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Knowledge, Hope, and Fallibilism

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Hope, in its propositional construction "I hope that p," is compatible with a stated chance for the speaker that $\neg p$. On fallibilist construals of knowledge, knowledge is compatible with a chance of being wrong, such that one can know that p even though there is an epistemic chance for one that $\neg p$.[1] But self-ascriptions of propositional hope that p seem to be incompatible, in some sense, with self-ascriptions of knowing whether p (that is, knowing either that p or that $\neg p$). Given a very intuitive grasp of the epistemic conditions under which one may hope for some proposition, the data from knowledge's incompatibility with hope generates evidence that fallibilism is false. Yet the infallibilist about knowledge can straightforwardly explain why knowledge would be incompatible with hope, and can explain all of the linguistic data introduced here. This suggests that fallibilists bear an explanatory burden which has been overlooked.

In §1 I introduce several strands of linguistic evidence for the incompatibility between knowledge and hope, and examine whether the incompatibility of their ascriptions is semantic, pragmatic, or rational in nature. I then situate the problem by noting the differential explanatory resources of infallibilists and fallibilists, and arguing that fallibilists indeed do have a challenge to face here. Because it would be natural for fallibilists to draw upon their explanations given for the parallel problem raised by "concessive" knowledge attributions, in §2 I consider several prominent fallibilist explanations of them. But I argue that none of those explanations will generalize to account for the data from knowledge-hope incompatibility presented in §1, and

[1] There are many ways of spelling out the fallibilist doctrine. My purpose is not to adjudicate them here, but to begin with a general statement of the view. See Reed (2002) and Dougherty (2011) for discussions of fallibilism, and Brown (2011) and Dutant (2016) for different ways of characterizing infallibilism.

in fact I show show that some new data introduced here calls into question a certain pragmatic explanation of the infelicity of concessive knowledge conjunctions. Finally, in §3 I show how the issues raised by the linguistic evidence in §1 go beyond knowledge ascriptions or concessions with epistemic modals, to include conjunctions with factive predicates which seem to implicate the speaker in knowing. If a commitment to knowledge is indeed implicit in such constructions, the fallibilist will want to explain these as well.

1 Knowledge and Hope

First, it is clear that an attribution of one's propositional hope (hereafter just 'hope') is compatible with an epistemic chance for one that what one hopes for does (or will) not obtain. One can declare one's hope while acknowledging the chance that one's hopes will be frustrated, for example:

(1) I hope that Jennifer is at home, but she might not be.

This comports well with the views of many theorists working on hope who explicitly state that to hope that *p*, a subject must "think that *p* has some degree of probability, however small" (Day 1969, 89); or that for the subject, "the object of hope falls within a certain range of physical possibility which includes the improbable but excludes the certain and the merely logically possible" (Downie 1963, 249); or, as Adrienne Martin recently puts it, the subject must "assign a probability between and exclusive of 0 and 1 to the outcome" (Martin 2014, 62; cf. Bovens 1999, 673).

However, as many such theorists also note, attributing hope to oneself that *p* appears to be incompatible with also attributing *knowledge* whether *p*. According to them, this is because hope in a proposition is itself somehow incompatible with knowledge of that proposition or of its negation.[2] That

[2]Downie: "one cannot hope that something will occur if one already knows that it will; knowledge overshoots the criterion of probability" (Downie 1963, 249). Day: "one cannot, logically, want, and so hope for, what he already knows that he has... [nor] hope for, what he... knows he cannot have" (1969, 95). Gordon: "a person hopes that *p* only if he *does not know* that *p*" (1969; 1987, 26). And Martin: "hope entails uncertainty... e.g. lack of knowledge" (2011, 154).

there is some kind of incompatibility, or at least some norm in play here, is suggested by the following. If you know, or merely believe, that Sam knows Jennifer's whereabouts, and you hear Sam tell (1) to a third party, then you will likely judge that Sam has intentionally misled them. For by asserting (1), or even just its first conjunct, Sam has somehow represented himself as not knowing Jennifer's whereabouts.[3]

That knowledge and hope are somehow incompatible is also suggested by the fact that one typically does not hope for, or against, what one knows—at least where the propositional object of knowledge or hope is being considered under the same guise (as I shall assume in all of what follows). The incompatibility of self-ascribing both hope and knowledge may be either *semantic*, *pragmatic*, or *rational* in nature. That is, it may reflect a semantic inconsistency between two conjuncts that could not both be true; or a pragmatic inconsistency generated by conjoining two assertions that could both be true; or it may reflect a requirement of rationality such that one may not rationally hope that p when one knows whether p. Remaining neutral for the moment on the nature of this incompatibility, we can note that the weaker rational incompatibility thesis is all that is needed to account for the following linguistic data and to generate difficulties for the fallibilist.

Consider how bad the following assertions sound:

(2) # I hope that John is in his office, but he is not there.

(3) # I hope that John is in his office, but I know that he is not.

(2), but not (3), may be felicitously embedded under supposition or a conditional antecedent, where they are not asserted. That is, the following embeddings of (2) sound perfectly fine:

(4) If I hope that John is in his office but he is not there, then...

(5) Suppose I hope that John is in his office but he is not there...

Whereas the following embeddings of (3) sound much worse:

[3]Cf. Dorr & Hawthorne (2013, 910) for related points.

(6) # If I hope that John is in his office but I know that he is not, then...

(7) # Suppose I hope that John is in his office but I know that he is not...

These embedding data are strong evidence that hope ascription is semantically or rationally (rather than pragmatically) incompatible with knowledge ascription. For by embedding a conjunction under a conditional or under supposition, one evaluates the conjunction in a linguistic construction without it being asserted.[4] Because the conjunction (3), when embedded in (6) and (7), is still infelicitous, this is good reason to think that its infelicity is *not* due to a pragmatic effect of asserting it. So the incompatibility between self-ascribing hope and knowledge concerning the same proposition is plausibly either semantic or rational in nature. And this supports the hypothesis that knowledge whether p is itself is somehow incompatible with hope that p.

Further evidence for that incompatibility is the following. We may note that (2), whose second conjunct does not ascribe knowledge, simply outright asserts the denial of what is hoped for. As such, (2) is clearly not even semantically problematic, for it is surely possible to hope that p while p is false. Yet the infelicity of asserting (2) may be explained as pragmatically problematic given that its second conjunct is asserted and that, arguably, knowledge is the norm of assertion; that is, assertions are governed by a norm such that one may assert that p only if one knows p.[5] (2)'s first conjunct claims hope that John is in his office, which represents the speaker as not knowing whether he's there; but this conflicts with asserting the second conjunct, which (given the knowledge norm) represents the speaker as knowing that he is not there. In short, the infelicity of asserting the semantically consistent (2) may be pragmatically explained in terms of the knowledge norm and our hypothesis of knowledge-hope incompatibility.

Finally, conversational patterns confirm these data. A lottery loser, inter-

[4]This is Geach's well-known "Frege point": see Geach 1965.

[5]See Williamson (2000, ch. 11), Hawthorne (2004, 23ff.), Turri (2011, 2014, 2016), and Benton (2011, 2016), among many others. Rival norms of assertion are offered by Weiner (2005), Douven (2006), Lackey (2007), McKinnon (2013), and Gerken (2017), among others. But it is unclear to me how those rival norms would explain the infelicity of (2); indeed, one might expect that such norms requiring merely warrant or rational credibility or supportive reasons in order to assert would sanction assertions like (2).

viewed about his loss and asked an odd question about whether he still hopes that he wins, can say, "I *used* to hope that I'd win; now I know that I didn't, so I no longer hope for it." The oddness of such a question, the apt denial of hope after coming to know, and the appropriateness of the inferential "so" in his reply all confirm the incompatibility. (Notice that these same features apply to a similar conversation where the lottery ticket holder might have instead hoped to *lose* the lottery, which reinforces the incompatibility of hoping for what one knows.)

We also find elegant patterns between speech acts which support the incompatibility. Interrogatives typically (apart from didactic or other special contexts) represent their speakers as not knowing the answers to the questions asked; so they typically license inferences to non-knowledge.[6] Thus one who asks a question of the schema "Is (it the case that) p?" will, absent special background information or rhetorical posturing, typically represent herself as not knowing whether p. This explains why "Is p?" may naturally conjoin with other speech acts, such as hope ascriptions, which likewise convey that one doesn't know p:

(8) Did the Giants win last night? I hope so [hope not].[7]

(9) I hope the Giants won last night. Did they?

By contrast, both "know(s) that p" ascription and outright assertion do not acceptably conjoin with interrogatives concerning p:

(10) # Did the Giants win last night? I know they did.

(11) # The Giants won last night. Did they?

These patterns enable us to predict the awkwardness of conjoining speech, such as hope self-ascription, which licenses inference to non-knowledge of whether p, with speech that represents one as knowing whether p. Thus these patterns reinforce the contrast found between the felicity of (1), which conjoins

[6] Cf. Hawthorne 2004, 24, and Whitcomb 2017.

[7] Relatedly, emotive doxastics like "I hope that p" may be acceptably used to respond to questions concerning whether p: see Anand and Hacquard (2013, 26).

hope self-ascription with a contrary epistemic modal, and the infelicity of conjoining hope self-ascription with either outright assertion in (2), or with knowledge self-ascription in (3).

So we have seen that data from conjunctions, embedding behavior, and conversational patterns all support the idea that self-ascriptions of knowledge or of hope in some proposition are either semantically or rationally incompatible with one another. But why think this presents a special problem for fallibilists? After all, the fallibilist might simply grant that "S hopes that p" ascriptions are incompatible with S knowing that p or that $\neg p$. Why can't the fallibilist just claim that this incompatibility is part of the nature of hope, and then insist that this fact is not one which the fallibilist need be in the business of explaining? Because fallibilism suggests that this incompatibility is *not* part of the nature of hope. How so?

Consider the intuitive "Chances License Hope" principle for a proposition p which one, all things considered, desires to be true:

(CLH) If there is a chance for one that p, and a chance for one that $\neg p$, then one may hope that p.

CLH is highly plausible, summarizing the epistemic conditions on hope (recall the considerations of Downie, Day, and Martin cited at the beginning of §1). Now fallibilism allows that one can know that p while there is a chance for one that $\neg p$. But by CLH, in such cases hope that $\neg p$ would be licensed; and if hope is licensed, then hope is rationally permissible. Thus it would be rationally possible for one to know that p while hoping that $\neg p$. But the evidence of incompatibility, plus CLH, suggests that this is not rationally possible; so the evidence, plus CLH, suggests that fallibilism is false. So fallibilists must explain away the evidence suggesting that their view is false. Thus it would seem that fallibilists must either deny that the evidence really shows that hope is incompatible with knowledge, or they must deny the highly intuitive CLH.[8]

[8]CLH might have counterexamples: e.g., one all things considered desires that p, but only because one is irrationally responding to one's evidence which indicates that if p then terrible outcomes ensue which one, all things considered, desires not to obtain. In such a case, it seems highly irrational to hope that p. But such counterexamples are irrelevant to this argument against fallibilism. Thanks to Blake Roeber here.

Moreover it seems significant that, with respect to all the data to be covered herein, fallibilists look to be in a much worse explanatory position than infallibilists. Infallibilists have a very simple (and plausibly the best) explanation of what is going on. For infallibilists, knowing that p is incompatible with an epistemic chance for the knower that $\neg p$. Given CLH, self-ascribing hope that $\neg p$ requires an epistemic chance both that p and that $\neg p$. So given infallibilism and CLH, self-ascribing hope that $\neg p$ would be *semantically* inconsistent with also self-ascribing knowledge that p (or, that $\neg p$). Such semantic incompatibility would explain the infelicity of asserting (3), which in turn would explain and predict the embedding data from (6) and (7). And infallibilists can likewise explain the conversational patterns considered above, including speech which licenses inference to non-knowledge, such as the conjoined speech acts (8)–(11). Because infallibilists can easily explain the incompatibility given the plausible CLH, fallibilists who opt to deny CLH would do well to offer another explanation for why knowledge, though compatible with an epistemic chance of being wrong, might nevertheless be incompatible with hope.[9]

[9] It has been suggested to me that fallibilists might explain the hope-knows incompatibility by appeal to reasoning like the following:

1) Knowing that p requires being completely confident (or having confidence of at least E*) that p.

2) Hoping that p requires *not* being completely confident (or *not* having E* or higher) that p.

3) Therefore, knowing that p is incompatible with hoping that p.

And plugging in $\neg p$ to 2) for p will generate the conclusion that knowing that p is incompatible with hoping that $\neg p$, on the plausible assumption that one will have far less than complete (or E*) confidence in $\neg p$ when one knows p. However, this approach seems unpromising: fallibilists will not endorse the first premise above on the "complete confidence" interpretation, because they do not require maximally strong confidence or evidence in order to know. So the "at least E*" gloss is required for premise 1); and if so, then the E* gloss is also required for 2). But then 2) seems less plausible, for just as the lottery examples considered earlier suggest that there is no minimum confidence level required for hoping that p, there also does not seem to be a *maximum* confidence level (short of complete confidence) required for hope: one might well hope that one loses the lottery. (And this strategy is complicated by some fallibilists who think one *can* know that a lottery ticket will lose; see discussion of Reed in §2.) At any rate, a fallibilist who would like to pursue this line would need to specify in more concrete terms exactly what E* is, how it is set, whether it is context-sensitive, and so on.

Moreover, infallibilists can do much more with their explanatory resources: for example, they can also explain why ascribing *to others* knowledge that p is incompatible with self-ascribing hope, as in:

(12) # Sandy knows that the team lost but I hope that they won.

An infallibilist can easily explain the problem with conjoining third-person knowledge ascription with hope self-ascription such as in (12).[10] Arguably, as we've already noted, knowledge is the norm of assertion; if so, then to be epistemically positioned to assert (12) I must know its first conjunct, that Sandy knows that the team lost, and by so asserting it, I represent myself as knowing that Sandy knows this. But on infallibilism, Sandy's knowing is incompatible with an epistemic chance for Sandy that Sandy is wrong, and my knowing that Sandy knows is likewise incompatible with an epistemic chance for me that he's wrong. By contrast, it is entirely unclear how the fallibilist would explain this datum; because on fallibilism, Sandy's knowing p, and my knowing that he knows p, can be compatible, for him and for me, with a chance that he's wrong about p. For the fallibilist, such a situation about what Sandy knows should, one might think, offer enough epistemic space to license *my* hope.

Furthermore, the infallibilist who accepts CLH will think that S's hope that p, if rational, entails both a chance for S that p and a chance for S that $\neg p$. Given this, infallibilists have an easy explanation of the oddity of 'agreement' conjunctions where one knows and hopes for the same proposition, such as:

(13) # Sam knows that it's raining and hopes that it's raining.

For on CLH the latter conjunct of (13), if true (and rational), entails that there is a chance for Sam that it's not raining, which, on infallibilism, is incompatible with the truth of the former conjunct. Again, it is unclear how fallibilists would explain such data.

In sum then, infallibilists are well-positioned to explain all the above data, whereas fallibilists, by contrast, seem to incur a special explanatory burden.

What is more, it is unclear how the above reasoning would account for third-party knowledge ascriptions like (12).

[10] Note that (12) is semantically consistent, as it embeds under "if" or "suppose".

Now in order to handle the linguistic data introduced above, fallibilists might naturally look to their accounts of some other troublesome conjunctions; we turn to those in the next section. I do not assume that fallibilists must explain our data with the same resources which they've used to explain "concessive" knowledge attributions, but it will be natural to start there and evaluate whether any of those explanations might be extended to handle the present data. Along the way, I shall also consider additional proposals they might offer.

2 Fallibilist Explanations

The linguistic data considered in §1 are strikingly similar to those for "concessive" knowledge attributions, that is, conjunctions of knowledge-claims with contrary epistemic modals (including "it's possible that" or "there's a chance that" locutions), such as

(14) # I know that John is in his office but he might not be.

(14) sounds, to many people, just as bad as (2) or (3). But because fallibilists maintain that knowledge is compatible with an epistemic chance of being wrong, they tend to be committed to concessive conjunctive assertions like (14) as being semantically consistent, and thus possibly true.[11] As such, they must look elsewhere to explain the infelicity present in such assertions.

Many such fallibilists have disputed, or tried to explain away, the evidence from conjunctions like (14). For example, Trent Dougherty & Patrick Rysiew (2009) and Jeremy Fantl & Matthew McGrath (2009) offer *pragmatic* explanations of the infelicity of sentences like (14), according to which such assertions are (or can be) true but unassertable because asserting the contrary epistemic modal conjunct raises a possibility of error as being *significant*; in asserting "it might be [there's a chance] that not-p," a "speaker is pragmatically imparting that there is a significant chance that not-p" (Fantl & McGrath 2009, 21). On

[11] Stanley (2005) is an exception, for he claims that such conjunctions *are* semantically inconsistent; thus his non-standard version of fallibilism predicts the data from (14), as well as its inability to embed in (15)–(16), considered below. Because of this, however, his fallibilism is disputed as not really being fallibilist at all (e.g. Reed 2013, 53).

this story, while knowledge is compatible with an epistemic chance of error, it is not compatible with a *significant* chance of error; thus these conjunctions sound bad. (For Fantl & McGrath, whether the chance that $\neg p$ is significant for the speaker depends on whether she is justified in acting on p; however, our interest here is not with whether the chance of error is in fact significant, but with what the speaker, according to their view, pragmatically conveys by asserting the contrary epistemic modal.)

However it has gone unnoticed that such pragmatic approaches are undercut by the embedding behavior of concessive knowledge attributions. For example, (14) does not embed comfortably under supposition or a conditional antecedent:

(15) # If I know John is in his office but he might not be, then...

(16) # Suppose I know John is in his office but he might not be...

Similar to the data from (3)–(7), the evidence from (15) and (16) strongly suggests that the trouble with concessive knowledge attributions is not pragmatic, but is either semantic or rational in nature. Pragmatic accounts are poorly positioned to explain the embedded occurrences (15) and (16): because those occurrences are unasserted, they screen off pragmatic explanations of their infelicity which turn on effects of being asserted. (Similar difficulties would apply to Alex Worsnip's 2015 quantifier domain restriction account of concessive knowledge attributions, which turns on the effect of asserting a conjunct which claims knowledge for the speaker.) In particular, it is quite unclear why raising a contrary possibility in the context of hypothetical consideration or mere supposition would make salient that possibility as epistemically significant enough to make it non-idle. But to tell a uniform story about the infelicity present even in embeddings, the suggestion of these fallibilists would be that even in mere supposition, such possibilities are raised as being epistemically significant.[12] Such a story would have to adjudicate between those hypothet-

[12]See Dodd (2010) and Hawthorne (2012) for additional concerns with such approaches. Dougherty & Rysiew (2011) reply to Dodd, but do not offer any resources that will help with the data presented here.

ical scenarios, tokened by utterances like (15) and (16), whose contrary possibilities are actually raised to salience (and thus no longer idle), from those hypotheticals which fail to raise their possibilities to salience. (For example, does *every* counterfactual "If I were a brain-in-a-vat..." conditional clause make its antecedent salient and thereby epistemically significant? What about indicative conditionals like "If I am a brain-in-a-vat..."? If only some clauses or moods raise their possibilities to salience, in a context, such pragmatic accounts must offer a plausible and systematic story about why the mechanisms involved select only those clauses or moods or contexts for salience raising.)

To return to our hope-knows conjunctions: pragmatic approaches to concessive conjunctions which appeal to a distinctive contribution made by asserting an epistemic modal will not extend in an obvious way to handle our present concern, namely conjunctions like (3). For (3), recall, does not contain any such modal:

(3) # I hope that John is in his office, but I know that he is not.

These fallibilists may be tempted to insist that hope ascriptions, as in (3), carry a pragmatic commitment, for the one who hopes, to a corresponding epistemic modal such as "might *p*,"[13] and thereby reduce the infelicity of (3) to the infelicity infecting (14) (with commuted conjuncts, of course).[14] Call this impulse to explain the hope data reductively in terms of the concessive knowledge conjunction's infelicity "*the temptation.*" I already suggested earlier, however, that such accounts of pragmatic infelicity do not handle embeddings such as (15) and (16), and thus attempts to reduce the infelicity of hope-knows conjunctions in this way will not explain the embeddings (6) and (7). Not only this, but the tempting story linking hope with a corresponding modal commitment will not easily generalize to explain third-person conjunctions like (12), or 'agreement' conjunctions like (13). Furthermore, giving in to this temptation raises additional questions over divergences in embedding behavior. As noted in §1, (3) does not comfortably embed whereas (2) does; yet compare (2), reproduced below, with conjunctions like (17), due to Seth Yalcin (2007):

[13] E.g. Anand and Hacquard 2013, 27–29.

[14] I am assuming that most (perhaps all) of the infelicitous conjunctions considered in this paper remain so when commuted.

(**2**) # I hope that John is in his office, but he is not there.

(17) # John might be in his office, but he is not there.

Yielding to the above temptation reduces the infelicity of (2) to that of (17). But this reveals another puzzling fact, namely that (2) easily embeds whereas (17) does not,[15] even though, according to the tempting story, the infelicity infecting (2) reduces to that of (17). But if the explanation of (2)'s infelicity is that of (17), we could expect that they both easily embed if (2) does. This suggests that fallibilists should not yield to the temptation to account for the data from hope self-ascriptions entirely in terms of a pragmatic modal commitment, for that approach looks entirely unpromising.

By contrast with the above pragmatics fallibilists, Charity Anderson (2014) suggests that fallibilists can handle concessive knowledge attributions like (14) by positing a *semantic* variation due to different domains of quantification which are contextually set.[16] On her approach, the semantic contribution of epistemic modals is such that by default, knowledge is (semantically) incompatible with contrary "might" or "possible" claims, and thus concessive knowledge attributions are typically false. The standard semantic modal base for bare (unembedded) modals is the totality of the speaker's knowledge; but in certain contexts, a covert restriction in that modal base to less than all the speaker's knowledge (what she calls "K-p"), particularly the speaker's knowledge that p, can make conjunctions much like (14) come out true. Now while Anderson's account might be offered in explanation of (14), it concerns bare rather than embedded modals. Yet even if that account can be extended to handle embedded occurrences such as (15) and (16), it will do little to explain

[15] Cf. discussion by Yalcin (2007), and Dorr & Hawthorne (2013).

[16] Note that Anderson's gloss on fallibilism might be attractive to many who find other construals of fallibilism problematic: "Fallibilists are committed to the idea that for many propositions we know, there is some body of propositions, K-p , such that we can know p on the basis of K-p even though 'might $\neg p$' is true relative to K-p (2014, 604)." This seems fine insofar as inductive knowledge and knowledge from testimony satisfy it; it simply encodes the idea that not all of our knowledge is gained by deductive or entailment relations. But if this is all that fallibilists are committed to, it will not clearly predict that knowledge itself is compatible with an epistemic chance of being wrong (e.g. a Williamsonian E=K theorist may well agree with Anderson's gloss, but deny that when they know p, that knowledge that p is compatible with their own affirmation that 'might $\neg p$').

the data from (3), which as noted in the previous paragraph, does not contain any such modal. Again, while this semantic fallibilist might be enticed by a similar temptation to the one discussed in the previous paragraph, on which self-ascribing hope enlists not a pragmatic but a semantic modal, this may perhaps provide an explanation for the embeddings (15) and (16); but the cost will be that she remains poorly positioned to explain the embedding divergences mentioned above between (2) on the one hand, and (3) or (17) on the other. Nor will this approach obviously help to handle the third-personal (12), or 'agreement' conjunctions like (13).

Baron Reed (2013) espouses what he calls a semantic ambiguity approach (though it is perhaps better understood as polysemy).[17] Reed's account is of "know(s)" rather than of the epistemic modal, which he uses to try to explain concessive knowledge attributions. On Reed's view, "knowledge" and "knows" are, like "blueness" and "blue," ambiguous because "knowledge is both a determinable and various determinates". In its determinate sense, "know" can be used to refer to *any* degree of knowledge ('Given the confusion, can they be said to know it at all?'); or to *every* degree of knowledge ('The modern university is devoted to the acquisition of knowledge.'); or to a *particular* degree of knowledge ('She knows that they borrowed the car—Peter told her.'); or to the *standard* degree ('Most people know that World War II ended in 1945.'); and so on (Reed 2013, 55–56). And "As in the case of 'blue', the best explanation for these various uses is that 'knows' and 'knowledge' are ambiguous. Again, it should be granted that conversational context can play an essential role in determining what sort of knowledge is being talked about" (2013, 56).

Concessive knowledge attributions like (14) sound odd, says Reed, because

> When they are used in a bare way, without any context to make explicit what is meant by "knowledge" or "might," hearers know that speakers have pragmatic reason to keep their epistemic terms linked together. This, in turn, means that they expect the semantic content of the utterance to be such that a sentence of the form

[17] However, linguists differ on whether, or how much, ambiguity differs from polysemy. See Sennet 2016, §1 for discussion and citations.

> that CKAs take would be necessarily false. A speaker who intended to say something of the form, "S knows [in sense *x*] that *p*, and it might be [in sense *x*, for S] that not-*p*," would have a self-defeating intention. The utterance would take back with one conjunct what was asserted with the other one. It would be infelicitous, not only because it is false (and necessarily false), but because it reflects a defective state of mind in the speaker. (2013, 56–57)

Yet this approach seems unpromising for two reasons which will affect how plausibly it might handle our hope-knows conjunctions.

First, Reed's ambiguity/polysemy thesis would not, without some supplementation, predict that the above data involving "know(s)," such as (14), sound odd. For if, as Reed suggests, "know(s)" were ambiguous because of the wide range of determinate senses, we could expect that hearers would easily discern one of the relevant determinate meanings available for "know(s)" on which such a conjunction could be felicitous in context. Thus when evaluated in the abstract, without a specified context, conjunctions such as (14) ought to sound just fine, for we could charitably fill in a determinate sense for "know(s)" which would render the sentence acceptable. This is plausibly what we do when considering in the abstract other sentences containing ambiguous terms: "Mark kept his bat in his locker to keep others from touching it", or "Mark had his bat shaved down so it would be lighter", are most plausibly interpreted as referring to a baseball bat rather than a mammalian bat (even though the latter interpretation is in principle available). This is not just due to a principle of charity in interpretation; rather, much experimental evidence suggests that we resolve ambiguity probabilisitically according to co-occurrence of nearby words. So in the above "bat" sentences, we can resolve the ambiguity due to clues like the non-animate "it" (rather than the animate "he" or "she"), or the athletic relevance of "locker" or "lighter".[18] But far from constraining their interpretation to an inevitably infelicitous reading, sentences without such clues—such as, perhaps, (14)—would make available an even larger array of semantic options for resolving their mean-

[18] Thanks to Peter van Elswyk here.

ing, and charity would push us to to find an available meaning on which the conjunction is felicitous and sensible.

So the fact that (14) sounds bad even apart from specifying a context or further fragments of the discourse, and even under embedding as with (15) and (16), would *not* obviously be predicted by Reed's ambiguity/polysemy thesis; indeed, such a thesis would if anything predict the *opposite*, for it posits such a wide range of available meanings on which the conjunction can be true. This drawback will cause trouble for extending Reed's account to handle a hope-knows conjunction such as (3). For (3) sounds infelicitous without any further specification of context; indeed, even entertaining the conjunctive schema

(18) # I hope that $\neg p$, but I know that p

seems to many quite bad, without even considering particular propositions for "p." But for the reasons just stated, we would expect on an ambiguity thesis for "know(s)" that (3) and even the schema (18) would sound felicitous.

A second worry about Reed's approach is this. Reed (perhaps sensing the above concern) suggests in an above quote that speakers would have "pragmatic reason to keep [the meaning of] their epistemic terms linked together," so as not to generate confusion for hearers. But this is itself unsatisfying along two dimensions. (i) Though that pragmatic reason tells us why speakers might try to keep their meaning for "know(s)" linked with their meaning for "might," that pragmatic reason does little to explain how hearers themselves will converge, in conversational give and take, on the speaker's intended meaning for "know(s)" out of its many available determinable senses (and how the hearers will pick up on the corresponding epistemic modal's range of worlds which are regarded as epistemically close). And (ii), Reed's appeal to a speaker's pragmatic reason to avoid confusion seems to offer an account of what needs explaining (why "know" and "might" pattern conversationally as they do) in terms of what needs to be explained (that speakers have reason to conform to this pattern). Noting that speakers have reason to avoid such clashes does not explain why "know p" and "might not be that p," given an ambiguity thesis, would clash in conjunction or cut against each other in conversational pat-

terns; rather, the fact of such clashes are part of what needs to be explained, given a falliblist view that licenses them as in principle semantically compatible. Thus I am pessimistic about a semantic ambiguity solution to the data considered in §1.

A fallibilist might try to take a different approach from those that have been offered for concessive knowledge attributions, and instead focus on features of the hope attitude in order to account for the conjunctions considered here. A fallibilist might take a cue from the "significant chance" pragmatic accounts considered earlier, but attempt to apply it to a *semantic* account of hope. On this approach, hoping that p, or at least self-ascribing such hope, requires that there be a *significant* chance that p: asserting "I hope that p" requires for its truth that there be a significant chance for me that p. And, this fallibilist might propose, the standard for how significant that chance must be will correlate with the knowledge standard, such that knowing is incompatible with a significant chance of being wrong. However, this approach appears to be a non-starter. Certain individuals can plausibly hope that their lottery ticket will win; and this even though, for a large enough lottery, the chance that it will win is not significant by any measure. In addition, for those fallibilists such as Reed who think one can, under some conditions, know that a given lottery ticket will lose, the above proposal will be deeply problematic: for they will deny that, under those conditions, the chance is significant enough to rob one of knowledge that the ticket will lose, even though it is, on this proposal, presumably significant enough to allow one to hope that it will win.

§1 argued that hope has a knowledge-precluding component. But hope also plausibly has a desire or positive-evaluative component, and a fallibilist might try to exploit this to explain the infelicity of conjunctions like (3). On this proposal their infelicity comes from conjoining a claim to know some proposition p with a claim to hope for its negation, $\neg p$, where it would be implausible to desire or approve of $\neg p$; having done so, this fallibilist might go on to deny that knowledge is in fact precluded by hope. But this approach seems unpromising, for two reasons. First, as noted earlier, not only the conjunction (3) but even the conjunction *schema* (18) will strike many as an infelicitous construction, without needing to consider any particular proposi-

tions; and this suggests that the content of the proposition is irrelevant to the infelicity. Second, one can consider any number of conjunctions where the hoped for proposition is (given standard background assumptions) obviously desirable to the speaker, yet the conjunction still sounds bad. For example:

(19) # I hope that my son is alive, but I know that he's dead.

For these reasons then, I regard the problem with conjoining hope and knowledge ascriptions to be epistemic, and thus any appeal to other aspects of hope will be of little help. (In addition, conjunctions from the next section which do not include hope ascriptions suggest that hope itself is not the culprit.)

In sum then, fallibilists will need to explain the several strands of data from hope constructions considered in §1, and none of the semantic or pragmatic accounts offered for concessive knowledge attributions appears generalizable to handle those data.

3 Beyond Hope

Yet it is not only hope constructions which put pressure on fallibilism. We also find data from factive verb constructions (or factive stative adjective constructions) that take a propositional complement, such as *regret that*, being *happy that*, *disappointed that*, *angry that*, *glad that*, *grateful that*, *embarrassed that*, and many more. When self-ascribing, such factive constructions are arguably best understood as committing the speaker to knowing the propositional complement (either through presupposition or even entailment).[19] This is in part because denying knowledge while affirming such factive emotives sounds bizarre:

(20) # I regret that they lost, but I don't know whether they lost.

(21) # I am glad that she is home, but I don't know that she is home.

[19] See Unger (1975, 151–152, 171ff.), Gordon (1969, 1987), and Dietz (forthcoming) for the entailment view. Comesaña and McGrath (2014) and Fantl (2015) argue that some factives do not require knowledge. But notice that their views appear to acquire the burden of explaining the infelicity of conjunctions like (20)–(25) below.

These factives generate a larger class of cases where conjunctions similar to the concessive tokened by (14), which include a contrary epistemic modal, also sound quite bad. Examples are the following:

(22) # I regret that they lost, but there's a chance that they won.

(23) # I am glad that she is home, but she might not be home.

(24) # I am disappointed that my ticket lost, but it's possible that it won.

(25) # I am angry that she is home, but it's possible she's not home.[20]

As before, if fallibilism is correct, knowing the propositional object of the factive conjunct is compatible with the truth of the concessive epistemic modal conjuncts above. But it is plausible that the left-hand factive conjuncts presuppose or entail, or at least somehow commit their speaker, to knowledge of their propositional complements. If such factives commit their speaker to knowledge, then on fallibilism, we could expect that these conjuncts can be felicitously conjoined together, and for just the same reasons that fallibilism predicts as felicitous the conjunctions of concessive knowledge attributions.

Given the patterns considered in §1, one might expect that the above conjunctions also do not embed favorably under supposition or conditionals where they go unasserted, which is, again, a sign that standard pragmatic explanations of their infelicity will be unavailable. And indeed, they do not embed favorably. Consider the embeddings of (22) and (23) below:

[20]Someone might suspect that variants on, say, (22) can sound okay. E.g., "I regret that they lost, though it's still possible they won—I turned off the television before the game ended" (thanks to Baron Reed here). One might think that in this case, the second conjunct and its clarification do not take back anything from the first conjunct (and that in cases of genuine semantic incompatibility, the second conjunct will somehow take back what the first conjunct affirms). However, this variant sounds (to me at least) like it *does* take something back from the first conjunct: the first conjunct at least represents (and perhaps entails) that the speaker knows that they lost, and this is called into question by the second conjunct and its clarification.

(26) # If I regret that they lost but there's a chance that they won, then...

(27) # If I am glad that she is home but she might not be home, then...

(28) # Suppose I regret that they lost but there's a chance that they won, then...

(29) # Suppose I am glad that she is home but she might not be home, then...

What is more, if fallibilism is correct, one might also expect that hope attributions conjoined with such factive, knowledge-implicating constructions (with contrary complements) would also sound fine. Yet they do not sound fine:

(30) # I hope that they won, but I regret that they lost.

(31) # I hope she is not home, but I am happy that she's home.[21]

Significantly—and this is the crucial point—no fallibilist view considered earlier in §2 which appealed to a semantics or a pragmatics concerning either "know(s)" or epistemic modals like "might," will be well-positioned to explain conjunctions like (30) and (31). For these conjunctions do not include "know(s)" nor epistemic modals, so any explanation depending on a semantics or pragmatics of such terms will be unavailable. And as seen in §1, the fallibilist cannot simply lean on the incompatibility of hope and knowledge to explain (30) and (31), and insist there is nothing left to explain: for these incompatibility data, along with the plausible CLH, suggest that fallibilism is false.

As covered earlier, the temptation will be to reduce the factive conjuncts of (30) and (31) to being committed to knowledge, and their hope conjuncts to a corresponding modal, and thereby reduce the infelicity of (30) and (31) to that of their corresponding concessive knowledge conjunctions; in other

[21] In addition, we may note that with all of (22)–(31), the use of "but" to conjoin is revealing: there is a clear contrast such that "but" rather than "and" is required. And yet the clash between conjuncts is so painful that even "but" cannot heal it.

words, to reduce them to whatever is infelicitous about their corresponding concessive knowledge attributions. But as already noted in §2, succumbing to this temptation will not obviously explain the divergent embedding behaviors, the third-personal (12), nor 'agreement' conjunctions like (13). The lesson of this section then is this: not only does the linguistic data from §§1–2 pose a challenge to fallibilism, but also—on the assumption that knowledge is implicated by such constructions[22]—conjunctions with factive predicates like (22)–(25), and (30) and (31).

Now I do not contend, or even suggest, that fallibilists cannot meet any of these challenges. It is worth noting, however, that if we accept the incompatibility of hope-that self-ascriptions with knowledge self-ascriptions, then the simplest explanation of both the incompatibility and the attendant data raised throughout this essay would appear to be an infallibilist one. As sketched in §1, an infallibilist semantics for "know(s)," plus the principle CLH, can straightforwardly explain what is problematic about most of the troublesome conjunctions considered earlier in this paper: on infallibilism and CLH, each of (3), (19), (20)–(25), and (30)–(31) is at least rationally, if not also semantically, inconsistent; and if semantically inconsistent, this would in turn explain very well their infelicitous embeddings under "If" and "Suppose," as well as the attendant conversational patterns.[23] And infallibilism about knowledge itself would easily explain the factive conjunctions from this section, including (30) and (31), which do not use the term "know(s)" but whose factive predicates nevertheless appear to commit the speaker to knowledge.

4 Conclusion

Fallibilists about knowledge have been overly preoccupied with how to handle "concessive" knowledge attributions of a form similar to (14), that is,

[22] If one argues instead that constructions with factive emotive predicates do not even implicate knowledge, another puzzle is raised, namely, discerning what would wrong with them when they sound bizarre, and why it seems they all suffer from what is plausibly the *same* structural malady.

[23] Might the infallibilist do better to rest their case only on the idea that knowledge and hope are rationally inconsistent, while remaining neutral on whether their self-ascriptions can be semantically consistent? Perhaps, but doing so would mean that they do not have as many resources to predict the infelicitous embeddings considered throughout this paper.

conjunctions combining knowledge self-ascription and epistemically modalized concessions. Yet as seen here, there are many other attitude ascriptions which carry structural commitments (semantic or rational) to knowledge, for example factive emotives which take a propositional complement, such as *regretting that*, being *happy that*, being *sad that*, and many more besides. In addition, there are attitude ascriptions like *hope that*, which carry structural commitments to a *lack* of knowledge.

When we consider the ways that hope self-ascriptions interact with ascriptions committed to knowledge, we discover a wide array of data far exceeding that from epistemic modals in concessive knowledge attributions, data which impose serious challenges on fallibilists. Hope self-ascriptions generate problematic assertions when conjoined with outright assertions (2), or with knowledge ascriptions of the same proposition (e.g. (3), or third-person ascriptions like (12)), or with factive predicates as in (30) and (31). As shown in §1, when these and related constructions undergo embedding, are conjoined with other speech acts, or are considered in related conversational patterns, we find their problematic nature to be likely semantic or rational in nature.

All these data from hope self-ascriptions and beyond can be straightforwardly explained by infallibilists. By comparison, the fallibilist looks to have impoverished resources for offering a satisfactory explanation (let alone a better one) for all the data introduced here. Given this, fallibilists would do well to attend to the larger explanatory burden carried upon their shoulders.[24]

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