

5.2 The Generality of Awareness

The first argument for the Generality of Awareness starts with two observations from the previous chapter. First, that knowledge that \( p \) guarantees awareness of the fact that \( p \). That is, \((K \rightarrow A)\) is true. Second, there are a range of cases where an agent is aware of the fact that \( p \) but fails to know that \( p \). That is, \((A \rightarrow K)\) is false. This was demonstrated with cases of the following sort:

1. Seeing that \( p \), remembering that \( p \), and having a priori insight that \( p \) while not believing that \( p \).
2. Seeing that \( p \) and remembering that \( p \) while lacking justification to believe that \( p \) due to misleading evidence.
3. Seeing that \( p \) while in cases of environmental luck.
4. Having knowingly deduced \( p \) from one’s knowledge while not believing that \( p \),
   though one could come to justifiably and truly believe that \( p \) upon updating one’s
   beliefs.
5. Having knowingly deduced \( p \) from one’s knowledge while not believing that \( p \),
   though one could not come to justifiably or truly believe that \( p \) due to self-defeat.

In each case an agent was aware of a fact \( p \) despite not knowing \( p \) due to some necessary condition
on knowledge failing to be satisfied.

The failure of \( (A\rightarrow K) \) ensures that we cannot identify knowledge and factual awareness.
This prevents us from explaining \( (K\rightarrow A) \) by appealing to the fact that knowledge and factual
awareness are identical. How then are we to explain the truth of \( (K\rightarrow A) \)? What explains the fact
that every time an agent knows a fact they are also aware of that fact?

The most obvious option to pursue is one that takes knowledge as a kind of factual
awareness. The reason for this is that, as we saw in cases 1-5, there exist instances of factual
awareness which, while distinct from knowledge, are quite closely related to knowledge. Each
instance of factual awareness in 1-5 involved a non-accidental representation of a fact. Whatever
else seeing that \( p \), remembering that \( p \), and having a priori insight that \( p \) are they each involve one
hosting a non-accidental true representation of the fact that \( p \). The same was true of the cases of
inferential factual awareness. For the cases of inferential factual awareness involved deduction from
known premises in such a way that the premises indirectly represented the conclusion in the sense
discussed in Chapter 2.6. The fact that the premises were known ensures that they represent the
conclusion in a non-accidental way. As we will see in the next section, knowledge is also a kind of
non-accidental true representation. This all suggests that at some level of generality instances of
knowledge and these instances of factual awareness are of a kind. Moreover, if there are differences
between them, natural language does not clearly track these differences. There is no detectable
equivocation in claiming that an agent is “aware of the fact that \( p \)” when she knows that \( p \) and in
claiming that an agent is “aware of the fact that \( p \)” when an agent sees that \( p \) but fails to know that
\( p \). It is not as though in such pairings of cases we mean something distinct with our use of the term
‘aware’.

This provides support for the following claim:

**Generic Generality of Awareness.** Factual awareness is a type of which knowledge is but
one sub-type.

Yet this claim is neutral on the kind of relation that obtains between factual awareness and
knowledge. It might be a determinate-determinable relation, it might be a genus-species relation.

There is reason to prefer a genus-species relation here owing to the compatibility, by way of
token identity, of instances of factual awareness with instances of knowledge. Recall that knowing
that \( p \) entails being aware of the fact that \( p \). So everytime one knows that \( p \) at \( t \) one is also aware of
the fact that \( p \) at \( t \). But this doesn’t plausibly imply that knowing that \( p \) at \( t \) entails the simultaneous
existence of some further distinct state. More plausible is the idea that when \( k \) is a state of knowing
that \( p, k \) is token identical to a state of awareness of the fact that \( p \).
To motivate this it helps to think of cases where an agent is first aware of the fact that \( p \) and only later comes to know that \( p \) due to some change in their external circumstances. Fake barn cases of environmental luck provide a helpful illustration. In such a case one is aware of the fact that the object they’re looking at is a barn, and their factual awareness is constituted by their belief that the object they’re looking at is a barn (Chapter 4). Despite having no reason to think one is in fake barn country, suppose one goes ahead and walks around the barn they’re looking at, thereby implicitly ruling out the possibility that it is a fake barn. They were aware of the fact that they’re looking at a barn before walking around it and they remained aware of that fact after walking around the barn. But what was before a state of mere factual awareness has become a state of knowledge. Yet it is not as though a wholly new belief state had to be produced in order for one to transition from having only mere factual awareness to also having knowledge. Intuitively, what was formerly a mere state of factual awareness became a knowledge state without any change to the state itself. In which case, one’s previous state of factual awareness and one’s newly acquired state of knowledge are token identical.

Why would this favor a genus-species relation between factual awareness and knowledge? Because distinct token determinates of a given determinable cannot be token identical. Spheres and cubes are distinct determinates of the determinable shape, but token shapes (particular objects that have a shape) cannot be simultaneously both a sphere and a cube.\(^{51} \) The same is not true of genus-species relations. When it comes to such relations, the species is a more specific property that can be understood as a conjunction of the less specific genus property plus some independent property or properties (Wilson 2021).

To give a relevant example take Lyons’ observation about the relation between perceptual beliefs and perceptual usings (=percepts). On the standard view, says Lyons, a perceptual belief is just a seeming that has the dispositional profile of belief, but the dispositional profile can ‘come and go’ and so is an independent property of the seeming (Chapter 2.6). So the less specific state of being a seeming is a genus of which being a belief is a species and is distinguished from mere usings by its dispositional profile. As Lyons argues, when a seeming becomes a belief by acquiring the relevant dispositional profile the ‘two’ states are token identical. Thus we should not treat the belief-seeming relation as a determinate-determinable relation.

We have, then, reason to move from the Generic Generality of Awareness to:

**The Generality of Awareness.** Factual awareness is a genus of which knowledge is but one species.

This completes the argument for the Generality of Awareness that relied on ordinary intuitions about factual awareness in cases 1-5. But, as indicated earlier, the primary conclusions of this book in relation to the nature of knowledge (Chapters 9) and the possession of reasons (Chapter 6) do not rely too heavily on such intuitions, as we will shortly see.

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51 Wilson (2021: Section 2.1) generalizes this point: ‘If \( x \) has determinate \( P \) of determinable \( Q \) at time \( t \), then \( x \) cannot have, at \( t \), any other determinate \( R \) of \( Q \) at the same level of specificity as \( P \). For example, an object cannot be both red and blue all over, at a time.’
5.3 Awareness as the Generalization of Knowledge

In defending the Generality of Awareness I relied on ordinary intuitions about factual awareness. But there is a theoretical way of reaching a similar generality claim, one that involves a constructed notion of ‘factual awareness’ given by the following stipulative definition:

\[(FA') \ S \text{ is factually aware}\ast \text{ that } p \ (\text{aware}\ast \text{ of the fact that } p) =_{d} \text{ S is in some representational state } r \text{ that truly represents the fact that } p, \text{ and } S\text{'s being in } r \text{ is suitably non-accidental.}\]

Here, the relevant concept of ‘suitably non-accidental’ is to be located by association with the non-accidentality condition on knowledge. The relevant sense of ‘association’ involves generalization: whatever non-accidentality relation, \(R\), is required for a true belief to constitute a case of knowing, \(R\) is itself an instance of a more general non-accidentality relation \(R\ast\) that applies to other forms of true representation. This will be defended below in connection with Permissive Non-Accidenality.

With (FA’) the relevant generality claim is this:

**The Generality of Awareness\ast.** Factual awareness\ast is a genus of which knowledge is but one species.

The argument for the Generality of Awareness\ast proceeds from familiar claims about knowledge and representation. Take first:

**Factivity.** Knowing that \(p\) is a factive relation, a relation one can stand in to \(p\) only if \(p\) is true.

**Belief Fundamentalism.** Believing that \(p\) is fundamental to knowing that \(p\).

The idea that knowledge is factive is a commonplace, I will not be defending it. The idea that believing is fundamental to knowing was defended in Chapter 2, a consequence of which is that \(S\) knows that \(p\) only if \(S\) believes that \(p\). From both, it follows that knowledge is a kind of *true belief*. And since belief states are a kind of representational state it follows that:

\[(1) \text{ Knowledge is a kind of true representation.}\]

The second step in the argument to the Generality of Awareness\ast relies on:

**Representational Pluralism.**
(Rough) There are representational mental states that are not belief states.
(Precise) There are representational mental states that represent the fact that \(p\) that are: neither belief-that-\(p\) states nor constituted by belief-that-\(p\) states.
Representational Pluralism was shown in Chapter 2 to follow from familiar views about the nature of seeming states and indirect representational states constituted by one’s true beliefs about the deductive consequences of one’s beliefs.

From (1) and Representational Pluralism we get:

(2) Knowledge is but one kind of true representation.

But this is not yet the Generality of Awareness*. To get there we will need to show that the non-accidentality relations characteristic of knowledge are themselves instances of more general non-accidentality relations that representational states can figure into. That is, we need a defense of:

**Permissive Non-Accidentality.** Representational mental states other than belief can stand in the same type of knowledge-grounding non-accidentality relation(s) as beliefs.

Knowledge-grounding non-accidentality relations are the non-accidentality relation(s) that enable a true belief to constitute knowledge. Since there are different accounts of the non-accidentality constraint on knowledge there will be different options here. Fortunately, we need not walk through all potential accounts of knowledge’s non-accidentality relation to establish Permissive Non-Accidentality. For the most part, it is very easy to see how a representational state that is not a belief state can stand in a suitable generalization of a candidate non-accidentality relation.

To illustrate this, I’ll give two examples from leading theories of knowledge. Take a view on which knowledge is safe belief:

**Safe Belief.** S’s belief that \( p \) is safe \( =_a S \) could not have easily had a false belief that \( p \).\(^{52}\)

We can generalize this specification of the safety relation so that it applies to representations generally:

**Safe Representation.** S’s representation that \( p \) is safe \( =_a S \) could not have easily had a false representation that \( p \).

Since beliefs are a kind of representational state, it follows that every safe belief is a safe representation. So the only way to argue that Permissive Non-Accidentality is false is to argue that the only occasions where Safe Representation is non-trivially satisfied is in the special case of belief. But it is hard to see how an argument for this would go.

To appreciate this difficulty take a mere seeming state. Suppose in completely normal environmental circumstances it seems to you that a barn is nearby but you do not believe it because of misleading evidence (as in the case of Weak Misleading Evidence of Chapter 4). That seeming can be the product of a cognitive process operating safely in that environment despite the failure to believe. Alternatively, consider a case of indirect representation where one believes: that \( q \) and \( q \) entails \( p \) (Chapter 2). Could this state of indirectly representing \( p \) be suitably non-accidental? Sure.

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\(^{52}\) This is a generic formulation of the safety relation that leaves the notion of ‘could have easily been false’ unregimented. We discussed regimentations earlier (Chapter 4.2.4). For present purposes this generic formulation is enough.
Just suppose one indirectly represents that \( p \) in virtue of \textit{knowing}: \( q \) and \( q \) entails \( p \), and competently deducing \( p \) from that knowledge. Such knowledge guarantees that the indirect representation is suitably non-accidental. For example, if knowledge requires safety, then this indirect representation that \( p \) can be safely held since the indirect representation that \( p \) is constituted just by the knowledge-constituting safe belief that \( q \) and \( q \) entails \( p \) together with one’s exercise of a deductive competence.\(^{53}\)

These reflections on seemings and indirect representations present a strong case for the following: if safety is a knowledge-grounding non-accidentality relation, then Permissive Non-Accidentality is true, i.e. representational mental states other than belief can stand in the same type of knowledge-grounding non-accidentality relations as beliefs.

For a second example of how knowledge’s non-accidentality constraint can be generalized to apply to states that represent \( p \) while not being belief-that-\( p \) states, take reliabilist virtue epistemology. At the heart of reliabilist virtue epistemology is the attempt to understand knowledge in terms of true beliefs owed to (held because of; attributable to) exercises of a sufficiently reliable ability to form true beliefs. So take the following condition:

\textbf{Virtuous Belief.} \( S \)'s true belief that \( p \) is virtuous \( =_{df} \) \( S \)'s true belief that \( p \) is owed to the exercise of \( S \)'s sufficiently reliable cognitive ability to form true beliefs.

We can generalize the virtue theoretic relation so that it applies to representations generally:

\textbf{Virtuous Representation.} \( S \)'s true representation that \( p \) is virtuous \( =_{df} \) \( S \)'s true representation that \( p \) is owed to the exercise of \( S \)'s sufficiently reliable cognitive ability to form true representations.

Again, since beliefs are a kind of representational state, every virtuous belief will be a virtuous representation. So the only way to argue that Permissive Non-Accidentality is false is to argue that the only time Virtuous Representation is non-trivially satisfied is in the special case of belief. But, again, it is hard to see how an argument for this would go.

In general, it is an easy exercise to take one’s preferred theory of knowledge and its attendant non-accidentality relation and demonstrate that there is a generalization of that relation which true representations other than belief can non-trivially satisfy. From Permissive Non-Accidentality and (2)–the claim that knowledge is but one kind of true representation—we get:

\(^{53}\) Some have argued that safety is not closed under competent deduction from knowledge (Kvanvig 2004; Murphy 2005; Al.Suppress-Kelly 2011). While there is reason to doubt the integrity of these arguments (Williamson 2009: 324-328; Schulz 2020), there is no reason to wade into these issues. First, an indirect representation that \( p \) of the sort indicated above is not a belief that \( p \) that is based on deduction from some premise set. Rather, the indirect representation that \( p \) consists of a competent reasoner’s knowledge of (and hence safe belief in) a premise-set and its entailment of a conclusion \( p \). Arguably, if the belief-states constituting the representation that \( p \) are safe, the representation should be safe as well. Second, all that is important for the purposes of establishing Permissive Non-Accidentality is that sometimes an indirect representation that \( p \) can be safe, and this is consistent with it not always being safe.
**The Generic Generality of Awareness**. Factual awareness* is a type of which knowledge is but one sub-type.

The Generic Generality of Awareness* is neutral on the kind of relation that obtains between the types factual awareness* and knowledge. It might be a determinate-determinable relation, it might be a genus-species relation. But for the same reasons articulated in the previous section a genus-species relation is preferable.

Accordingly, we have good reason to move from this generality claim to:

**The Generality of Awareness**. Factual awareness* is a genus of which knowledge is but one species.

Here’s the significance of (FA*) and the present argument for the Generality of Awareness*. Suppose, despite all the counterevidence provided in Chapter 4, you think that ‘being aware of a fact’ as used in ordinary language just is knowledge. Were this true, the Generality of Awareness would be false. But what we’ve just seen is that we can construct a concept of factual awareness defined by (FA*) and show that knowledge is but one instance of it. This establishes the Generality of Awareness*. To resist this would be to resist some of the assumptions relied on in the argument to the Generality of Awareness*. This would involve resisting either Belief Fundamentalism, Representational Pluralism, or Permissive Non-Accidentality. All of which I expect to be reasonably uncontroversial as they are, or follow from, highly intuitive and widely shared assumptions. So if those shared assumptions are true, then factual awareness* is a real state that is realized whenever knowledge is realized. But it’s also realized when knowledge is not realized, as in cases 1-5 discussed in Chapter 4.2-4.3. This remains true even if being aware* of the fact that p is not the referent of the expression ‘aware of the fact that’ in natural language.

What is the relationship between ‘aware of the fact that p’ as used in ordinary English and ‘aware* of the fact that p’ as specified by (FA*)? Given the arguments of Chapter 4 and having observed above that seeing that p, remembering that p and so forth are states of non-accidental true representation, in what follows we can assume factual awareness just is factual awareness*:

(S is aware of the fact that p if and only if) S is aware* of the fact that p, i.e. S is in some representational state r that truly represents the fact that p, and S’s being in r is suitably non-accidental.

Since the right hand side of this biconditional is just the definition of factual awareness* given by (FA*), it follows from this working hypothesis that the Generality of Awareness* and the Generality of Awareness come to the same thing. So if this working hypothesis is correct then there are two arguments for the Generality of Awareness. The first is the argument of the previous section in support of the Generality of Awareness that relied on ordinary judgements about factual awareness in the cases discussed in Chapter 4. The second is the argument of this section that relied on Belief Fundamentalism, Representational Pluralism, and Permissive Non-Accidentality.
5.4 Awareness Monism vs. Awareness Pluralism

The Generality of Awareness provides a minimal structure for factual awareness, indicating that there are ways of being aware of facts without knowing them. But this minimal structure leaves a great number of issues open in theorizing about factual awareness. In particular it says nothing about the nature of factual awareness or knowledge. To get a sense of the logical space of substantive theories of factual awareness and its relation to knowledge, take just three potential non-accidentality requirements on knowledge. These are obviously vague and imprecise, but they are for the purpose of illustration only:

**Reliabilist Condition.** S’s belief that $p$ is produced in a way that is reliable, i.e. more likely than not to lead to true beliefs.

**Virtue Condition.** S’s belief that $p$ is owed to an exercise of S’s sufficiently reliable ability to form true beliefs.

**Anti-Luck Condition.** S’s belief that $p$ satisfies some modal anti-luck requirement (a weak safety, weak sensitivity, or weak adherence requirement).

Two points about these conditions. First, the Reliabilist Condition does not entail the Virtue Condition. Since being sufficiently reliable does not entail being reliable. As Turri (2015: 539) points out, one might be sufficiently reliable at hitting baseballs to play for the Yankees but even then one will not be more likely than not to hit a baseball. Second, since anti-luck conditions are standarly taken to imply reliability, I here mean to refer us to non-standard anti-luck conditions that do not. For example, a weak safety condition can be construed along the following lines: were S to believe that $p$, S’s would not too likely have been false, where what counts as ‘too likely’ can fall short of reliability. Such anti-luck conditions will, of course, not be widely regarded as plausible candidates for knowledge. But we’re just looking at conceptual space here.

With these we can provide a rough map of a proper subset of the conceptual possibilities when it comes to the theory of knowledge. Since knowledge requires true belief, these coarse-grained conditions overlap in such a way as to provide at least seven general approaches to the nature of knowledge, as indicated by Figure 5.4.1:

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54 Indeed, this diagram below distorts the magnitude of options available. In part this is because it fails to represent alternative views of knowledge whose core conditions cannot be neatly tucked into these three categories (e.g. explanationist views). In part this is also because it fails to represent conceivable disjunctive views of knowledge that take multiple conditions. In part this is also because there are so many distinct ways of filling in the details of the reliability condition, the virtue condition, and the anti-luck condition that the possible combinations are far more than seven.
The primary point to observe here is \textit{the recipe} for constructing a theory of factual awareness: first take a view of knowledge from above, then generalize from true \textit{belief} to true \textit{representation}, then also generalize \textit{the relevant non-accidentality relation} so it applies to representational states in general and not only to belief states. This ensures that there are at least as many theories of factual awareness as there are theories of knowledge, as indicated by Figure 5.4.2:

But the space of options for theories of factual awareness is also \textit{greater than} the space of options for theories of knowledge. For the Generality of Awareness is consistent with the following:
**Awareness Pluralism.** For every state of non-accidental true representation, \( r \), that constitutes factual awareness: \( r \) always does so in virtue of some non-accidentality condition \( c \), but the non-accidentality condition is not a requirement of knowledge.\(^55\)

**Awareness Monism.** For every state of non-accidental true representation, \( r \), that constitutes factual awareness: \( r \) always does so in virtue of some non-accidentality condition \( c \), and \( c \) is a non-accidentality requirement for knowledge.

The basic idea here concerns the unity of distinct species of factual awareness. There is already unity at the level of true representation: one cannot be aware of the fact that \( p \) unless one truly represents \( p \). The question at issue here is whether all species of factual awareness are unified in the kind of non-accidentality constraint(s) they share.

One kind of pluralist view involves a disjunctive non-accidentality condition, where each disjunct involves a non-accidentality condition sufficient for factual awareness, at least one of which is not a non-accidentality condition on knowledge. For illustration, assume that knowledge has a virtue condition but not a sensitivity condition. We can then construct a form of Awareness Pluralism as follows:

**Virtuous-Sensitivity Awareness Pluralism.** Necessarily, \( S \) is aware of the fact that \( p \) iff:

1. **(Virtue Condition)** \( S \)'s true representation that \( p \) is owed to the exercise of \( S \)'s sufficiently reliable cognitive abilities, or
2. **(Sensitivity Condition)** If \( p \) were false, \( S \) would not have represented that \( p \).

The idea here is that there are two ways of being non-accidentality related to facts such that factual awareness results: one specified by a virtue condition, the other specified by a sensitivity condition.

There are many other ways of constructing pluralist views. Whether or not there is sufficient motivation for adopting a pluralist view is unclear. But motivation could be found if there are cases where it is compelling to regard an agent as aware of some fact \( p \) in virtue of satisfying some non-accidentally condition, \( c \), even though \( c \) is neither necessary nor sufficient for knowledge.

All of this raises more issues than I will discuss here. The point is not to resolve the potential conflict between monist and pluralist theses, but to highlight emerging complexities within the theory of factual awareness. The Generality of Awareness imposes some structural constraints on one's theory of factual awareness, but these structural constraints fail to settle every structural question that might arise in connection with factual awareness. The conflict between Awareness Monism and Awareness Pluralism is one that cannot be settled by any of the aforementioned insights pertaining to factual awareness. But one argument against it will emerge from Chapters 8 and 9. The theories of knowledge and factual awareness given in those chapters constitute a version of (thin) Awareness Monism. If they are correct and able to explain all the

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\(^{55}\) Awareness Pluralists will not be able to use my stipulative definition of factual awareness* without further qualification as the notion of ‘suitably non-accidental’ is specified in relation to the non-accidentality requirement on knowledge. As Awareness Pluralism is not defended in this book this wrinkle can be set aside. Also note that this is only a wrinkle for Awareness Pluralists who do not want to rely on ordinary judgments about factual awareness from Chapter 4.
desiderata laid out in Chapter 8, this would provide non-trivial support for (thin) Awareness Monism.

5.5 Awareness Monism: Thick vs. Thin

According to Awareness Monism, the relevant non-accidentality relation required for factual awareness is also a non-accidentality relation required for knowledge. But some views of knowledge have thicker non-accidentality requirements than others. Consider the overlapping regions in the diagram above (regions 1, 3, 4, and 6). Each overlapping region represents a view on which factual awareness has at least two non-accidentality requirements. In the center, region 4, we have a category that imposes at least three non-accidentality requirements on factual awareness.\(^{56}\)

The claim of Awareness Monism is just that knowledge and factual awareness share a non-accidenality requirement, not that they share every non-accidentality requirement. Accordingly, we can distinguish between at least two kinds of awareness monism:

**Thick Awareness Monism.** Knowledge and factual awareness share every non-accidentality requirement.

**Thin Awareness Monism.** Knowledge and factual awareness share some, but not all, non-accidentality requirements.

For example, some safety theorists have claimed that an advantage of safety requirements on knowledge is that they entail reliability theses of some sort. Part of being safe is being reliably formed.\(^{57}\) So safety requirements are a kind of thick non-accidentality requirement since reliability does not imply safety. Thus monists who are safety theorists can opt between two accounts of factual awareness. First, they can adopt:

**Safe Awareness.** Necessarily, \(S\) is aware of the fact that \(p\) iff \(S\)'s true representation that \(p\) is reliably formed and could not have easily been false.

This is a version of thick monism since it and a safety-theoretic account of knowledge imply that factual awareness and knowledge share every non-accidentality requirement, i.e. a safety requirement. But safety theorists could walk this back, arguing that factual awareness is less demanding, requiring only reliability:

**Reliable Awareness.** Necessarily, \(S\) is aware that \(p\) iff \(S\)'s true representation that \(p\) is reliably formed.

\(^{56}\) At least three non-accidentality requirements are imposed in region 4 as there might be combinations of anti-luck principles imposed on knowledge. While Nozick’s (1981) tracking theory doesn’t fall into region 4, it is a theory on which two distinct anti-luck conditions are imposed (sensitivity and adherence).

\(^{57}\) Sosa (1999: 149) and Williamson (2009).
This is still a form of Awareness Monism since being reliable is part of being safe. But it is not a
thick form of monism because this non-accidentality requirement for factual awareness is less
demanding than the non-accidentality requirement on knowledge.

One motivation for adopting a thin form of monism stems from cases of environmental
luck. Take our toy fake barn case. In such cases there is an inclination to say that agents don’t know
that a barn is nearby despite looking directly at a barn in good visual conditions. Yet the very fact
that they are looking at a barn in good visual conditions and form a belief that a barn is nearby
from an exercise of their ability to identify barns suggests that they are aware of the fact that the
object they’re looking at is a barn. Thin monists can explain this. We’ve already seen an argument for
this in Chapter 4 and we’ll see further support for such a view in Chapters 6 and 8.

5.6 Awareness vs. Being in a Position to Know vs.
Being Capable of Knowing Truths

Knowledge and factual awareness are alike in being states wherein an agent truly represents the
world. But agents can be aware of facts without knowing them. Cases where agents fail to know for
the sole reason that they fail to believe are cases where agents are, at least often, in a position to know.
This raises a general question about the relation between being in a position to know and factual
awareness. It is a question that comes with a reductive threat: could it be that factual awareness just
is being in a position to know? That question concerns the status of the following claim:

\[(\text{FA=PK}) \text{ For } S \text{ to be aware of the fact that } p \text{ just is for } S \text{ to be in a position to know that } p.\]

To assess the integrity of (FA=PK) we first need to characterize what it is to be in a position to
know.

While explicit characterizations of being in a position to know differ in detail, they tend to
be of a kind. For example, Rosenkranz (2008: 73) writes that one is in a position to know \( p \) just in
case: “\( p \) is true, one possesses a decision procedure for \( p \), such that the enabling conditions for one’s
successful implementation of that procedure are de facto met.” Smithies (2012: 268) writes: “One
is in a position to know a proposition just in case one satisfies all the epistemic, as opposed to
psychological, conditions for knowledge, such as having ungettiered justification to believe a true
proposition.” Lord (2018: 92) writes: “You’re in a position to know \( p \) when all the impersonal
conditions for knowledge are met. The personal conditions are (1) believing \( p \) and (2) believing \( p \)
for the right reasons. The impersonal conditions are just whatever are left over.” Similar
characterizations can be found elsewhere (Neta 2018; Williamson 2000).

These characterizations each seem to imply that being in a position to know requires the
possibility of knowing. This is as it should be. For it is an independently plausible constraint on
being in a position to know. In general, one cannot be in a position to \( F \) if \( F \)-ing is impossible for
one. While there are arguments to be made that the type of possibility should be restricted in some
way, let’s leave it a logical possibility. This gives us the following constraint on being in a position
to know:
(PK→◊K) Necessarily, S is in a position to know that p when impersonal conditions c obtain only if there is a logically possible situation in which: S knows that p and impersonal conditions c obtain.

Following Lord’s lead, ‘personal conditions’ will refer to any condition that is required for either (i) believing that p, or (ii) believing that p for the right reasons, or (iii) any condition needed to ground (i) or (ii). In contrast ‘impersonal conditions’ will refer to any other condition. By limiting the relevant conditions in (PK→◊K) to impersonal conditions we preserve the platitude that one can be in a position to know that p even if one does not believe that p or does not do so for the right reasons.

With this constraint on being in a position to know we can demonstrate the distinctness of factual awareness and being in a position to know. For we have already seen a range of cases of factual awareness that do not satisfy (PK→◊K). Take the self-defeat cases from Chapter 4.3.2. These are cases where the following impersonal conditions obtain: one has recognizably conclusive evidence for p and the following holds: if one believes that p, then p is false. We saw that such conditions were no barrier to being aware of the fact that p. Could one’s factual awareness in such cases be reducible to one being in a position to know? No, since knowing that p when such conditions obtain would require truly believing that p, and there is no logically possible case of self-defeat where one believes that p and p is true. Thus (PK→◊K) is not satisfied. So (FA=PK) is false.

Take the cases of irrational belief from Chapter 4.2.3. These are cases where the following impersonal condition obtains: one has (unwittingly) misleading undercutting information that makes it irrational to believe that p. We saw that such a condition was no barrier to being aware of the fact that p. Could one’s factual awareness in such cases be reducible to one being in a position to know? No. For knowledge that p requires justified (=rational) belief that p (Chapter 6). So these too will be cases where (PK→◊K) is not satisfied. So such cases are also counterexamples to (FA=PK).

Lastly, take the cases of unlucky factual awareness from Chapter 4.2.4 (cf. 9.4.3). These are cases where the following impersonal condition obtains: modal anti-luck principles (e.g. safety) are not satisfied with regard to one’s belief that p. We saw that such a condition was no barrier to being aware of the fact that p. Could one’s factual awareness in such cases be reducible to one being in a position to know? Assuming knowledge requires the satisfaction of modal anti-luck principles (e.g. safety), these will be cases where (PK→◊K) is not satisfied. So here too we have a counterexample to (FA=PK). So factual awareness cannot be reduced to being in a position to know.

Now, take the knowledge-centric concept of being capable of knowing. Williamson (2000: 95) alludes to such a notion when he writes that “To be in a position to know p, it is neither necessary to know p nor sufficient to be physically and psychologically capable of knowing p... being in a position to know, like knowing and unlike being physically and psychologically capable of knowing, is factive...” That knowing and being in a position to know differ from being capable of knowing is obvious from facts about capabilities generally. You may be capable of doing a summersault, but if you are skydiving or sleeping you are neither somersaulting nor are you in a position to do so. To be in a position to do a summersault you must be situated in such a way that you could easily do a summersault.
Could factual awareness be reduced to being capable of knowing? No. As Williamson indicates, being capable of knowing is non-factive while factual awareness is a factive notion. But this could be corrected for with the enriched notion of being capable of knowing \( p \) when \( p \) is true. Furthermore, once factual awareness has been shown to be distinct from being in a position to know it is easy to show that it is distinct from being capable of knowing \( p \) when \( p \) is true. For while being capable of knowing \( p \) when \( p \) is true is unlike being in a position to know in that it doesn’t seem to require the ability to easily know, it remains like being in a position to know in requiring the possibility of knowing. So any case where one is aware of some fact when certain impersonal conditions obtain while it is impossible to know it when those conditions obtain will be a case where one is aware of some fact while one is incapable of knowing it. If there is a way of reducing factual awareness to some knowledge-centric relation, it is unclear what relation that is.\(^{58}\)

\(^{58}\) It may at this point occur to some knowledge-first virtue epistemologists to provide a knowledge-first virtue theory of factual awareness. But the motivations for doing this depend on having sufficient reason to pursue a knowledge-first virtue theory in the first place. Standard motivations for the knowledge-first virtue epistemologies of Kelp (2019) and Miracchi (2015) are explored and undermined in Chapter 9.