How to Do Without Encroachment

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There are two definitions of 'pragmatic encroachment' that are widely accepted in the literature on encroachment. Unfortunately, both definitions are inadequate. If we adopt these definitions, then the claim that knowledge is subject to pragmatic encroachment ends up being entailed by a certain contextualist view of knowledge ascriptions, which I call *shiftable contextualism*. In §§1–3 of this paper, I explain how shiftable contextualists endorse the letter of the claim that knowledge is subject to pragmatic encroachment, while denying the intended substance of this claim.

In the rest of the paper, I defend shiftable contextualism, pointing out several virtues of this view that have so far gone unnoticed. In §4, I argue that shiftable contextualism successfully generates bound readings of certain knowledge ascriptions, where rival views fail to generate these readings. In §§5–6, I argue that shiftable contextualism can account for many of the ordinary language judgments that motivate pragmatic encroachment, while at the same time avoiding counterintuitive verdicts often used to argue against encroachment. Finally, in §§7–9, I show how shiftable contextualists also vindicate the theoretical principles that motivate pragmatic encroachment, such as the principle that rational action must be based on knowledge. With the right sort of contextualist view at hand, we can reject the thesis that knowledge is subject to pragmatic encroachment, while retaining the attractive consequences and applications of this thesis. In short, we can do without encroachment.

1. Thanks to Keith DeRose, Guus Duindam, Jonathan Ichikawa, Ezra Keshet, Ofra Magidor, David Manley, Matt McGrath, Jonathan Schaffer, and Brian Weatherson for helpful discussion. Gabrielle Kerbel and Margot Witte provided invaluable research assistance. Thanks also to audiences at Arizona State, Cornell, Indiana, University of Maryland at College Park, the Michigan Epistemology Work-In-Progress Group, the 2021 New York Philosophy of Language Workshop, Oxford, the 2020 Philosophical Linguistics and Linguistical Philosophy Conference, Princeton, St Andrews, and Syracuse. Thanks especially to Eric Swanson for extensive feedback on earlier drafts.

1 Traditional definitions of 'encroachment'

What is pragmatic encroachment? Among the hundreds of papers written on the subject, there is a striking amount of agreement about how to answer this question. The thesis that knowledge is subject to pragmatic encroachment is commonly defined using a dependence claim that looks something like (1):

(1) Whether someone knows that p can depend on her practical interests.

Here are some representative samples from the literature:

> Whether someone knows that p at a time t depends at least in part upon practical facts.[2]

> Whether someone knows something can depend on actual or perceived practical factors of her situation.[3]

> Whether you know... P depends in part on how much is at stake in your practical situation.[4]

> Whether an agent knows that p can depend on pragmatic factors.[5]

> Whether we know can vary depending on what's at stake in whether the proposition is true.[6]

Some theorists cash out this dependence claim using a more precise definition of encroachment—namely, the negation of a supervenience claim.[7] According to this second definition, knowledge is subject to pragmatic encroachment just in case:

(2) There is a pair of subjects such that one subject knows that p, the other doesn't, and they differ only in their interests.

Again, here are some representative samples:

> There are cases in which two people are similarly situated, but one has knowledge, whereas the other does not, because one has greater practical investment in

2. Stanley 2007, p. 168–9.
3. Schroeder 2012, p. 265.
4. Sosa et al. 2014, p. 84.
5. Ross & Schroeder 2014, p. 259.
6. Fantl & McGrath 2014, p. 88.
7. This second definition is more precise because it clarifies the nature of the dependence mentioned in (1). As the stakes become higher for a subject, she might end up with more knowledge because she gathers more evidence, or she might have less knowledge because she refrains from forming any beliefs at all. These examples do not establish that knowledge depends on interests in the sense intended in (1), since such high-stakes subjects not only have different interests but also different evidence or beliefs. Thanks to an anonymous referee for encouraging me to emphasize this point.

> the truth or falsity of her beliefs.[8]
>
> There exist at least one pair of cases where the only relevant difference between agents in the two cases concerns their interests, but one knows that p and the other does not.[9]
>
> There are cases of knowledge such that if we merely vary a pragmatic factor present in that case, and leave everything else the same (as much as is possible), we can arrive at a case of ignorance.[10]

Both defenders and opponents of encroachment routinely accept definitions of 'pragmatic encroachment' that take the form of (1) or (2) above.[11]

In addition to the thesis that knowledge is subject to pragmatic encroachment, several other encroachment theses have been introduced and debated by epistemologists. Some theorists argue that in addition to making a difference to what you know, your practical interests can make a difference to what you are justified in believing, what it is rational for you to believe, or what is included in your evidence. Others argue that in addition to depending on your practical interests, what you know can also depend on moral features of your situation. In each case, definitions just like (1) and (2) are used to define the key notion of non-epistemic factors encroaching on epistemic states.[12]

2 The problem

Unfortunately, traditional definitions of encroachment face a serious problem.

The problem arises when we consider what definitions (1) and (2) look like from the perspective of an epistemic contextualist. To spell out the problem, we must take a brief detour through some formal semantics. According to contextualists, 'knows' denotes different epistemic relations in different contexts—just as, say, the context-sensitive adjective 'tall' denotes one property as uttered in the context of a basketball game, and another property as uttered in the context of a gymnastics competition where the athletes are considerably shorter. Furthermore, it is a well-known fact that many context-sensitive expressions have bound readings when embedded under

8. Stanley 2005a, p. 2.
9. Weatherson 2011, p. 594.
10. Fantl & McGrath 2011, p. 562.
11. A few theorists accept a stronger definition. According to Ichikawa et al. 2012 and McKenna 2020, for instance, knowledge is subject to pragmatic encroachment just in case whether someone knows that p *constitutively* depends on her practical interests. This modification does not make a difference to my arguments; for relevant discussion, see footnote 24.
12. For parallel definitions of pragmatic encroachment on states other than knowledge, see Fantl & McGrath 2002, p. 68; Ganson 2008, p. 453; and Schroeder 2018, p. 297. For parallel definitions of moral encroachment, see Pace 2011, p. 267, fn. 42; Gardiner 2018, p. 13; Moss 2018a, p. 177; Basu 2019, p. 12; and Bolinger 2020, p. 6.

quantifiers.[13] For example, in addition to using 'tall' to talk about a single standard of height fixed by the context of utterance, speakers can use 'tall' to talk about multiple standards of height in sentences such as (3):

(3) At every high school sports practice, the coaches pay more attention to the tall kids.

This sentence can be true in virtue of the fact that the gymnastics coaches pay more attention to the kids who are tall compared to other gymnasts, while basketball coaches pay more attention to the kids who are tall compared to other basketball players. This is the *bound reading* of (3). On this reading, 'tall' is interpreted relative to a different standard for each sports practice that is being quantified over. For another example, consider the fact that Marie-Sophie Hindermann—at 5 feet 7 inches—was the tallest female gymnast ever to compete in the Olympics. At the same height, Spud Webb was one of the ten shortest basketball players in NBA history. Marie-Sophie was tall, and Spud was short, even though they were the same height. That's because, as we might say,

(4) Whether a 5'7" athlete is tall depends on what sport they play.

The natural reading of (4) is the bound reading, which says roughly that whether a 5'7" athlete is tall by the standards of their sport depends on what sport they play. Similarly, we can say:

(5) Marie-Sophie Hindermann is tall, and Spud Webb isn't, and the only relevant difference between them is in what sport they play.

The natural reading of this sentence is true in virtue of the fact that Marie-Sophie is tall for a gymnast, whereas Spud isn't tall for a basketball player. This is the *sloppy identity* reading of (5), a reading semantically akin to the most natural reading of (6):

(6) John called his mother on Mother's Day, but Bill didn't.

In principle, the second conjunct of (6) could be interpreted as saying that Bill didn't call John's mother. But the more natural interpretation is the sloppy reading, which is true just in case Bill didn't call his own mother. Just as 'his mother' is used to talk about multiple mothers in (6), 'tall' is used to talk about multiple standards of height on the sloppy reading of (5).[14]

Having made these observations, we can now state the problem for traditional definitions of encroachment. Suppose that knowledge ascriptions are context sensi-

13. This observation is originally due to Mitchell 1986. For detailed discussion, see Partee 1989.
14. For more background on the syntax of sentences like (5) and (6), see Ludlow 1989, p. 520ff.

tive, and suppose that 'knows' has the same range of bound and sloppy readings as 'tall' and other similar context-sensitive expressions. For short, call this view *shiftable contextualism* about 'knows'.[15] This view presents a problem for traditional definitions of encroachment, because the shiftable contextualist accepts the letter of these definitions, but she rejects the spirit of the claim that practical interests encroach on knowledge. For instance, recall the first definition of encroachment:

(1) Whether someone knows that p can depend on her practical interests.

The shiftable contextualist says that this sentence has just the same bound reading as the sentence (4) discussed above. We can use (4) to say that whether a 5'7" athlete is tall *by the standards of their sport* depends on what sport they play. According to the shiftable contextualist, we can use (1) in just the same way—namely, to say that whether someone knows that p *by the standards that are practically relevant for them* depends on their interests. Similarly, recall the second definition of encroachment:

(2) There is a pair of subjects such that one subject knows that p, the other doesn't, and they differ only in their interests.

The shiftable contextualist says that this sentence has just the same readings as (5), including a reading on which it is true merely because there is a pair of subjects such that each knows that p by the standards that are practically relevant for them. Hence the shiftable contextualist accepts both traditional definitions of encroachment, interpreting these definitions as expressing contextualist-friendly truths.

Defenders of encroachment may rightly feel that this is an unfair trick. Although the shiftable contextualist accepts (1) and (2), she can still reject the intended substance of the pragmatic encroachment thesis. To see this, just consider the analogous view of 'tall' ascriptions. We have seen that (4) has a true bound reading:

(4) Whether a 5'7" athlete is tall depends on what sport they play.

The bound reading of (4) is a cheap dependence claim. To a very rough approximation, it says that whether you satisfy 'tall' as uttered by your coach depends on what sport you play. By contrast, consider the following sentence:

(7) Whether someone is tall depends on genetic factors.

This sentence expresses a deep dependence claim, a claim about what determines whether you are tall according to a given relevant standard. Defenders of pragmatic encroachment likewise interpret (1) as expressing a deep dependence claim. They say

15. The term 'shiftable contextualism' appears in Ninan 2010, though my use of the term is broader than Ninan's, since my use includes theories that posit hidden variables in the logical form of knowledge ascriptions.

that what you know depends on what practical interests you have, just as it depends on what evidence you have. But the shiftable contextualist can interpret (1) as expressing a cheap dependence claim, so she can accept (1) and nevertheless deny that knowledge deeply depends on practical interests.

To sum up, we have seen that traditional definitions fail to distinguish the true defender of pragmatic encroachment from her contextualist mimic. This observation raises two concerns. First, we need to formulate better definitions of the pragmatic encroachment thesis—that is, definitions that unambiguously capture the spirit of the view. I solve this problem in §3. The second concern is a deeper dialectical worry. Insofar as traditional discussions fail to distinguish genuine pragmatic encroachment from shiftable contextualism, arguments that appear to support the former view may equally support the latter. In the main part of this paper, I argue that shiftable contextualism is indeed supported by arguments that have been taken to motivate pragmatic encroachment—and by a few additional arguments, besides.

3 How to define pragmatic encroachment

We need to define the pragmatic encroachment thesis using sentences that are not straightforwardly embraced by shiftable contextualists. Here are better definitions:

(8) As uttered at a context, 'knows' denotes a relation R such that whether a subject bears R to a proposition can depend on their interests.

(9) As uttered at a context, 'knows' denotes a relation R such that one subject bears R to a proposition p, another doesn't, and they differ only in their interests.

Unlike traditional definitions of encroachment, (8) and (9) cannot be used to state cheap dependence claims. As one might put it, (8) and (9) say that *the knowledge relation itself* can depend on practical interests.[16] There is a certain property that you have when you know that Paris is the capital of France, for instance, and (8) says that whether someone has that very property can depend on their practical interests. This is just the sort of deep dependence claim that defenders of pragmatic encroachment want to uphold.

By contrast, shiftable contextualism does not support (8) or (9). Suppose that as uttered in the context of a basketball practice, 'tall' applies to athletes who are over six feet tall, while in a gymnastics context, 'tall' applies to anyone over five feet tall.

16. A note of clarification: (8) and (9) should be read as claims about what 'knows' typically denotes, rather than claims about what 'knows' denotes at every context. For simplicity, I assume that the context of this paper is typical.

It doesn't follow that as uttered at some particular context, 'tall' denotes a height property such that whether you have that very property depends on what sport you play. In fact, whether you're over five feet tall *doesn't* depend on what sport you play. Similarly, shiftable contextualists about 'knows' may deny that 'knows that Paris is the capital of France' denotes an epistemic property such that whether someone has that very property depends on their practical interests.[17]

It is not entirely surprising that theorists have not bothered to distinguish traditional definitions of encroachment from claims like (8) and (9). Generally speaking, defenders of pragmatic encroachment are interest-relative *invariantists*; that is, they deny that 'knowledge' is context sensitive. If invariantism is true, then shiftable contextualism is false, which means that (1) and (2) do not have bound readings, and so they do not have readings on which they express cheap dependence claims. Hence defenders of encroachment generally take it for granted that (1) and (2) must express deep dependence claims, which alleviates the need to introduce more explicit definitions such as (8) and (9).

Likewise, some *opponents* of encroachment believe that (1) and (2) can only express deep dependence claims. In particular, some contextualist opponents of encroachment reject shiftable contextualism in favor of an *indexical contextualist* view of knowledge ascriptions. To spell out the difference between these views, it is helpful to take a step back and observe that not all context-sensitive expressions exhibit shiftable context sensitivity. For example, both 'local' and 'here' are context-sensitive expressions, referring to different locations in different contexts. But these expressions do not exhibit the same behavior in the following sentences:

(10) When we move to the East Village, there will be more local sushi bars.

(11) When we move to the East Village, there will be more sushi bars here.

In (10), 'local' is naturally interpreted as referring to the East Village, whereas in (11), 'here' must refer to the speaker's location. In short, 'local' exhibits shiftable context sensitivity, whereas 'here' is a *pure indexical* in the sense of Kaplan 1989. Shiftable contextualists say that 'knows' gives rise to the same range of readings as 'local', whereas indexical contextualists say that 'knows' behaves more like 'here'. Especially in early discussions of contextualism, a number of contextualists seem drawn to the latter view. As Stanley 2000 observes, "According to leading proponents of contextualism, it is important to the doctrine... that the word 'know' is an indexical, rather

17. The point of my discussion here is that 'knows' and 'tall' are both shiftable context-sensitive expressions and that we can use the latter to help us understand the former. This does not mean that 'knows' and 'tall' are alike in all semantic respects. For a detailed discussion of differences between these expressions, see Stanley 2004, Partee 2004, and Schaffer & Szabó 2014.

than a non-indexical expression correlated with a variable in logical form that can be bound by a quantified expression" (430).[18] Indexical contextualists deny that (1) and (2) have bound and sloppy readings. Just like interest-relative invariantists, indexical contextualists maintain that these traditional definitions of encroachment can only be interpreted as expressing deep dependence claims.

To sum up, shiftable contextualists are unique in holding the view that (1) and (2) can be interpreted as expressing cheap dependence claims, propositions which are not equivalent to the claims expressed by (8) and (9). This view opens up a theoretical possibility: The shiftable contextualist can accept the cheap dependence claims expressed by (1) and (2), while rejecting the deep dependence claims expressed by (8) and (9). In the rest of this paper, I argue that this theoretical possibility is not merely an abstract position in logical space. In fact, it is exactly the right view of knowledge ascriptions and pragmatic encroachment.[19]

4 Arguments for shiftable contextualism inspired by work on gradable adjectives

According to semantic orthodoxy, 'tall' is context sensitive, denoting different properties in different contexts. In principle, there is another view that one could take—namely, that 'tall' denotes the same property in all contexts, and that whether an athlete has this property depends on what sport they play. In other words, one might argue that 'tall' invariantly applies to gymnasts who are tall relative to other gymnasts, basketball players who are tall relative to other basketball players, and so on. Let's call this the *sports-relative invariantist* account of tallness ascriptions.

The debate between contextualism and sports-relative invariantism is not a merely hypothetical debate. Both views have been explored in the literature on gradable adjectives, with some theorists defending a shiftable contextualist view of 'tall' and others defending sports-relative invariantism. When it comes to tallness ascriptions,

18. For indexical contextualist views, see Goldman 1976, p. 777; DeRose 1992, p. 925; Heller 1999, p. 120ff.; Blome-Tillmann 2014, p. 131ff.; and literature cited in §2.1 of Schaffer & Szabó 2014. Some contextualists resist shiftable contextualism because they want to explain the infelicity of *abominable conjunctions*, sentences like 'Hannah knows her car is parked outside, but she doesn't know it wasn't stolen'. Indexical contextualists appear to have a simple explanation of why this sentence sounds bad—namely, that 'knows' must denote the same relation throughout. For more on this argument, see Davis 2007, p. 399 and Blome-Tillmann 2017, p. 354–56. For a compelling alternative account of abominable conjunctions, see Ichikawa 2011, p. 391–92; Dretske 2014, p. 32; and Ichikawa 2017a, p. 38–40.

19. Stanley 2000 objects to indexical contextualism on the grounds that "the vast number of cases of uncontroversial context-dependence do not involve indexicality, narrowly construed" (431), whereas my paper develops more direct arguments against indexical contextualism. In recent years, more contextualists have expressed sympathy for shiftable contextualist views; see §2.2 of Blome-Tillmann 2022 for references. For my fellow shiftable contextualists, the most significant upshots of this paper appear in §§4.2, 5, and 7, where I argue that accepting shiftable contextualism undermines the arguments that are commonly used to motivate pragmatic encroachment, and in §9, where I argue that nothing much hangs on the question of whether knowledge is subject to pragmatic encroachment.

there are arguments that settle this debate in favor of shiftable contextualism. In this section, I lay out these arguments against the sports-relative invariantist view of 'tall'. Then I construct analogous arguments against the interest-relative invariantist view of 'knows'.

4.1 Arguments against sports-relative invariantism

At a first pass, the sports-relative invariantist says that 'tall' applies to an athlete just in case they are tall by the standards of their sport. But this can't be the final story, because some individuals play multiple sports.[20] Consider the following example:

> *All-Around Athlete:* Bo is a member of two sports teams at Community High, the gymnastics team and the basketball team. Bo is tall for a gymnast but short for a basketball player.

Intuitively, both of the following are true:

(12) *As uttered by his coach at morning gymnastics practice:* Bo is tall.

(13) *As uttered by his coach at afternoon basketball practice:* Bo is not tall.

In order to predict both of these judgments, the sports-relative invariantist must say that being tall is a temporary intrinsic property. Bo has this property in the morning but not in the afternoon, and that's why (12) and (13) are each true when they are uttered. On this view, 'tall' denotes the same property as uttered in any context. But this property is sports relative, in the sense that whether Bo has it at a given time depends on what sport he happens to be playing at that time. More generally, 'tall' applies to an individual at a time just in case they are tall by the standard that is relevant for them at that time.

Unfortunately, sports-relative invariantism fails to account for the full range of our ordinary language judgments about tallness ascriptions. For starters, suppose that you accept the sports-relative view of tallness because you want to predict that Bo's coaches each speak truly when they utter (12) and (13) at their respective sports practices. Then you would likely also want to predict that the coaches each speak truly when they talk about Bo later in the day—say, in the context of a dinner conversation with their spouses:

(14) *As uttered by the gymnastics coach at 6:00 in the evening:* Bo is tall.

(15) *As uttered by the basketball coach at 6:00 in the evening:* Bo is not tall.

20. This objection to invariantism is originally due to Stanley 2005b. Jason Stanley calls it the *Bo Jackson problem*, after the American athlete Bo Jackson, who played baseball for the Kansas City Royals and football for the Los Angeles Raiders, eventually becoming an All-Star athlete in both sports.

However, simply treating tallness as a temporary intrinsic property does not secure this result. Whatever property 'tall' denotes, either Bo has this property at 6:00 or he doesn't, so one of the coaches must be speaking falsely.

In addition, Stanley 2005b points out that sports-relative invariantism fails to predict our judgments about certain quantified tallness ascriptions. Let's add a few more details to our example:

> *All-Around Athlete, Cont'd:* At Community High, a lot of the students on the gymnastics team are unusually short, even for gymnasts. In fact, Bo is the only tall gymnast on the team. In addition, there is exactly one tall basketball player on the school's basketball team—namely, Bo's friend Yao, who happens to be several inches taller than Bo.

In the context of this example, the following sentence could turn out to be true:

(16) Every sports team at Community High has exactly one tall member.

The sports-relative invariantist fails to predict this result. The invariantist claims that 'tall' denotes just one property in (16). If Bo has this property, then at least two basketball players have it, and if Bo lacks this property, then no gymnast has it. Either way, (16) will come out false. The indexical contextualist about 'tall' faces just the same problem. Like the invariantist, the indexical contextualist claims that 'tall' denotes just one property in (16). But (16) is true only because Bo has one height property and lacks another—that is, because he is tall for a gymnast and short for a basketball player.

By contrast, the shiftable contextualist view of 'tall' has no trouble predicting our judgments about (14)–(16). For starters, the shiftable contextualist will distinguish the context in which the gymnastics coach utters (14) from the context in which the basketball coach utters (15), so she can say that 'tall' has different extensions in these contexts, which is why (14) and (15) can both be true. In addition, the shiftable contextualist can account for the true reading of (16)—namely, because she can say that 'tall' has a bound reading in this sentence, where the relevant standards for tallness correspond to the different sports teams that are being quantified over.

4.2 Arguments against interest-relative invariantism

Turning back to the semantics of knowledge ascriptions, we can replay much of the foregoing dialectic between invariantist and contextualist views. At a first pass, the interest-relative invariantist view of knowledge ascriptions says that 'knows that p' applies to a subject just in case she knows that p by the standard that is practically relevant for her. But this can't be the final story, because a subject might have multiple

practical interests, and she might know something by the standard that is relevant for one of her interests but not another. Here is an example:

> *Blood Type:* Jones is getting a vaccine at a local hospital. While she is waiting for the vaccine, her intake nurse says, "By the way, the Red Cross is running a blood drive in the hospital lobby today. Do you happen to know your blood type? They're in urgent need of type O donors." Jones says, "As it happens, I recently bought a blood typing kit from Walgreens and found out that I have type O blood! I'll be sure to drop by the blood drive before I leave."
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> A few minutes later, Jones meets the doctor in charge of administering her vaccine. There are two versions of the vaccine available. The first is suitable only for patients with type O blood, as it causes kidney damage in patients with other blood types. The second vaccine is suitable for all patients, but unfortunately, it's very expensive. The hospital has just run out of blood typing kits. The doctor overhears Jones tell her nurse about the results of her home blood test. But the doctor doesn't want to risk causing Jones kidney damage, so he decides to give her the expensive vaccine.

This example has the same structure as *All-Around Athlete*, with healthcare providers in place of the coaches. Jones knows her blood type well enough when it comes to deciding whether to give blood before leaving the hospital, but not when it comes to determining which vaccine she should get. Intuitively, both of the following are true:

(17) *As uttered by the nurse:* Jones knows her blood type.

(18) *As uttered by the doctor:* Jones doesn't know her blood type.

In order to account for both of these judgments, the invariantist must say that knowing your blood type is a temporary intrinsic property, a property that you can gain and lose depending on your interests. Jones has this property when interacting with the nurse but not when interacting with the doctor, and that's why (17) and (18) are each true when they are uttered. On this view, 'knows' denotes the same relation as uttered in any context. When the doctor is deciding which vaccine to administer, Jones has different interests, and that's why Jones no longer knows that she has type O blood.

Unfortunately, interest-relative invariantism fails to account for the full range of our ordinary language judgments about knowledge ascriptions. For starters, suppose that you accept that knowledge is interest relative because you want to predict the intuitive judgment that the nurse and the doctor each speak truly when they utter (17) and (18). Then you would likely also want to predict that the nurse and the doctor each speak truly even if they happen to be speaking simultaneously—say, as they are recording notes during their respective lunch breaks:

(19) *As uttered by the nurse at noon:* Jones knows her blood type.

(20) *As uttered by the doctor at noon:* Jones doesn't know her blood type.

The interest-relative invariantist fails to predict this judgment. Whatever property 'knows her blood type' invariantly denotes, either Jones has this property at noon or she doesn't, so either the nurse or the doctor must be speaking falsely.[21]

In addition, interest-relative invariantism fails to predict our judgments about certain quantified ascriptions. Let's add a few more details to our example:

> *Blood Type, Cont'd:* The nurse has several other patients besides Jones, none of whom know anything about their blood type. Thinking of Jones, the nurse complains, "Only one of my patients knows their blood type." The doctor has only one other patient besides Jones. Fortunately, that patient just had a successful blood transfusion, so she knows her blood type for sure. Thinking of this patient, the doctor complains, "Only one of my patients knows their blood type."
>
> As it happens, the nurse and the doctor make these complaints to the same person, the hospital staff psychologist. The psychologist is conducting a study about the occupational stress suffered by nurses and doctors at the hospital. She suspects that healthcare providers suffer more stress when their patients are ignorant of basic medical facts, such as their blood type.

In the context of this example, the staff psychologist could truly report:

(21) Today, every caregiver has exactly one patient who knows their blood type.

The interest-relative invariantist fails to predict this result. The invariantist claims that 'knows their blood type' denotes a single property in the context of (21). If Jones has this property, then two of the doctor's patients have it. If Jones lacks this property, then none of the nurse's patients have it. Either way, (21) will come out false. The indexical contextualist about 'knows' faces just the same problem. Like the invariantist, the indexical contextualist denies that 'knows' has a bound reading in (21), a reading on which it is used to talk about multiple epistemic relations at once. But (21) is true because Jones has one epistemic property and lacks another—that is, because she knows her blood type well enough for the purpose of deciding to give blood before leaving the hospital, but not for the purpose of getting the less expensive vaccine.

By contrast, the shiftable contextualist has no trouble predicting our judgments about (19)–(21). For starters, the shiftable contextualist will distinguish the context in which the nurse utters (19) from the context in which the doctor utters (20), so she can say that 'knows' denotes different relations in these contexts, which is why (19) and (20) can both be true. In addition, the shiftable contextualist can account for the true reading of (21)—namely, because she can say that 'knows' has a bound reading in this

21. This challenge for interest-relative invariantism is the same as the challenge raised by the case of Thelma and Louise described on p. 5 of DeRose 2009. For further discussion, see DeRose 2009, §§7.2–7.4.

sentence, where the relevant standards for knowledge correspond to the caregivers being quantified over.

What's the upshot of these arguments for debates about pragmatic encroachment? The judgments in this section can't be explained by interest-relative invariantists; only the shiftable contextualist can account for them. However, these judgments do not disprove the pragmatic encroachment thesis. For all I have said so far, it might be the case that shiftable contextualism is true and also that the knowledge relation itself is subject to encroachment. (Similarly, a shiftable contextualist semantics for 'tall' doesn't rule out the possibility that playing basketball really does affect how tall you are.) That being said, the foregoing arguments put significant pressure on defenders of encroachment. Pragmatic encroachment is motivated in part by its alleged usefulness in explaining data like (17) and (18); for instance, many defenders of encroachment would say that (18) is true because Jones stops knowing that she has type O blood when her practical interests come to include the question of which vaccine to get. Once we endorse shiftable contextualism, we have a ready explanation of these data, whether or not knowledge is subject to encroachment. Hence, although the arguments of this section do not disprove the pragmatic encroachment thesis, they do undermine one motivation for accepting it.

5 A shiftable contextualist response to the argument from cases

As discussed in §2, sentences like (5) have sloppy readings, where 'tall' is used to talk about multiple standards in a single sentence:

(5) Marie-Sophie Hindermann is tall, and Spud Webb isn't, and the only relevant difference between them is in what sport they play.

Here's an important fact about the pragmatics of shiftable context-sensitive expressions: Even when our semantics generates a sloppy reading for a given sentence, it may be hard to hear this reading in some contexts. For example, consider the following sentence:

(22) This person is tall, and that person isn't, and they're the same height.

When uttered out of the blue, (22) may sound odd, since we are inclined to interpret 'tall' relative to the same standard for both people mentioned in the sentence. There is no semantic restriction that forbids 'tall' from being interpreted relative to one standard for the first person and another standard for the second. It's just that it's hard to hear any such reading of (22) in the absence of contextual cues that identify different standards of tallness as relevant for these subjects. Once we fill in more

details—for instance, by explaining that the first person is a gymnast and the second is a basketball player—it can be easier to hear the sloppy reading of (22).

If shiftable contextualist about 'knows' is correct, we should expect to find a similar variation in our interpretation of knowledge ascriptions. And indeed, this is just what we find. Suppose that Ankita and Bojan are reading a philosophy paper, and they both believe that the paper is free of typos. Consider the following sentence:

(23) Ankita knows that the paper is free of typos, and Bojan doesn't, and their beliefs are based on exactly the same evidence.

When uttered out of the blue, (23) may sound odd. However, just as (22) can sound better in a context where multiple standards of tallness are salient, (23) can sound better in a context where multiple epistemic standards are salient. For instance, consider the following example, adapted from Pinillos 2012:

> *Proofreading:* As a matter of coincidence, Ankita and Bojan have independently written word-for-word identical papers for their freshman philosophy class. They have each checked their paper for typos in just the same way. It makes no difference to Ankita whether she hands in a paper that has a typo in it. But it makes a big difference to Bojan; handing in a paper with a typo might cause Bojan to lose his college scholarship. As it happens, their papers do not contain typos.

In the context of this example, it is easier to hear a true reading of (23). Weatherson 2017 brings out this reading by observing that Ankita can act on her belief that the paper is free of typos, while Bojan can't: "Ankita knows she has no typos in her paper, and should turn it in, while Bojan does not know this, and should do a third (and perhaps fourth or fifth) check" (241).

Judgments like the true reading of (23) are often used to motivate pragmatic encroachment. As Reed 2014 observes, "Perhaps the most common way of defending pragmatic encroachment involves comparing two subjects who are identical in all truth-directed ways but differ in their practical situations" (98). Weatherson spells out the argument as follows:

> Contextualists have a hard time explaining [why] in this very context I can say 'Ankita knows her paper has no typos, but Bojan does not know his paper has no typos'. If the intuition is right, it seems to support interest-relativity, since the difference in practical situation between Ankita and Bojan seems best placed to explain their epistemic difference. That's the argument from cases. (241)

According to many defenders of encroachment, ordinary speakers are happy to assert sentences like (23) when provided with enough background context, and these ordinary judgments support the pragmatic encroachment thesis.[22]

22. There is a substantial empirical literature assessing folk judgments about subjects like Ankita and Bojan. Sripada & Stanley 2012 argue that several studies support the pragmatic encroachment thesis; for an opposing viewpoint, see Buckwalter & Schaffer 2015.

The assertability of (23) does indeed make trouble for any indexical contextualist who rejects pragmatic encroachment. The indexical contextualist denies that 'knows' can be interpreted relative to different standards for Ankita and Bojan in (23), which means that this sentence can be true only if knowledge is subject to pragmatic encroachment. However, shiftable contextualism can predict that (23) sounds fine, whether or not knowledge is subject to encroachment. In fact, shiftable contextualism provides an appropriately nuanced account of our judgments about sentences like (23). A key fact about these sentences is that they sound significantly better in contexts in which multiple epistemic standards are salient, and shiftable contextualists have a ready explanation for this fact. Just as it is easier to hear sloppy readings of 'tall' in (22) when multiple standards of height are salient, it is easier to hear sloppy readings of 'knows' in (23) in contexts where multiple epistemic standards are salient. As it happens, these are just the sorts of contexts that are often described at length by defenders of pragmatic encroachment, which means that in the context of the examples used to spell out the argument from cases, sloppy readings of knowledge ascriptions will be readily available. But the sloppy reading of (23) can be true, even if there is no single relation denoted by 'knows' such that Ankita bears that relation to the proposition that the paper has no typos, but Bojan doesn't. Hence the argument from cases does not provide us with compelling evidence that the knowledge relation itself is subject to encroachment.

6 A diagnostic test supporting shiftable contextualism

As we have seen, defenders of encroachment and shiftable contextualists both accept (1), but they interpret this sentence in different ways:

(1) Whether someone knows that *p* can depend on her practical interests.

Defenders of encroachment interpret (1) as expressing a deep dependence claim, comparable to the following:

(24) Whether someone is tall depends on genetic factors.

(25) Whether your batter is smooth depends on whether you stirred it for just a few seconds or for a full minute.

(26) Whether your hands are clean depends on whether you washed them after using the bathroom.

Meanwhile, shiftable contextualists interpret (1) as expressing a cheap dependence claim, comparable to the following:

(4) Whether a 5′7″ athlete is tall depends on what sport they play.

(27) Whether your batter is smooth depends on whether it's going to be used for crepes or for pancakes.[23]

(28) Whether the surgeon's hands are clean depends on whether she is merely conducting a skin exam or getting ready to perform a major surgery.

This difference raises an interesting question: Are there any diagnostic tests that could provide us with evidence that (1) expresses a cheap dependence claim?[24]

As it happens, the foregoing cheap dependence claims do have one striking feature in common—namely, it sounds odd to state their consequences using change-of-state sentences. For instance, the following sentences are infelicitous:

(29) ??Spud Webb became tall when he quit basketball and took up gymnastics.

(30) ??The batter stopped being lumpy when you decided to use it for pancakes instead of crepes.

(31) ??The surgeon's hands were dirty until her scheduled operation was cancelled.

These sentences correspond to the cheap dependence claims stated above, and they all sound significantly less natural than those dependence claims. By contrast, consider the following change-of-state sentences:

(32) Mabel became short as a result of developing severe osteoarthritis.

23. The adjective 'smooth' is often used with stricter standards when making crepe batter. As the *Joy of Cooking* explains, "Unlike pancakes, crêpes require a very smooth batter, which is most easily achieved in a blender" (Rombauer et al. 2019, 645).

24. At first glance, one might be tempted to understand my distinction between cheap and deep dependence claims in terms of other more familiar kinds of dependence. For instance, one might conjecture that deep dependence involves causal dependence, that cheap dependence claims are essentially about language, or that any constitutive dependence claim is necessarily a deep dependence claim. To clarify the distinction, I should mention that some non-causal dependence claims are deep dependence claims:

(47) Whether an integer is prime depends on how many factors it has.

There are cheap dependence claims that are not essentially about language:

(48) Whether the restaurant is on the left depends on which direction you are facing.

And there are cheap dependence claims that concern constitutive dependence:

(49) Whether that player is a teammate depends on whether she is on the same team as you.

Strictly speaking, the relevant distinction between cheap and deep dependence is a distinction between readings of sentences. The natural readings of (48) and (49) are cheap dependence claims because 'left' and 'teammate' mean something like 'left of you' and 'teammate of yours' respectively. By contrast, 'prime' in (47) does not have any implicit argument that gets its value from a linguistic antecedent. Similarly, (24)–(26) make deep dependence claims because the implicit arguments of 'tall', 'smooth', and 'clean' are determined referentially, rather than by an antecedent or a variable assignment function.

(33) The batter stopped being lumpy when you stirred it for a full minute.

(34) Your hands were dirty until you washed them with soap.

These sentences correspond to the deep dependence claims stated above, and they all sound fine. The underlying explanation for this contrast is that we naturally interpret the change-of-state sentences (29)–(31) relative to a single standard fixed by context. This interpretation matches our natural interpretation of deep dependence claims, but it does not match our natural interpretation of cheap dependence claims, which essentially involve the application of different standards to different subjects. For another example of this mismatch, consider the following sentence:

(35) ??Want to become tall? Start doing gymnastics!

This advice sounds like a joke. (35) could be used to convey a certain truth—namely, that you can come to be *considered tall* by taking up gymnastics. But this truth is irrelevant to our natural interpretation of (35), which is about how to become tall according to a fixed standard. That's why someone could naturally reply, "Look, if you want to become tall, you have to eat your vegetables, and take your vitamins, and stuff like that. You can't become tall just by taking up gymnastics!"

Having made these observations, we can return to our initial claim of interest:

(1) Whether someone knows that *p* can depend on her practical interests.

As we assess whether (1) states a cheap dependence claim, we can ask whether corresponding change-of-state claims sound significantly worse than (1) itself. And indeed, this is just what we find. It does sound odd to say that you can gain or lose knowledge merely because your interests change. Even diehard defenders of pragmatic encroachment admit that the relevant change-of-state sentences sound counterintuitive:

> Knowledge can be lost or gained by gaining or losing information—by acquiring new evidence or forgetting old evidence. But you can't lose knowledge, it might seem, by changing what you care about, your available options, or the expected costs and benefits of acting in various ways.[25]

This is a recurring theme in the literature on pragmatic encroachment. Although defenders of encroachment sometimes argue that dependence claims like (1) sound fine, their opponents often underscore the fact that the corresponding change-of-state claims sound counterintuitive. Here are several examples of this argument in action:

> It seems absurd to suppose that a thinker can acquire knowledge without further

25. Fantl & McGrath 2014, p. 89.

> investigation simply because his practical interests happen to change so as to reduce the importance of the matter at hand.[26]
>
> [Pragmatic encroachment] allows knowledge to come and go in counterintuitive ways. We would not have thought that what we know can change simply because we have been offered a bet.[27]
>
> Hannah starts out *not knowing* that the bank will be open on Saturday. Yet the IRI account must say that Hannah *comes to know* that the bank will be open when she strikes it rich. . . it is no longer a serious practical question whether the bank is open.[28]
>
> If you don't know whether penguins eat fish, but want to know, you might think. . . you have to gather evidence. [But if pragmatic encroachment] were correct, though, you have another option: You could take a drink.[29]
>
> [T]he crucial point here is the implausibility of the view that a difference in practical interests can bring about a difference in epistemic states.[30]

Hence when it comes to change-of-state sentences, (1) resembles the cheap dependence claims stated above. Just as it sounds odd to say that you can become tall by taking up gymnastics, it sounds odd to say:

(36) ??If you drink enough beer, you can come to know that penguins eat fish.

(37) ??Hannah lost knowledge when her sister drained her bank account.

(38) ??Hannah came to know the bank was open by paying off her mortgage.

This is an uncomfortable result for defenders of pragmatic encroachment. If knowledge is subject to encroachment, then what Hannah knows deeply depends on her practical interests, just as it deeply depends on how much evidence she has. And yet, it sounds fine to say that Hannah can come to know that the bank is open by acquiring more evidence, while it sounds counterintuitive to say that she can come to know it by paying off her mortgage.[31]

By contrast, the shiftable contextualist view of 'knows' can easily explain why (36)–(38) sound bad. For shiftable contextualists, these sentences are comparable to

26. Wright 2017, p. 21.
27. Cohen 2019, p. 103.
28. Russell & Doris 2008, p. 433.
29. Cappelen & Lepore 2006, p. 1044–5.
30. Blome-Tillmann 2009, p. 325.
31. There are plenty of sentences in which implicit arguments of expressions like 'local' have shifted interpretations under change-of-state verbs, and our semantics for these expressions should allow for such readings. The infelicitous sentences (29)–(31) may or may not have true readings that are hard to hear for pragmatic reasons, much like the sentence (22) discussed in §5. For present purposes, we do not need to settle this question. The point of the present discussion is that (29)–(31) sound bad because we interpret them as talking about changes in whether a particular standard is met, and that (36)–(39) exhibit a similar infelicity.

the infelicitous sentences (29)–(31):

(29) ??Spud Webb became tall when he quit basketball and took up gymnastics.

(30) ??The batter stopped being lumpy when you decided to use it for pancakes instead of crepes.

(31) ??The surgeon's hands were dirty until her scheduled operation was cancelled.

Similarly, (39) is comparable to (35):

(39) ??Want to know that penguins eat fish? Start drinking beer!

(35) ??Want to be tall? Start doing gymnastics!

We naturally interpret these sentences as talking about changes in whether a particular fixed standard is met. As shiftable contextualists, we can conclude that there is a mismatch between (36)–(39) and the corresponding claim about knowledge depending on interests. Sentences like (36)–(39) sound bad because they reflect relations of deep dependence, whereas (1) merely expresses a cheap dependence claim.

To briefly recap the previous two sections, we saw in §5 that shiftable contextualism can account for ordinary language judgments that are used to motivate pragmatic encroachment, such as the assertability of (23):

(23) Ankita knows that the paper is free of typos, and Bojan doesn't, and their beliefs are based on exactly the same evidence.

At the same time, shiftable contextualism can account for judgments that are used to challenge pragmatic encroachment, such as the infelicity of (39):

(39) ??Want to know that penguins eat fish? Start drinking beer!

Of course, diehard fans of indexical contextualism might insist that (23) sounds bad to them, resisting any view that predicts otherwise. Diehard fans of encroachment might insist that (39) sounds good. By accommodating the intuitive judgments that are commonly offered in support of each side of this debate, shiftable contextualism will lose the support of extremists. The arguments of this paper are addressed to the moderate middle. For any theorist who can appreciate the intuitions that have motivated pragmatic encroachment while also appreciating those that have motivated indexical contextualism, it is attractive that shiftable contextualism can successfully account for intuitions of both sorts.

7 A shiftable contextualist response to the argument from principles

There are two arguments commonly used to motivate the thesis that knowledge is subject to encroachment.[32] The first is the argument from cases discussed in §5. As we have seen, the argument from cases does not actually support the pragmatic encroachment thesis, since shiftable contextualists can account for the relevant data without accepting encroachment. The second common argument for encroachment is the *argument from principles*. In this section, I'll describe this argument and then explain why it also fails to support the thesis that knowledge is subject to encroachment.

The argument from principles doesn't rely on ordinary judgments about knowledge ascriptions, but rather on the general idea that knowledge plays an important role in guiding rational decision-making. There are many ways to make this idea more precise. For present purposes, we can work with the following principle:

Sufficiency If S knows that p, then S can rationally take p as given in practical deliberation.

A number of epistemologists defend some principle in the neighborhood of *Sufficiency*.[33] At first glance, the principle seems intuitive enough. What's the point of having knowledge, if you can't rely on it when deciding what to do? However, *Sufficiency* seems to yield counterintuitive verdicts about some decision situations. Here is an example from Weatherson 2017:

> *Blue Ticket*: Chika looked at the baseball scores last night before going to bed and saw that the Red Sox won. She remembers this when she wakes up, though she knows that she does sometimes misremember baseball scores. She is then faced with the following choice: take the red ticket, which she knows pays $1 if the Red Sox won last night, and nothing otherwise or the blue ticket, which she knows pays $1 iff 2+2=4, and nothing otherwise. (242)

According to Weatherson, it is obvious that Chika is rationally required to take the blue ticket. But now we have a puzzle, since this intuitive verdict appears to conflict with *Sufficiency*. Suppose that Chika knows that the Red Sox won last night. Then according to *Sufficiency*, she can rationally take it as given that the Red Sox won when deciding whether to take the red or blue ticket. But if Chika takes it as given that the Red Sox won, then the red ticket is worth just as much to her as the blue ticket—namely, $1. Hence according to *Sufficiency*, Chika should be rationally permitted to take either ticket, not required to take the blue one.

32. This taxonomy of the main arguments for encroachment is endorsed by Weatherson 2017, p. 241; Roeber 2018, p. 171; and Blome-Tillmann 2022, p. 111; among others.
33. See for instance Hyman 1999, p. 442; Hawthorne 2004, p. 176; Fantl & McGrath 2007, p. 559; and Hawthorne & Stanley 2008, p. 578; as well as additional references cited in §1 of Heil et al. 2022.

As Weatherson sees it, we should accept *Sufficiency*, and we should also stand by the intuitive verdict that Chika is rationally required to take the blue ticket. There is only one way left out of our puzzle. We must deny that Chika knows that the Red Sox won when she is deciding which ticket to take. Perhaps Chika knew that the Red Sox won before she went to bed. But when she faces the choice between the tickets, her practical interests change, and she doesn't know that the Red Sox won. Hence what Chika knows depends on her practical interests. Knowledge is subject to pragmatic encroachment.

Almost every defender of encroachment endorses some version of this argument, starting from some principle to the effect that if you know a fact, then you can rationally depend on it. Although versions of the argument differ in their details, the central upshot remains the same—namely, that if knowledge is not subject to pragmatic encroachment, then principles connecting rational action and knowledge seem to force us to deny ordinary knowledge claims. This argument does not rely on controversial intuitions about knowledge ascriptions. For instance, as developed by Weatherson, the argument relies on *Sufficiency* together with the intuition that Chika is rationally required to take the blue ticket. Since it seems plausible that Chika must take the blue ticket, *Sufficiency* is doing most of the heavy lifting in the argument. Accordingly, most opponents of encroachment reply to the argument by challenging *Sufficiency*, while defenders of encroachment respond by answering these challenges and developing further arguments in favor of *Sufficiency*.[34]

As I see it, we can sidestep debates about *Sufficiency* and other controversial claims about knowledge and rational action. There is a simpler response to the argument from principles. Even if we accept *Sufficiency*, the argument does not actually support the thesis that knowledge is subject to pragmatic encroachment. As we did with the argument from cases in §5, let's consider the argument from the point of view of the shiftable contextualist. As shiftable contextualists, we can agree with Weatherson about several facts: that Chika knew the Red Sox won before she went to bed, that she is rationally required to take the blue ticket when she is deliberating about which ticket to take, and even—let's grant for sake of argument—that she would be rationally permitted to take the red ticket if she knew that the Red Sox won. Both of the following are true:

(40) Before she goes to bed, Chika knows that the Red Sox won.

(41) When she is choosing a ticket, Chika doesn't know the Red Sox won.

34. Arguments against *Sufficiency* are developed by Brown 2008, Reed 2010, Lackey 2010, and Roeber 2018. For responses to these arguments, see chapter 3 of Fantl & McGrath 2009b, Ichikawa 2012, and chapter 5 of Weatherson 2023.

The problem arises at the very last stage of the argument. Although (40) and (41) are both true, we can't conclude that knowledge is subject to encroachment. That is, we can't conclude that 'knows' denotes some knowledge relation *R* such that Chika used to bear *R* to the proposition that the Red Sox won, but she doesn't any more. For all we have argued, 'knows' might denote different relations in (40) and (41), neither of which ceases to hold as a result of the bet.

For epistemic contextualists, this is a perfectly natural solution to our puzzle. To see why, it is helpful to compare *Blue Ticket* with another example:

> *Smooth Batter*: Smith is a line cook at a restaurant that serves pancakes for breakfast and crepes for lunch. To cut costs, the restaurant uses the same batter for both. At breakfast, cooks are supposed to stir the batter until it is smooth enough for pancakes. At lunch, they stir the batter for a minute longer, until it is smooth enough for crepes.
>
> Smith starts her day by mixing up some batter and pouring it on the pancake griddle, turning out perfect pancakes. When the lunch rush starts, she starts pouring her batter on the crepe maker. But she forgets to stir her batter for another minute before pouring it, so her first crepe is totally ruined.

Here are two things that we can say about Smith:

(42) At breakfast, Smith poured smooth batter on the pancake griddle.

(43) At lunch, Smith poured lumpy batter on the crepe maker.

Although both of these sentences are true, it doesn't follow that 'smooth' in (42) denotes a property that Smith's batter loses at the start of the lunch rush. Rather, contextualists about 'smooth' will say that we have one standard of smoothness in mind when we talk about pouring out batter for pancakes, and another standard in mind when we talk about crepes. Smith's batter is always smooth by the former standard and never smooth by the latter standard. Whichever property we have in mind, that property is not subject to "culinary encroachment," as one might put it. In other words, whether some batter has that property doesn't depend on whether it's being used to make pancakes or crepes.

Assuming we adopt a contextualist account of 'smooth', how should we interpret normative principles connecting smoothness and action? For instance, suppose that our restaurant example continues:

> *Smooth Batter, Cont'd*: The head chef at the restaurant has noticed that many of her line cooks are spending too much time stirring their batter, whether it's for pancakes or crepes. She suspects that the cooks are stalling for time because they hate standing at the hot griddles and crepe makers. To address the situation, she calls a meeting with everyone who makes pancakes or crepes at the restaurant.

At the meeting, suppose the head chef issues the following instruction:

Smoothness Norm of Pouring If your batter is smooth, you can pour it out and start cooking with it.

The natural reading of this principle is a bound reading. The head chef is simultaneously talking about the different levels of smoothness that are sufficient for cooks to start pouring out pancake batter and crepe batter. Pancake cooks can pour out their batter if it's smooth by pancake-making standards, and crepe cooks can pour out their batter if it's smooth by crepe-making standards. These standards aren't the same—it takes a lot more stirring to make batter that is smooth enough for crepes!—and hence we arrive at the conclusion that whether you can pour out your batter according to *Smoothness Norm of Pouring* can depend on what food you are making.

This shiftable contextualist account of *Smoothness Norm of Pouring* provides a useful model for how epistemic contextualists can interpret principles connecting knowledge and rational action. Let's return to our main principle of interest:

Sufficiency If S knows that p, then S can rationally take p as given in practical deliberation.

As shiftable contextualists, we can identify the natural reading of *Sufficiency* as a bound reading. On this reading, *Sufficiency* sets out different conditions for taking p as given in different practical situations. For instance, *Sufficiency* says that Chika can take it as given that the Red Sox won when she is making ordinary decisions, such as whether to throw a party to celebrate the win. But *Sufficiency* doesn't entail that Chika can act on her belief when deciding which ticket to take in *Blue Ticket*. In short, whether you can rationally take a belief as given according to *Sufficiency* may depend on what decision you are making.

Shiftable contextualism provides us with an alternative resolution to the puzzle that was supposed to motivate pragmatic encroachment. Just like defenders of encroachment, we can accept *Sufficiency*, and we can agree that *Sufficiency* entails that Chika doesn't know the Red Sox won when deciding which ticket to take. However, it doesn't follow that the knowledge relation itself is subject to encroachment. Chika doesn't lose knowledge when her practical situation changes, just as Smith's batter doesn't gain lumps when she starts using it for crepes. The same general reasoning applies to other principles connecting knowledge and rational action, as well as knowledge norms more generally. As shiftable contextualists, we can accept the bound readings of these principles without accepting the deep dependence reading of the claim that knowledge depends on practical interests. Like the argument from cases, the argument from principles fails to establish that knowledge is subject to

pragmatic encroachment.

8 Answering a worry for contextualist accounts of knowledge norms

In addition to principles connecting knowledge and rational action, there are many other knowledge norms that one might endorse, including knowledge norms of assertion, belief, theoretical reasoning, peer disagreement, blame, and legal findings of civil or criminal liability.[35] A familiar question arises for contextualists who want to endorse these norms: If 'knows' denotes different relations in different contexts, then how should we interpret 'knows' when it appears in any particular knowledge norm? As Alex Worsnip points out in a recent handbook article on contextualism and knowledge norms, it would be odd for the contextualist to say that there's exactly one possible interpretation of 'knows' that makes the knowledge norm come out true:

> Given the diversity of potential semantic values for 'knows', it feels arbitrary to pick one privileged value of 'knows' that plays the crucial role of being necessary (and perhaps sufficient) for assertion; it is not even clear how one would go about specifying such a value. And once one says that one semantic value of 'knows' is privileged in this way, it seems that there will be pressure to say that this is the "core" or "real" sense of 'knows' in a way that undercuts contextualists' pluralism about the range of concepts that 'knows' can express. (Worsnip 2017, 180)

There is a standard contextualist response to this concern. Most epistemic contextualists do not strictly speaking endorse knowledge norms; rather, they endorse meta-linguistic surrogates of these norms. For example, contextualists do not endorse the following knowledge norm of assertion:

(44) S may assert that p only if S knows that p.

Rather, contextualists endorse 'knowledge' norms of assertion, such as the following:

(45) S may assert P in C only if "S knows P" is true at C.[36]

(46) [T]he standards for when one is in a position to warrantedly assert that P are the same as those that constitute a truth condition for "I know that P[.]"[37]

This meta-linguistic approach is commonly taken to be the best contextualist approach to knowledge norms. For instance, Worsnip 2017 remarks, "Contextualists should

35. Benton 2014 provides a detailed survey of the literature on knowledge norms of assertion, belief, reasoning, and disagreement. For discussion of knowledge norms of blame, see §10.5 of Moss 2018b and Kelp 2020. See Moss 2023 for a detailed defense of knowledge norms of civil and criminal liability.
36. Cohen 2004, p. 486
37. DeRose 2002, p. 187. For additional examples, see Benton 2012, p. 30–31; Blome-Tillmann 2013, p. 90; and Blome-Tillmann 2022, p. 97.

accept relativized [i.e., meta-linguistic] versions of knowledge norms if they want to accept knowledge norms at all" (180).

However, the meta-linguistic approach to knowledge norms faces serious challenges. Hawthorne 2004 argues that the meta-linguistic approach incorrectly dismisses simple and intuitive knowledge norms as resting on a sort of use-mention confusion (89). Fantl & McGrath 2009a say that the meta-linguistic approach "seems plainly incorrect: the reader might react differently, but our reaction to this proposal is *it doesn't seem like we're reasoning about 'knowledge' here but about knowledge!*" (51). Weatherson 2023 raises the following objection:

> The most obvious reason to reject this line of reasoning is that it is implausible that meta-linguistic norms like this exist. . . If there were a human language that didn't have a verb for knowledge, then that last point could be made with particular force. What would the contextualists say is the standard for assertion in such a language? (33)

In short, we have compelling reasons to prefer knowledge norms to 'knowledge' norms, so it would indeed be troubling if contextualists were forced to abandon the former in favor of the latter.

Fortunately, shiftable contextualism provides us with a way out of this trouble. As shiftable contextualists, we can endorse bound readings of knowledge norms, thereby obviating the need for meta-linguistic surrogates of these norms. We can agree with Worsnip that there is no privileged value of 'knows' that is necessary for appropriate assertion. Different standards of knowledge are relevant for speakers making different assertions, just as different standards of smoothness are relevant for cooks making different meals. We can also agree with Fantl and McGrath that we are talking about knowledge when we utter knowledge norms, in just the same sense that a head chef is talking about smoothness when she tells her cooks that smooth batter can be poured out and cooked with. There is no use-mention confusion here. When we state knowledge norms, we are using 'knows', not mentioning it.

9 How to do without encroachment

At this point, the reader may be thinking, "Wait a minute. I agree with your theory that 'knows' works like 'smooth'. But why isn't this just an interest-relative theory of knowledge? Whether your batter is smooth depends on what food you're making. Whether your belief is knowledge depends on what decisions you're making. Doesn't this just mean that smoothness and knowledge are both interest-relative in some sense? Maybe we have established that knowledge really is subject to pragmatic encroachment, after all."

To address this point, we should remind ourselves of what is at issue in the pragmatic encroachment debate. At the start of this paper, we observed that contextualists can accept the bound reading of the dependence claim:

(1) Whether someone knows that p can depend on her practical interests.

At the same time, we noted that this seemed like an unfair trick. The shiftable contextualist accepts that 'knows' works like 'tall' and 'smooth', but she doesn't thereby accept that *knowledge itself* is subject to encroachment. She may deny that knowledge is a relation that depends on practical interests, in the same deep sense in which it depends on how much evidence you have. In other words, shiftable contextualists may deny the deep dependence claim that defenders of encroachment express using (1). Accordingly, they may deny the more precise definitions of the pragmatic encroachment thesis stated in §3 of this paper. That's why shiftable contextualism isn't just one way of developing the thesis that knowledge is subject to encroachment.

However, there is something right about the irenic sentiment expressed above. Ultimately, the difference between interest relativism and shiftable contextualism isn't as significant as it may appear at first. In particular, not much hangs on the deep dependence claim endorsed by defenders of encroachment, because many of its important consequences are equally supported by the corresponding cheap dependence claim. Of course, it's still a valid academic question whether knowledge is subject to encroachment. (As I've argued, we don't have much reason to think that it is.) But for many purported applications of encroachment, it doesn't actually matter whether the pragmatic encroachment thesis is true.

So far, I have argued that shiftable contextualists can endorse much of what interest relativists say about hypothetical subjects mentioned in the argument from cases and about theoretical principles connecting knowledge and rational action. In the remainder of this paper, I will describe several practical applications where the pragmatic encroachment thesis has just the same consequences as its contextualist surrogate. The first application is from my own work. In Moss 2021, I argue that pragmatic encroachment has significant consequences for American criminal trial procedure. The main arguments of that paper proceed from the following principle:

Knowledge Norm of Conviction — A defendant is properly convicted only if the factfinder—i.e., the judge or jury—knows that the defendant is guilty.[38]

38. The knowledge norm of conviction follows from my knowledge account of legal proof, according to which a fact F is proved beyond a reasonable doubt just in case the factfinder knows F on the basis of the evidence admitted at trial. For a detailed defense of the knowledge norm of conviction, see Moss 2023.

Suppose that you are serving on a jury in a criminal trial and that you and your fellow jurors believe that the defendant is guilty. According to the knowledge norm of conviction, whether you can properly convict the defendant depends on whether your belief constitutes knowledge. Assume for sake of argument that knowledge is subject to pragmatic encroachment. Then whether you know that the defendant is guilty can depend on the practical consequences of your belief—such as, for instance, what will happen if you vote to convict the defendant. Will the defendant be sentenced to ten hours of community service? Ten years in prison? Life in prison without parole? As the potential sentences increase, so do the stakes, and hence more evidence may be required for you to know that the defendant is guilty. Accordingly, more evidence may be required for you to properly convict.

This is a significant result. Jurists have long debated whether the standard of proof at a criminal trial could depend on the consequences of conviction.[39] On one side of the debate, Lillquist 2002 argues that "it makes sense that the standard of proof ought to be higher in some cases than in others. For instance, in death penalty cases the standard of proof perhaps should be even higher than what we commonly associate with 'proof beyond a reasonable doubt'" (147). Lillquist contrasts his view with the traditional view that the criminal standard of proof must be a "fixed standard of reasonable doubt, requiring a uniform level of certainty across all criminal cases" (163). If proper conviction requires knowledge, and knowledge is subject to pragmatic encroachment, then we can settle this legal debate. Proper conviction is indeed subject to pragmatic encroachment. The criminal standard of proof can vary depending on the consequences of conviction.

This consequence of pragmatic encroachment has practical implications. In the United States and many other common law countries, criminal proceedings are split into two stages. First, there's a fact-finding stage, where a judge or jury determines whether a defendant is guilty. If the defendant is found guilty, then there's a second sentencing stage, where a judge determines the punishment that the defendant will receive. In the vast majority of cases, the first stage is shielded from the second. Jurors are prevented from knowing facts about sentencing, including the range of sentences that the defendant could receive if convicted. In practice, juries often underestimate these sentences.[40] If knowledge is subject to encroachment, then these juries may be underestimating what it takes to know the defendant is guilty, and hence convicting defendants on insufficient evidence. To sum up our brief foray into legal epistemology: Given the knowledge norm of conviction, pragmatic encroachment has two

39. See Bartels 1981, Stoffelmayr & Diamond 2000, Sand & Rose 2003, and Laudan & Saunders 2009.
40. For discussion of relevant legal restrictions and facts about juror ignorance, see Moss 2021, pp. 260–63.

significant consequences. First, whether it is permissible for a jury to convict a defendant may depend on what's at stake, and second, we have a reason to pursue legal reforms that would provide jurors with more information about the sentences that a defendant could receive if convicted.

Here's the thing: Even if knowledge is not subject to pragmatic encroachment, we can derive the same significant consequences from the knowledge norm of conviction, if we're shiftable contextualists. Again, here's the norm:

Knowledge Norm of Conviction A defendant is properly convicted only if the factfinder knows that the defendant is guilty.

This norm resembles several other norms discussed in this paper, such as *Sufficiency* and the *Smoothness Norm of Pouring*. By now, it should be clear what to say about such norms. As shiftable contextualists, we will interpret the *Knowledge Norm of Conviction* as having a bound reading, so that it imposes different standards on factfinders in different trials, depending on what's at stake. It may take a lot for jurors in high-stakes cases to know that a defendant is guilty, in just the same sense that it takes a lot for a basketball player to be tall, for a surgeon's hands to be clean, and for crepe batter to be smooth. Accordingly, it may take more evidence for jurors in high-stakes cases to properly convict. Without accepting pragmatic encroachment, we have derived the practical conclusion that whether a jury can properly convict a defendant can depend on what's at stake.

Similarly, even if knowledge is not subject to encroachment, we have a reason to provide jurors with more information about the sentences that a defendant is facing—namely, because providing this information to the jury will clarify what it takes for them to know that the defendant is guilty, which will help them figure out what proper conviction requires. The juror who is ignorant of sentencing information is like a line cook who doesn't know whether she is mixing up batter for pancakes or crepes. Suppose the head chef tells the cook, "If your batter is smooth, you can pour it out and start cooking with it." If the cook doesn't know what she is making, she will be unsure how to interpret this instruction. She won't know how much stirring is needed before she can properly pour out her batter. It's just the same with juries and the knowledge norm of conviction. Without knowing what's at stake, the jury won't know how much evidence is needed in order for them to properly convict the defendant. Hence we have a good reason to tell juries what's at stake in their decision, even if knowledge is not subject to pragmatic encroachment.

These results about proper conviction are just one instance of a much more gen-

eral lesson. Shiftable contextualists and defenders of pragmatic encroachment have different ways of interpreting the thesis that knowledge depends on practical interests, and relatedly, they have different ways of interpreting knowledge norms. Shiftable contextualists accept bound readings of both sorts of sentences, and ultimately, these readings have the same significant consequences as the deep dependence claims endorsed by defenders of encroachment. This lesson applies to many other claims that have been identified as consequences of encroachment. For example, Stanley 2015 argues that pragmatic encroachment has significant consequences for political action:

> The interest-relativism of knowledge has direct consequences for political action. Consider an employee of a business who believes that its workers are being exploited... She faces a substantial risk of losing her job for attempting to organize a union. In this case, it will be much harder for her to know that the owners are taking advantage of the workers. The interest-relative nature of knowledge places obstacles in the way of oppressed groups trying to act to ameliorate their oppression. (254)

Benton 2018 argues that pragmatic encroachment has significant consequences for the rationality of religious belief:[41]

> If pragmatic encroachment is true, then the practical stakes alone can affect whether one knows... Applied to the issue of theism and atheism, one way to understand this point is by noting that the practical stakes of believing bare theism seem to be lower than the practical stakes of believing atheism... theistic belief is in principle eligible to be knowledge if true, whereas atheistic belief, even if true, is not; such a situation can look as though it may give a distinctive kind of epistemic reason to the would-be theist. (272, 285)

Schönher & Gomez 2022 argue that pragmatic encroachment has significant consequences for the nature and scope of epistemic injustice:

> Nilam is the only person of color in the room. Given the society she lives in, if she were to be wrong about [an assertion], her professor and many fellow students would think, on the basis of prejudice, that people of color are underprepared... These raised stakes can, in turn, undermine what she knows—at least if knowledge is sensitive to the practical costs of belief: that is, if knowledge is subject to pragmatic encroachment... This is why Nilam suffers a pragmatic encroachment-based epistemic injustice. (594, 602)

According to these authors, if knowledge is subject to pragmatic encroachment, then it can be harder for your beliefs to constitute knowledge when you are at risk of losing your job, when you believe that atheism is true, or when you face some prejudice that raises the stakes of your acting on your beliefs. These theoretical conclusions

41. For similar arguments, see p. 227 of Rizzieri 2011 and §3 of Eaton & Pickavance 2017.

have real-world consequences—namely, that exploited workers face epistemic obstacles when fighting oppression, that there is a distinctive kind of reason to believe that theism is true, and that targets of prejudice suffer a distinctive kind of epistemic injustice. However, we can now see that it is misleading to characterize these facts as consequences of pragmatic encroachment, since shiftable contextualists can deny pragmatic encroachment and still accept the arguments in each of the passages quoted above.[42] The shiftable contextualist accepts that whether someone has knowledge can depend on what's at stake, and the bound reading of this claim has just the same significant practical upshots as the corresponding deep dependence claim. The thesis that knowledge is subject to pragmatic encroachment is a red herring, inessential to the arguments quoted above.

In conclusion, we've seen that shiftable contextualists can solve problems faced by many interest relativists, such as capturing bound readings of certain knowledge ascriptions and explaining why it sounds odd to say that subjects gain and lose knowledge as their interests change. At the same time, shiftable contextualists can recover a lot of what matters to interest relativists, including the ordinary language judgments used in the argument from cases, theoretical principles connecting knowledge and rational action, and practical applications of these principles and other knowledge norms. With the correct contextualist account, we can do just as well—and sometimes better—without encroachment.

42. Although Stanley 2015 does not discuss contextualism in detail, he mentions in passing that "alternative accounts of the phenomena motivating pragmatic encroachment, including the various contextualist accounts, entail that negative privilege leads to epistemic harm" (259), which suggests that he would be sympathetic with the point I am making here.

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