Meta-agnosticism: Higher Order Epistemic Possibility
ROY SORENSEN

In 'Epistemic Modals' (2007), Seth Yalcin proposes Stalnaker-style semantics for epistemic possibility. He is inspired by John MacFarlane's ingenious defence of relativism, in which claims of epistemic possibility are made rigidly from the perspective of the assessor's actual stock of information (rather than from the speaker's knowledge base or that of his audience or community). The innovations of MacFarlane and Yalcin independently reinforce the modal collapse espoused by Jaakko Hintikka in his 1962 epistemic logic (which relied on the implausible KK principle and heavy idealizations). I respond to this new challenge with fresh objections to the underlying S4 equivalence: $\Box \Box p \leftrightarrow \Box p$. I also propose counter-analyses of the intriguing data which Yalcin cites in support of his new semantics.

A key collateral motivation for this defence of irredundant iterations is to ward off a threat to higher order vagueness.

Agnostic: God might exist and God might not exist. No one can have proof either way.

Meta-agnostic: There might be some proof concerning God's existence and there might not be any such proof. There can be no meta-proof.

Meta-meta-agnostic: The meta-agnostic scolds the agnostic for asserting more than he could possibly know. I, in turn, scold the meta-agnostic...

The agnostic believes that there is an ineliminable epistemic possibility that God exists and an ineliminable epistemic possibility that God does not exist. He refuses to debate whether God exists, because he thinks it is impossible to know whether God exists.

The meta-agnostic believes that there is an ineliminable epistemic possibility that agnosticism is true and an ineliminable epistemic possibility that it is false. He refuses to debate whether agnosticism is correct, because he thinks it is impossible to know whether agnosticism is correct.

Higher order agnosticism never collapses into lower agnosticism. Lower order agnosticism never implies higher order agnosticism. Therefore, the underlying epistemic possibilities are stable.
Or to put my thesis more technically and negatively, the $S_4$ equivalence, $\Diamond\Diamond p \leftrightarrow \Diamond p$, fails in both directions. The equivalence is implied by old fashioned epistemic logic and by new fangled relativism about epistemic possibility. The equivalence also gives false hope to the minority of vagueness theorists who think higher order vagueness is an illusion.

1. Open hierarchies and psychological realism

Sextus Empiricus’s caveats about assertion resonate in an open-ended hierarchy of epistemic possibilities. For Sextus would find even the meta-meta-agnostic too assertive. In *Outlines of Pyrrhonism*, Sextus always refuses to assert that he does not know because that would suggest he knows that he does not know. Nor would Sextus assert that he knows that he does not know that he does not know. As the meta levels ascend, we asymptotically approach the Pyrrhonian requirement for assertion. The impossibility of ever reaching the limit explains Sextus’s quietism.

At this stage, Sextus would follow his practice of arguing on both sides of the issue (in his effort to cultivate the tranquility that comes through suspended judgement). He would caution against over-sophisticating his reservations. Memory and attention are taxed by iterations.

This psychological realism explains why (Om) is plausible but (Com) is not:

\[
\begin{align*}
\text{(Omissive)} &\quad \Diamond p \& \sim \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Diamond \Dia
possible world or false in every possible world). *Epistemic* possibility is broader, meaning something roughly equivalent to ‘consistent with all that is known’.

Known by the speaker? By his epistemic community? By the assessor of the claim? In my opinion, stable iterations will proceed regardless of the choice of relatum because knowledge iterates.

2. The case for collapse

There is a modal collapse, $\Diamond \Diamond p \leftrightarrow \Diamond p$, in Jaakko Hintikka’s (1962) epistemic logic. He defines epistemic possibility as the dual of knowledge: $\Diamond p \leftrightarrow \sim K \sim p$. Thus, $\Diamond \Diamond p \leftrightarrow \Diamond p$ translates to $\sim K \sim K \sim p \leftrightarrow \sim K \sim p$. By contraposition, the conditional $\sim K \sim K \sim p \rightarrow \sim K \sim p$ is equivalent to $\sim \sim K \sim p \rightarrow \sim \sim K \sim K \sim p$ which yields $K \sim p \rightarrow KK \sim p$ after the two double negations are removed. This is a theorem of Hintikka’s system because he accepts the KK principle (if you know, then you know you know).

The relativist John MacFarlane has pioneered a new path to collapse (see MacFarlane forthcoming). He was inspired by examples involving eavesdroppers. If wire tappers know that the ringleader is in a London police station, then they will disagree with the conspirator’s speculation that the ringleader might be in Baghdad. Instead of relativizing to the speaker’s knowledge or that of his conspirators, the eavesdropper uses his own actual state of information. What might be the case is fixed by the information he presently possesses (regardless of his beliefs about what this information entails). Given the modal rigidity induced by ‘actual’ and ‘present’, $\Diamond \Diamond p$ reduces to $\Diamond p$.

The relativist specifically takes the information state parameter to be initialized by the context of assessment. But MacFarlane foresees that a ‘non-indexical contextualist’ could abstain from taking a position on how the information state is initialized by the context and still run the underlying compositional semantics (in which $\Diamond$ quantifies over all the worlds in the information state parameter without shifting the information state parameter).

Although Seth Yalcin does not commit to either relativism or non-indexical contextualism, he endorses a semantics in which the set of worlds over which epistemic modals quantify is determined by a separate information state parameter, and not by the world of evaluation and an accessibility relation. Because the modal operators do not
shift this information state parameter, this semantics predicts modal collapse:

We can observe immediately that iterating epistemic possibility operators adds no value on this semantics: $\Diamond \Diamond \Phi$ is semantically equivalent to $\Diamond \Phi$. The outer modal in $\Diamond \Diamond \Phi$ serves only to introduce vacuous quantification over worlds. (This may explain why iterating epistemic possibility modals generally does not sound right, and why, when it does, the truth-conditions of the result typically seem equivalent to $\Diamond \Phi$ ….) (Yalcin 2007, p. 994)

3. Garden path suppositions

Seth Yalcin also appeals to the defectiveness of sentences such as:

(9) # Suppose it is raining and possibly it is not raining.
(11) # If it is raining and it might not be raining, then …

According to Yalcin, these ‘epistemic contradictions’ differ from G. E. Moore’s sentence ‘It is raining but I do not believe it’. Although Moore’s sentence resists being asserted on its own, it can be supposed and it can be embedded in assertible conditionals such as ‘If it is raining but I do not believe it, then I will be surprised when I go outside.’

Yalcin’s explanation is semantic. The sentence in (9) is an impossible command. To suppose $p$ is to tentatively add it to your stock of information and explore what follows. Evaluating conditionals is more specific; add the antecedent and check whether the consequent follows. A proposition is epistemically possible if it is not excluded. So on the one hand, (9) is commanding you to add ‘It is raining’ to your background stock of information. On the other hand, (9) is also forbidding you from excluding ‘It is not raining’. It is impossible to follow both sub-orders. Yalcin concludes that (9) and (11) are unintelligible.

If ‘It might be that not $p$’ means ‘Not $p$ is consistent with all that is known’, then (9) would be equivalent to the obeyable command to suppose that $p$ is true while also supposing that $\neg p$ is consistent with all that is known. So Yalcin has designed a crucial experiment for the rival theories.

As a defender of the classic analysis, I need to explain away the apparent ungrammaticality of (9) and (11). I borrow precedents from the linguist’s corpus of grammatical but unacceptable sentences. Consider the garden path sentence: ‘Suppose the horse raced past the barn fell.’ The supposition seems ungrammatical because we try to
parse the embedded sentence as an ordinary active intransitive sentence. This effort is doomed by ‘fell’. Many readers give up and conclude that the sentence is impossible to understand. Persistent readers backtrack. They check whether the sentence can be parsed with a rarer structure. One of these unlikely candidates does make parsing feasible: interpret ‘raced past the barn’ as a reduced relative clause with a passive participle (making ‘fell’ the main verb). In other words, read the embedded sentence as ‘The horse (that was raced past the barn) fell.’

Parallel rescues can be mounted for recursive embedding as in ‘The thought that the man who saw the girl who went away is my brother is interesting is complex.’ Notice that its negation is a pragmatic paradox. But it is not an obvious pragmatic paradox. It looks like nonsense rather than a self-defeating thought.

Let us rescue (11) in four stages. First, reverse the conjuncts in its antecedent to obtain ‘If it might not be raining and is raining, then …’. The switch makes the sentence sound less self-stultifying. Second, put flesh on the skeletal sentence by adding a complete consequent: ‘If it might not be raining and is raining, then the farmer will be relieved.’ Third, pepper the sentence with pragmatic contrast indicators ‘If it might not be raining but it is raining, then the farmer will be relieved.’ Fourth, add a bit of confirming context. A pitiful scenario: we are entertaining a vacationing farmer who seems ambivalent and preoccupied. The radio weather lady recently announced that it is raining in a county that sounds familiar to us. Does that county not border his drought-stricken farm? If our rusty recollection of the county’s name is correct, then his crops are probably being saved by the rain. But then still, for all that the farmer knows, the rain does not extend to his farm. So maybe the farmer fears a near miss. To ease his conjectured anxiety, we discreetly call the farmer’s neighbour in the hope of becoming bearers of definite good news.

The command ‘Tie your shoes and put them on’ is unexecutable if we read it as entailing that you first tie your shoes and then put them on. But this temporal implicature is cancellable: ‘Tie your shoes and put them on but not necessarily in that order.’ Similarly, when Yalcin commands ‘Suppose it is raining and possibly it is not raining’ we are tempted to first add the assumption that it is raining and then protect the possibility that it is not raining. We cannot do it in that sequence. However, as far the semantics of the order is concerned, there is no entailment of order. So we can comply by first protecting the epistemic possibility that it is not raining and then adding the assumption that it is actually raining.
As Keith DeRose (1991) emphasizes, we have flexibility as to whose knowledge we should relativize to. In a later effort to explain oddity of sentences such as 'I know that Michael doesn’t lead the league in scoring, though it's possible that he does’ (1998, p. 75), DeRose requires that the speaker be included in the knowledge base. But this compulsory membership overlooks epistemic empathy. It is common knowledge that the game show host knows which door has the prize behind it. Yet, the host can truthfully tell a contestant 'There might be a prize behind door number one' even if he knows that there is no prize there.

An eavesdropper has similar flexibility. If he wants to replicate the reasoning of the conspirators, he should relativize epistemic possibility to what the conspirators know. If he wants to avoid misleading less informed members of the surveillance team, then he should relativize to his own knowledge.

4. Irredundant iterations

The collapse thesis $\Diamond \Diamond p \leftrightarrow \Diamond p$ predicts that iterated epistemic possibility will sound redundant (rather than ungrammatical). However, iterated modals do not sound redundant when we are promoting caution. The foreman at a nuclear power plant tells his crew:

(C) If you might have misread the reactor gauge or even if you might have just possibly misread the gauge, then check it again.

If a worker is teased for neurotically re-reading the gauge, he can defend his double checking by appealing to the second disjunct.

A Cartesian sceptic who cannot get you to concede that you might be dreaming may press you to concede that it is at least possible that you might be dreaming. After all, it is often unclear what might and what might not be possible. (As a rejecter of the KK principle, you could fearlessly grant this and grant that this implies that you do not know that you know and yet insist that the sceptic has not shown that you do not know.)

There are misleading linguistic pressures against repeating modal adverbs; 'He might might be a culprit' sounds odd. We can avoid stirring up these inhibitions by using terms that are defined in terms of modals: 'He might be a suspect' sounds fine. A detective who does not have enough evidence to assert 'He is a suspect' can hedge with 'He might be a suspect'. Under legal pressure to hedge, police have introduced the phrase 'person of interest' to cover people who are merely possible suspects or who are potential witnesses.
A detective who learns that the victim’s husband is an amnesiac and so is neither a potential witness nor a promising suspect can still insist that ‘The husband might be person of interest’. This conveys a third-order epistemic possibility equivalent to the clumsy ‘Possibly he might be a possible suspect.’

5. Higher order vagueness

Epistemicists analyse vagueness in terms of ineliminable epistemic possibilities. (See Sorensen 2003.) The basic idea is that ‘It is indefinite whether \( p \)’ means ‘There is an ineliminable epistemically possibility that \( p \) and an ineliminable epistemic possibility that not \( p \).’ Epistemicists believe in higher order vagueness. Consequently, they deny ‘It is indefinite whether it is indefinite whether \( p \)’ entails ‘It is indefinite whether \( p \).’ Epistemicists are thereby committed to irredundant, iterated epistemic possibilities. Epistemicists are agnostics about indefinite propositions, meta-agnostics about indefinite indefinite propositions, and so on. (Supervaluationists and most other vagueness theorists agree with epistemicists that indefinite operators do not collapse, but they analyse the operators semantically.)

Even without epistemicist premisses, the arguments for higher order vagueness can be adapted to support the iteration of epistemic modalities. Consider our practice of sorting cases into clear positives, clear negatives, and borderline cases. In addition to the clear borderline cases, there are cases that are borderline between being clear positives and clear borderline cases. Interpret ‘borderline’ as ‘might be positive and might be negative’. In addition to the maybes, there will be the maybe maybes.

Any resistance to irredundant iterations must be firm: if the resistor hedges, and concedes that mights might iterate, he affirms his adversary’s thesis!

Department of Philosophy
Washington University in St Louis
One Brookings Drive – Campus Box 1073
Wilson Hall
St. Louis, MO 63130
USA
sorensen@wustl.edu

Meta-agnosticism: Higher Order Epistemic Possibility 783

References


