1 INTRODUCTION

You’re wondering whether you turned the stove off. You’re pretty sure you did, but just to be safe you have a quick look at the stove dial before you leave the house. You can see that it’s in the off position and so you walk away. A moment later though you start to worry about whether the stove is really off – was the dial really in the off position? You cast another glance at the dial, you see it’s in the off position and you leave the house. But a few moments after that you start to worry again about whether the stove is really off – couldn’t the dial be broken? – and you go back in the house and this time check the temperature of the burner – it’s cold. You leave the house again. But then you start to worry again about whether it’s off – did you put your hand close enough to the burner? – and so you call your neighbour and ask them to go over and check. They do and report that, yes, your stove is off. But a few moments later you get worried again – is the neighbour trustworthy? You call your friend and ask them to go check. And this keeps going.

This sort of incessant checking and re-checking is not a model of rationality: it looks like a serious a misuse of time and energy and might even be pathological. Is it epistemically acceptable behaviour though?

It’s not clear. It certainly doesn’t feel as though you’re thriving epistemically when you keep checking and re-checking on the stove. That said, it’s hard to say exactly why incessant checking should be epistemically (rather than say, practically) problematic. When you keep checking whether your stove is off, you’re getting more and more information about whether it’s off. Isn’t having more evidence on some matter better than having less, and so getting more evidence always acceptable (and even laudable)?

1 Please ask if you want to cite it though.
from the perspective of epistemology? And surely some re-checking is great epistemic practice: even if the doctors know that it’s your right arm they have to amputate, you’re still hoping that they check your chart before they start the operation. So, in the end, is there anything wrong – from a purely epistemic perspective – with checking again and again and again?

I think there is. In this paper, I want to make the case that incessant checking is always epistemically problematic and show exactly where the incessant checker is going epistemically wrong. As we’ll see, from the perspective of epistemology and epistemology alone, there is something wrong with incessant checking.

The arguments to come have broader epistemic implications as well: I’ll discuss suspension of judgment, epistemic justification, the permissivism/uniqueness debate, and the norms of inquiry in general. On this last item: part of what will emerge in the discussion is that some of the cases in which checking again is epistemically problematic are cases in which subjects stand to gain in evidence or epistemic standing by performing that check. In these cases, even though further inquiry could improve their epistemic situations, I’m going to argue that there are serious problems – epistemic ones – with inquiring further.

Incessant checkers may have a wide range of motivations, but their possible epistemic trajectories are more limited. In particular, as an incessant checker runs through their checks, their epistemic position with respect to their answer is either going to improve or it’s not. My plan in what follows is to look at how things will unfold along either sort of epistemic path and bring out just how each is going to be epistemically problematic. As we’ll see, the epistemic flaws will show up in different places in different cases, but often these flaws will be very standard, e.g., the incessant checker will have unjustified doxastic attitudes.

There is a certain kind of “epistemic purist” who might want to complain that some of the questions I am asking here are misguided. This purist says: “Epistemic evaluations are reserved for doxastic attitudes and only doxastic attitudes and track some-

1 Good (1967) argued that, in expectation at least, one cannot do worse by gathering more evidence before acting. And some have argued that an epistemic analogue of this is true as well: that gathering more evidence cannot reduce the (e.g.) expected accuracy of one’s beliefs. For instance, see Horwich (1982), Maher (1990), Oddie (1997) and Fallis (2007).

2 While I am going to be talking about incessant checking, I want to distinguish that from the sort of compulsive checking associated with some kinds of Obsessive-Compulsive Disorder (OCD). OCD-related checking will come up again a bit later, but in this paper, I want to mostly be thinking about re-checking that isn’t part of a genuine disorder.
thing about the extent to which those attitudes fit or are sensitive to the evidence the subject has at a given time. Questions about whether we should or may check again, or gather more evidence, or engage in further inquiry are simply extra-epistemic." Perhaps we can find this sort of purism in some of Tom Kelly’s work, e.g., Kelly (2007) and Kelly (2008). I am not an epistemic purist, and I think the questions I’ve been asking so far make good sense. Most of what’s to come though does not hang on accepting the sort of “impure” epistemology I favour. Most of the epistemic flaws I am about to attribute to the incessant checker are absolutely standard epistemic flaws and will count as such even for the purist.

2 GROUNDWORK

The phenomenon I’m interested in in this paper can be called ‘re-checking’. And I’m interested in a particularly robust form of re-checking: one in which the re-checker is genuinely inquiring further into their question. Sometimes we “re-check” in a thinner sense – we have the habit of jigging the lock a few extra times or tapping our pockets when something important is in there. Perhaps in some of these cases, the behaviour is more like a tic than a genuine investigation. I’m interested in the cases that are genuine inquiries or investigations. My re-checkers are really trying to collect more information and are not just performing certain habitual movements or looking at the stove for any number of other (non-epistemic) reasons. I take it that typical double-checkers and triple-checkers (etc.) are genuine inquirers.

Often we start inquiring from a position of ignorance and neutrality. I don’t know where the dog went, so I check the yard. Re-checking isn’t borne from neutrality or ignorance though. If I have no idea whether my passport is in my bag, then fishing around in there can count as a check but it won’t count as a re-check, e.g., a double-check. To double-check whether my passport is in my bag I need to already think it is. Checks are inquiries, and re-checks (at least as I’m using the term) are inquiries into matters that the re-checker has already settled.

Here is the general form that a cycle repeated re-checking takes then. A re-checker starts settled with respect to a question Q (e.g., is the stove off?) – they already know

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3My use of ‘re-check’ may be slightly misleading then. It may seem to imply that the relevant subjects already checked or inquired, but this needn’t be the case here. What matters is that they had already settled the relevant question, whether by having inquired or by way of some other (less intentional) method, e.g., perception.
or at least believe an answer to \( Q \) (it’s off); then they open \( Q \) again (is it off?) and collect more evidence on the matter (look at the dial); they settle the question again as a result of the check (it’s off); they re-open the question again (is it off?) and do another test (look at the dial again or maybe check the burner this time); they re-settle again (it’s off); and so on. I’m going to call this sort of extended cycle of re-checking ‘\( m \)-checking’. I’ve also called it ‘incessant checking’, although of course it does stop at some point.

One slight complication. In order to get genuine cases of \( m \)-checking, re-checkers need to do more than just open and close a question over and over: they also need to be closing their question on the same answer each time. Say I think you’ve left the house, but I become doubtful and want to double-check whether you’re home or not. I call your phone and hear it ring upstairs. As a result, I change my mind and come to believe that you haven’t left yet. I’ve re-settled the question of whether you’re home or not, but not in the same way as I had originally settled it. Now say I become gripped with further doubt and want to check whether you’re home or not once more. This doesn’t seem to be a triple-check. When I re-settle the question of whether you’re home differently than I had originally settled it and then go back after that to re-check given my new answer, that looks like a double-check rather than a triple-check. For the re-checks to keep adding up, the checker needs not just to re-settle the question but re-settle it in the same way. That is, if a subject starts settled on \( p \) as the answer to \( Q \), their double-check has to take them back to \( p \) if the next check is going to count as a triple-check; and the same goes for further checks.

Why should this be? I think part of what’s going on is that we should think of re-checks as checks not just on questions but on ‘focused questions’, which we can think of as question-proposition pairs. Re-checkers re-check on a question and a proposition that they take to answer the question. The doctor doesn’t just double-check on whether it’s the right or left arm they have to amputate, but that it’s (say) the left arm. To get multiple re-checks we need multiple checks not only on some question \( Q \) but on some \( \langle Q, p \rangle \) pair such that \( p \) is the answer the checker takes to settle \( Q \). So to get a triple-check, we need a subject who settled on \( p \), re-checks on \( \langle Q, p \rangle \), re-settles on \( p \), and then re-checks on \( \langle Q, p \rangle \) again. And the same goes, mutatis mutandis, for quadruple, quintuple, and greater re-checks. In the discussion to come, I’ll sometimes say that re-checkers are re-checking questions, sometimes answers. Strictly speaking though they are always re-checking some pair of those.

Given all of this, here’s a simple representation of the cycle of incessant checking:
At point A subjects are settled on some answer to \( Q, p \). Along the top arc of the circle, \( Q \) continues to be settled for them. But then doubt creeps in, and they worry about whether \( p \) really is the right answer to \( Q \). At point B they open \( Q \) up for inquiry again, perform some test or check along the bottom arc, and then settle (again) at point A. And this keeps going for some number of revolutions. I’m going to keep referring back to this circle and its points and arcs.

My plan is to argue that subjects going around and around the circle in this sort of way are going to have to display various epistemic flaws. This may well help shed light on questions about whether or why or to what extent incessant checking is practically wasteful, but I’m not going to explore those connections here. I also don’t mean to say that the sorts of epistemic flaws I’m about to point to are the only ones we might find in these sorts of repeated cycles of checking and re-checking; there may be others as well.\(^4\)

In order to make my case, I’m going to help myself the notion of a subject’s ‘epistemic position’ or ‘epistemic circumstances’ or ‘epistemic standing’ (I use all of these interchangeably). My thought is that for any proposition \( p \) that a subject can grasp at a time we can talk about that subject’s epistemic standing with respect to \( p \) at that time. This isn’t a matter of whether they believe \( p \) or not (in the binary or degreed sense), but rather a matter of something like the strength of their evidence for \( p \), or the strength of

\(^4\)For instance, Buchak (2010) highlights some (plausibly epistemic) risks of further tests or checks. And perhaps endless focus on one question is wasteful in a properly epistemic sense, e.g., it prevents us from making other sorts of epistemic progress.
their epistemic justification to believe \( p \).

With that background in place, I want to partition the cases of \( m \)-checking into three kinds. With each revolution around the circle above (from A, back to A), one of three things will happen: either the checker's epistemic position with respect to their answer will improve, e.g., they’ll get more evidence for their answer, or it will deteriorate, e.g., they’ll get evidence against their answer, or it will stay the same. And then we can mark a mostly analogous distinction with respect to the repeating cycle of re-checking: as the number of revolutions is mounting, a checker's epistemic circumstances with respect to their answer are going to be ultimately improving, ultimately deteriorating, or neither.

A final bit of stage setting. I’ve been using expressions like “epistemic flaws”, “going epistemically wrong”, and “epistemically problematic” to describe the \( m \)-checker or their \( m \)-checking. These are meant to serve as generic ways of saying that something is epistemically not OK. In what’s to come I’m going to make clear exactly where these epistemic wrongs, or problems, or flaws are.

3 INCESSANT CHECKING: ULTIMATELY IMPROVING EPISTEMIC POSITION

One manifestation of this sort of pattern is one according to which an \( m \)-checker's epistemic position improves with each revolution around our circle. Let’s think about this straightforward sort of case to start. In this sort of case perhaps the \( m \)-checker performs a good, new test at each check (e.g., checks the stove dial, then the temperature of the burner, then the stove lights, then calls a neighbour for a second opinion etc.), gathers new evidence relevant to the question and settles their question based on that new check. Then they do the same thing again. And again. And again. I’m going to call this character the ‘step-functional \( m \)-checker’ since that’s a nice way to think of their epistemic progress.

This is the sort of case that might make \( m \)-checking appear unproblematic epistemically speaking – what could be epistemically wrong with getting more, good evi-

\[ ^5 \text{In fact, if the reader feels uncomfortable with this sort of talk of subjects' epistemic circumstances or positions with respect to } p, \text{ they should feel free to just cash that out entirely in terms of the strength of subjects' evidence for/against } p, \text{ or the strength of their justification for believing } p. \text{ I prefer the more neutral way of talking myself since it leaves open questions about what factors determine one's epistemic position, but nothing of significance hangs on it here.} \]
dence and improving your epistemic situation? To answer this we’ll need to move beyond the schematic outline so far presented of the doxastic changes the \( m \)-checker goes through. What does it take to have a question settled, and what happens when a question is put back up for inquiry again?

INTERLUDE: SETTLED AND OPEN QUESTIONS

On settling a question. Perhaps knowing the answer to \( Q \) is sufficient for having settled \( Q \), but I don’t think that it’s necessary. A subject who becomes convinced on good, but misleading grounds that the problem is the spark plugs when it’s actually a misfiring cylinder, may have settled the question of what’s wrong with their car in just the way we’re after here. It seems as though subjects who have settled a question must at least believe some answer to that question.

So let’s say that re-checkers start off believing some answer to a question. This is what happens at point \( A \): the relevant subject comes to believe \( p \). Then, for whatever reason, they come to doubt that answer and want to check on whether it’s right. So (very roughly) they start off thinking they have the answer but then they’re not so sure. How should we think about this change in view? Which is to say: what happens at point \( B \)?

Re-checkers are inquirers. Friedman (2017) argues that anyone inquiring into \( Q \) at \( t \) is suspending judgment about \( Q \) at \( t \). I want to follow Friedman here: at point \( B \) subjects suspend judgment about whether \( p \) is true, they investigate the matter across the bottom arc, until, at point \( A \), they re-settle/come to believe \( p \) again.

I’m not going to rehearse Friedman’s case for the tight connection between inquiry and suspension of judgment in much detail.\(^6\) In brief, she claims that all genuine inquirers have specific kinds of “questioning” attitudes (she calls these ‘interrogative attitudes’). So in conceiving of checking as genuine inquiry, we shouldn’t think of it as a matter of merely (say) walking over to the stove and turning your head (which you might do for any number of reasons, e.g., you’re stretching) or putting your hand in your bag (again). For those sorts of actions to count as acts of inquiry, they have to be actions that are grounded in or perhaps motivated by the inquirer’s desire to know more or to figure something out.

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\(^6\)This can be found in Friedman (2017) and some further discussion appears in Friedman (forthcoming).
For Friedman, one has this sort of desire to figure something out whenever one has an interrogative attitude: when one is wondering about the question or curious about it (or contemplating, deliberating, pondering, and so on). And anyone with an interrogative attitude towards $Q$ is suspending judgment about $Q$. A person who is curious about whether their passport is in their bag, isn’t convinced that it’s there (why would they be curious if they were already convinced?). It’s considerations like these that should push us to the conclusion that inquirers are suspending judgment: genuine inquirers into $Q$ have interrogative attitudes towards $Q$, and having an interrogative attitude towards $Q$ involves suspending judgment about $Q$.

One more general remark in defence of the thought that re-checkers suspend judgment at point $B$. I think that any way of understanding re-checking should involve a subject changing their mind in some sense. Say you put your passport in your bag at $t_1$. At $t_1$, you know your passport is in your bag. And say that once you put it in the bag, you simply go about the rest of your packing; you’re not worried about where your passport is. But at some point ($t_2$) you do start to worry about where your passport is and whether it’s in your bag (maybe you actually have to leave for the airport at $t_2$). At $t_2$, you become gripped by a kind of doubt or uncertainty that simply was not there before. So any account of re-checking needs to say something about this sort of change in view about whether $p$ is true. At point $A$, re-checkers think that $p$ is true, but then at point $B$ they’re not so sure anymore. A natural way of capturing the sort of epistemic backtracking we get between $A$ and $B$ is via a shift from believing $p$ to suspending judgment about whether $p$ is true.\(^7\)

Going back to our circle then we have incessant checkers believing $p$ at point $A$ and remaining believers along the top arc. They then suspend judgment about whether $p$ is true at point $B$ and inquire into that question along the bottom arc, performing some test or check. Then they come to believe $p$ again at $A$, and then they suspend again at $B$, and so on, for some number of revolutions.\(^8\)

\(^7\)We might try to capture this change in view in some other way. For instance, perhaps something confidence-theoretic will do, e.g., perhaps re-checkers become gripped by doubt post-checks and lose confidence in their answers; they check again with the aim of restoring that confidence. I don’t think that this view does as good a job of capturing the state of mind of the re-checker, but rather than get too far into those details, I simply want to point out that I don’t think this way of conceiving of the re-checker’s mind changes will do much to change the conclusion to come since I think the argument I make can be generalized to this sort of backtracking as well.

\(^8\)Quick note: while I think subjects can suspend judgment and perform a test or check on any kind of question, for ease of exposition I’m going to stick to discussing yes/no questions (‘whether’-questions).
All of this gives us a picture of incessant checking according to which incessant checkers move between believing and suspending judgment. But now we can ask: are those attitudes reasonable? Or better: are they epistemically justified? For now, we want to focus on our step-functional $m$-checker.

BACK TO CHECKING WITH IMPROVING EPISTEMIC CIRCUMSTANCES

I take it that the step-functional $m$-checker's beliefs are mostly in good standing epistemically. By and large, our starting un-checked beliefs are justified. And given that our step-functional $m$-checker's epistemic position with respect to their answer is improving, it's fair to say that as they re-settle on $p$ each subsequent time, those beliefs will also be epistemically justified. But is this $m$-checker justified in suspending judgment about whether $p$ is true given their epistemic position with respect to $p$?

There has been far less written about when suspending judgment is epistemically justified than there has been about when believing is, and I'm not going to give a full account here. A pressing question now is whether there are any epistemic circumstances with respect to $p$ that are too good or too strong to justify suspending judgment about whether $p$ is true. Let's call these, 'suspension-proof epistemic circumstances' (with respect to whether $p$ is true). It's not that one cannot suspend in suspension-proof epistemic circumstances, but that suspending is not justified in those epistemic circumstances. Are there any suspension-proof epistemic circumstances? I think so. Sometimes the evidence is just too good, and so agnosticism no longer reasonable.

For instance, say I know $p$ and ($p \rightarrow q$). And let's say this isn't a tricky case: I'm aware that I know these things. Then I consider whether $q$ is true. It does not look like I'm justified in being agnostic about whether $q$ is true. The inappropriateness of that package of commitments is clear if we imagine my making a speech about it. I say: “Yes, Jess had scrambled eggs for breakfast, and yes, if she had eggs for breakfast then she doesn't want eggs for lunch. But does she want eggs for lunch? I really can't say.” This is not a pretty speech; I take it that we'd think I'd misunderstood some commitment along the way. And I don't think the badness of the speech is merely a by-product of speaking the various sentences: its badness is (at least in part) a reflection of the badness of the package of commitments itself.

9To be clear: suspension-proof epistemic circumstances in this discussion are epistemic circumstances that are too good or strong for suspension of judgment. See Turri (2012) for some discussion of what may well be other sorts of epistemic circumstances in which suspension of judgment isn't justified.
Or say I come to your party and see Joe sitting on the sofa; Joe and I catch up. We need drinks though so I get up off the sofa and leave the room. Right outside the room I bump into you. You ask me whether Joe is at the party yet. Again, nothing tricky at all going on. It does not seem as though my considering the question and suspending judgment is appropriate. Again, our conversation makes that apparent when I say: "Well, I was just in the middle of catching up with him, and we needed drinks so I'm going to get us a couple, but I really don't know whether he's here/I'm agnostic about whether he's here".

So I think we should conclude that there are some suspension-proof epistemic circumstances. In particular, a subject's epistemic circumstances with respect to some answer to a question can be too good or too strong to justify suspension of judgment about that question. The implications of this for our step-functional $m$-checker depend upon how hard it is to get into suspension-proof epistemic circumstances. But the cases I just used to argue that there are suspension-proof epistemic circumstances are fairly ordinary cases. They don't involve special kinds of evidence or certainty or proof, but are simply everyday cases, the kinds we all find ourselves in. So, not only does it look like there are suspension-proof epistemic circumstances, it also looks like they are fairly run-of-the-mill.

If all of that is right, then we should not only expect that the step-functional $m$-checker will get into suspension-proof epistemic circumstances after some number of checks, but that it won't even take very long. Although, I think this is right, it's worth pointing out that so long as one thinks that there are suspension-proof epistemic circumstances, and they are not reserved for angels and supercomputers, then one should think that at some point – perhaps after more revolutions than I am suggesting here – the step-functional $m$-checker is going to get into suspension-proof epistemic circumstances. Whether this happens sooner or later, once this incessant checker does get there, they can only continue checking by having an unjustified doxastic attitude. Given this, from that point forward their incessant checking will be epistemically problematic.

Two quick points before moving on to the next type of $m$-checker. First, it's worth making clear that my claim here is not that there is some precise number of checks $n$ such that for every step-functional $m$-checker $n$-many checks is fine, but $n + 1$-many.

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10 Here is Confucius confirming: "Ji Wenzi always reflected three times before acting. The Master, hearing of this, remarked, "Twice would have been enough." (see Confucius (2003): 5.20)
checks is epistemically problematic. I take it that the point at which epistemic circumstances become suspension-proof and so checks become problematic can vary from case to case, may well be sensitive to what's at stake or vary with context. The conclusion so far leaves a range of possibilities open on this matter. Nothing I've said here should be thought to imply that it's obvious exactly when epistemic circumstances become suspension-proof (nor that there won't be any penumbral cases). My thought is just that what is clear enough is that there are some suspension-proof epistemic circumstances and that the step-functional $m$-checker is going to get into them if not sooner, then later.

And second, an $m$-checker's epistemic position can be ultimately improving without improving at every check. Some checks may lead to no change at all and others may even lead to their epistemic standing with respect to their answer deteriorating some. But if that epistemic standing is ultimately improving then the step-functional $m$-checker is going to end up in suspension-proof epistemic circumstances with respect to their answer at some point, and so their incessant checking will end up epistemically problematic at some point too.

4 INCESSANT CHECKING: ULTIMATELY DETERIORATING EPISTEMIC POSITION

The sort of $m$-checker we just looked at is one whose epistemic position is improving as they run through their checks. But incessant re-checking need not unfold that way. Before we get to another quite natural way that it might unfold, let me quickly address a different possible, if somewhat strange, alternative unfolding: an $m$-checker could keep re-checking despite the fact that their epistemic position with respect to their answer is deteriorating.

In the most straightforward version of this sort of case the re-checker starts off believing $p$, double-checks whether $p$ is true, gets evidence against $p$, re-settles on $p$, checks whether $p$ is true again, gets more evidence that it's the wrong answer, comes to believe $p$ again, and so on. This is obviously a strange sort of case and I think it's fairly clear that standard machinery in epistemology tells us that $m$-checking is epistemically transgressive in this sort of case as well.

In general, even if an $m$-checker starts in the sort of epistemic position that justifies believing some answer, if over the course of a series of re-checks that epistemic
position deteriorates, then soon enough this \textit{m}-checker will no longer be in the sort of epistemic position that justifies believing that answer. Given that one stage of \textit{m}-checking involves a shift back to belief in the answer post-check, these beliefs will be unjustified in these cases. Just as improving epistemic circumstances will eventually leave suspension of judgment unjustified, deteriorating ones will eventually leave believing the answer unjustified. But this means that in this sort of case incessant checking is also epistemically problematic since it involves \textit{m}-checkers forming and having beliefs without justification.\footnote{In fact we might think that this sort of \textit{m}-checker is in worse shape even. In this sort of case, the \textit{m}-checker starts believing \(p\) (we can assume justifiably) then shifts to suspension of judgment and performs a test that makes their epistemic position with respect to \(p\) weaker, but then re-settles on \(p\). There's certainly something strange if not worse about getting evidence against \(p\) and coming to believe \(p\) as a result.}

5 INCESSANT CHECKING: EPISTEMIC POSITION NEITHER ULTIMATELY IMPROVING NOR ULTIMATELY DETERIORATING

What about the cases in which \textit{m}-checkers’ epistemic positions neither ultimately improve nor ultimately deteriorate? This could happen if none of the checks have any impact on checkers’ epistemic circumstances with respect to their answers. These \textit{m}-checkers’ epistemic progress is flat from first check to last – no change at all. But this is not the only way an \textit{m}-checker can end up, in the long-run, in much the same epistemic position with respect to their answer that they started in: if an \textit{m}-checker’s epistemic gains and losses are balanced, then their epistemic position with respect to their answer will neither ultimately improve nor ultimately deteriorate.

5.1 BALANCED GAINS AND LOSSES (WAVY)

Let’s start with this sort of “wavy” \textit{m}-checker. There are a huge number of epistemic trajectories that fit this mold – the only constraint is that gains and losses be (roughly) balanced. This tells us nothing about where the gains and losses take place or how often they do in the cycle (or on our circle). The wavy \textit{m}-checker might have just one small gain and loss through all of their checking or massive gains and losses on each and every revolution, or anything in between. The gains may come as the result of the check or accidentally along the way. And so on.
I am not going to explore all of these different options; most don’t fit any natural or discernible pattern, and so it’s hard to know quite what to say about them. One option does stand out though. There is a checking-focused variant of Obsessive Compulsive Disorder (OCD). These compulsive checkers can spend hours checking whether a switch is off or a dial in some position over and over again. One sort of explanation of this behaviour relies heavily on memory loss: these checkers see that the switch is off but then a short time later they cannot properly recall the position of the switch.\textsuperscript{12}

Forgetting what is learned at a check is fairly common even for non-compulsive checkers. But this does give us a very natural version of a wavy $m$-checker. In this sort of case information is repeatedly gained in a check and then later forgotten. Here an $m$-checker’s progress might look something like a square wave, with information gained at the re-check, and then later forgotten, and then gained again at the next check and then forgotten again after re-settling, and so on. What should we say about this forgetful $m$-checker?

Intuitively, this $m$-checker is not thriving epistemically. Understanding exactly why gets into somewhat subtle issues about the extent to which we fail epistemically by losing certain kinds of information, and so I’m obviously not going to be able to say as much as I’d like here.\textsuperscript{13} But let me make a start at least.

What seems roughly right is that there are many episodes of forgetting that we don’t tend to think of as rational failings. No one accuses me of irrationality because I can’t remember what I had for lunch on December 05, 2011. It’s less clear to me though whether we want to say that there is nothing at all epistemically unfortunate about even this sort of mundane information loss. Certainly from some perspective knowing more is better.

The forgetful checkers we’re thinking about now aren’t losing mundane information though. This sort of subject is inquiring into some question. This means that they are trying to answer some question – where their keys are, whether the stove is off, whether they have their passport. Answering a question is a matter of having a certain kind of attitude towards the answer to the question, e.g., knowing that their keys are in

\textsuperscript{12}In fact, it’s been argued that compulsive re-checking breeds a kind of familiarity with the switch that actually (sadly) makes it more difficult to recall the details of its position clearly. So compulsive checking may, ironically, make it even harder to accurately recall what the switch looked like a moment ago. For more on this see, e.g., Rachman (2002) and Van den Hout and Kindt (2003).

\textsuperscript{13}For a couple of interesting – and very different – takes on the epistemic (dis)value of forgetting see Michaelian (2011) and Carr (2015).
the bottom drawer in the kitchen or that they turned the stove off. But the inquirers we're thinking about don't achieve their epistemic ends by just coming to know those answers for a fleeting moment. They want to not only form but retain their answer-attitudes. The wavy \( m \)-checkers we've just been considering are losing information in ways that make it that they cannot achieve these more temporally extended epistemic goals. While we may not have standard justificatory failures in this case, we do have some sort of inquiry-theoretic failure here: these subjects are losing the information they need to achieve their epistemic ends. So whether or not it's plausible that all forgetting is epistemically unfortunate, repeated forgetting of information one knows that one needs to achieve one's epistemic ends does seem more clearly epistemically problematic or transgressive. Given all this, I think we should conclude that this sort of cycle of forgetful \( m \)-checking is also epistemically problematic.

5.2 FLAT

In this sort of case, although the \( m \)-checker is performing some checks, those checks have no impact on their epistemic standing with respect to their answers at all. Intuitively, something is going wrong here: this subject is inquiring into whether \( p \) is true over and over again, but nothing at all is happening to their epistemic standing with respect to that question.

To see what's going wrong, I first want to make a general point about incessant checking. Say I think that you're in your office, but I want to double-check. I call your office phone but you don't answer. So then I call your mobile phone. There's a sense in which I've now performed two additional tests or checks as to whether you're in your office – called your office phone, called your mobile phone – but it doesn't seem right to say that when I call your mobile phone I'm triple-checking on whether you're in the office; I'm still double-checking, but my first attempt at double-checking failed, so I'm making another attempt.

Now say that after I call your office phone (and you don't answer), I come to believe, “yes, you're in the office.” I don't do this based on the check, but instead I just reason based on the evidence I already had, e.g., that you're always there at this time, etc. But then say that I change my mind a few minutes later and start wondering if you're really in the office. So I call your mobile now. Again, I think we have a second attempt at a double-check here rather than a triple-check.

What this last case shows is that checking whether \( p \) is true and then re-settling on
After that isn’t sufficient to make that series of events a ‘complete’ re-check – one that would make it that the subsequent check will count as an additional check. When I ring your office phone but you don’t answer, perhaps we can say that I started to re-check or I tried to re-check, but in the end I never managed to complete that check. Instead I just returned to the relevant information or evidence I had before the check and re-settled based on that. To get a complete re-check, the checker needs to settle their question based, at least in part, on the result of the check. In order for a revolution around our circle to count as a new, additional check, the last check needs to have been completed: the subject needs to have performed a test or check and then re-settled based on that test or check.

Now we can return to the flat $m$-checker. This subject is performing complete checks – basing their $p$-beliefs, at least in part, on the result of the tests or checks they perform along the bottom arc – but their epistemic standing does not change at all. How could this be? It could be only if what’s learned in the check or test is not (evidentially) relevant to whether $p$ is true. So the flat $m$-checker is re-settling on $p$ based, at least in part, on an ‘irrelevant check’ – a check from which the only information they get is irrelevant to whether their original answer is the right one or not.

Here’s an example. Say you decide to check (or “check”?) whether the stove is still on by tasting the grass outside your house. You taste the grass, find it sufficiently bitter and decide that the stove must be off. We can assume that this check adds nothing to your epistemic standing with respect to whether your stove is, in fact, on or off. Now we can ask: when you re-settle your belief that the stove is off, is that belief justified?

There are two ways to flesh out this case, but I think either way, your re-formed beliefs will not come out justified. First some setup. Crucially, we can assume that you started off with evidence relevant to whether the stove is off. And we can even assume that that evidence was sufficiently good or strong to justify your belief that the stove was off. Given that this sort of case involves no information loss, we can also then assume that at the time at which you again come to believe that the stove is off, your evidence is still sufficiently good or your epistemic standing sufficiently strong to justify your belief that the stove is off.

The notion of justification that makes this last claim true though is what is typically called ‘propositional justification’. In this case, after you taste the grass, you have enough evidence to justify believing that the stove is off. This is just the evidence you had before you tasted the grass, which hasn’t changed. But as is familiar, the fact that
one has some evidence that can justify believing \( p \) at \( t \) is no guarantee that one used that evidence in the right sort of way in forming or maintaining that belief \( p \) at \( t \). If one hasn't used that evidence in the right sort of way in forming or maintaining that belief, then while the belief may be propositionally justified, it won't be doxastically justified. And this is exactly what I think we should say about your belief that the stove is off in the case at issue now; and what we should say about the flat \( m \)-checker generally: you (and they) will have to have doxastically unjustified beliefs along the way.

Now the two ways of fleshing out the case. First way: when you taste the grass and as a result come to believe that the stove is indeed off, you do so based entirely on information that the grass tastes bitter. But if you do that then surely your belief that the stove is off is not doxastically justified (despite being propositionally justified). And this lesson generalizes: the \( m \)-checker who re-forms a belief based entirely on an irrelevant check or irrelevant information learned at the check, will end up with a doxastically unjustified belief.

Second way: upon tasting the grass you come to believe that the stove is off based in part on the evidence you already had and in part on your belief/experience that the grass tastes bitter. This sort of case is somewhat trickier, but ultimately I think that we should draw the same conclusion, viz., the relevant re-formed beliefs are not doxastically justified.

Here's an analogous case. Say you have a great deal of evidence that it's termites destroying your balcony \( b \): you found a termite, you can see their little tunnels, you call the exterminator over and they say, "yep, you have termites". You have more than enough evidence to justify believing \( b \), but nevertheless you're not convinced. You turn to your trusty magic 8-ball. You shake up the 8-ball and ask whether you have termites. You see the answer float to the top: "Without a doubt". You're upset: "My god, I have termites! I can't believe it!".

Intuitively, this is not reasonable of you and I don't think this belief is doxastically justified, despite being partially based on good evidence. Let me say a bit more in defense of this thought. I hope that it's clear enough that there is some sense in which your belief \( b \) is not sensitive to your evidence in the right sorts of ways – you had all of the genuine evidence already, but you were only convinced once the 8-ball gave its answer. Here is one way to characterize what's gone wrong: the magic 8-ball is playing a decisive role in your decision to settle the question. Even though your belief \( b \) is based on some good evidence, it's decisively based on information that's not evidence for (or
against) \( b \) at all. This explains why this belief is not doxastically justified. But this case is exactly analogous to the sort of flat \( m \)-checker at issue now: that incessant checker has plenty of good evidence that the stove is off, but isn't convinced until they receive the additional, evidentially irrelevant information. Here too it looks like the evidence from the check is playing a decisive roll in the decision to (re-)settle.\(^{14}\)

My claim here is not that any case in which one settles based even in small part on irrelevant information or an irrelevant check is a case in which the resulting belief is not doxastically justified. My claim is that in the cases at issue the irrelevant check/information is playing a central role in checkers' decisions to settle. Given the outsized weight irrelevant evidence is being given in these cases, the resulting beliefs are not doxastically justified. So, the flat \( m \)-checker, too, will have to have some (doxastically) unjustified beliefs.\(^{15}\)

6 DISCUSSION

There are three epistemic trajectories incessant checkers can end up on as they run through further and further checks. I've highlighted problems with all three. I'm not sure that we can conclude that any cycle of incessant checking must go epistemically wrong. In particular, I didn't explore every possible manifestation of wavy \( m \)-checking.

For instance, what if after every check a demon steals your memory away so that you keep re-checking and re-checking? Or you just happen to run into a defeater after

\(^{14}\) I obviously have not given a precise account of when some piece of evidence is playing the sort of “decisive” role I'm describing here. Nor do I have such an account. Here is one way to start to get at how important these checks are for coming to believe again though. What we're imagining now is that this re-checker comes to believe again based on (1) the evidence they had for their answer pre-check, and (2) what they learn from the check. Now we can think about two cases: the first in which the subject has (1) but not (2) and the second in which they have (2) but not (1). If they lost their pre-check evidence but retained what they learned from the check would they continue to believe their answer? I don't know that there's a clear answer here, but it's at least plausible that they would. On the other hand, I think it's much easier to evaluate the other counterfactual: these subjects are re-checking exactly because they are not satisfied with believing based on just their pre-check evidence.

\(^{15}\) I think it's intuitively plausible that \( m \)-checkers often have epistemically unjustified answer beliefs. Here's some evidence for this. Imagine you're getting information from someone. You ask them whether Joe went to the party last night. They say "yes", but then say that actually, they need to check again. They come back from their double-check and report that Joe was at the party. Moments later they say, "Actually, I'm not sure, let me check once more". They come back from that check and say, "Okay, yes, he was there". And then moments after that they say, "Wait, let me just check once more". And this keeps going. Would you trust this person's testimony about Joe's having gone to the party when they come back for the eighth time and report that Joe was there? I certainly wouldn't.
each check? Maybe we’ll want to count these as cases of epistemically acceptable m-checking, but I’m not sure.\textsuperscript{16} I think we can at least say that if any of us find ourselves in an actual cycle of re-checking, that cycle will be epistemically problematic.

To my mind the most interesting part of this conclusion is that incessant checking is epistemically problematic or transgressive even if your epistemic circumstances keep improving as you keep checking. But now say you’re checking and re-checking. You get to the point at which you’re in suspension-proof epistemic circumstances. Does the conclusion here imply that the norms of epistemology say that you are not allowed to perform another check or test or not allowed to look for more evidence to improve your epistemic standing? Well, I’m not quite sure whether we should say it’s strictly impermissible, but, yes, I think we should conclude that at this point there is a serious epistemic consideration against checking again, or that at this point continued checking would be epistemically transgressive: to genuinely check again you’d need to move to an unjustified doxastic attitude and thereby violate some epistemic norms.

This is not a trivial conclusion – it says that there are cases in which even though you could improve your epistemic standing by inquiring further, there is a serious strike against doing that. And this strike is a thoroughly epistemic one. Genuinely checking again in these sorts of cases involves violating some fairly central epistemic norms.

It’s important to be clear about what this conclusion does not say though. First, it does not say that it is epistemically problematic to (say) walk over to the stove and look at the dial again. As I’ve said, it is simply not the case that any time one walks over to a stove and looks at the dial that one is genuinely checking on whether that stove is on (or checking on anything at all). Second, the claim that further checks are epistemically transgressive also doesn’t say that you’re not allowed to receive any new information about whether the stove is on, or that you should ignore information relevant to that question; it’s not a bar on updating your epistemic state. If after all your checks your building management just happens to call you on the phone and tell you that your stove is off (maybe unbeknownst to you they’re doing that for all the tenants that day), nothing I’ve said here says or implies that you’ve done anything wrong by registering that information or by becoming more confident that the stove is off. What is problematic now is not the receiving of new information, but the investigation of certain questions.

Here is a way to think about the relevant epistemic failing. In inquiry we ask and

\textsuperscript{16}I’m not sure that these will be genuine cases of incessant checking, and even if they are I’m not sure that they’d be epistemically fine.
try to answer questions; inquirers have questions “open in thought” and are trying to resolve those questions. Plausibly though there will be all sorts of norms that regulate and constrain this practice. Some of those norms will guide us in our efforts to resolve questions – e.g., they’ll tell us how to best achieve our inquiry-theoretic ends – but others will tell us when it’s appropriate to have a question open at all – when we should or shouldn’t be inquiring in the first place. Part of what has emerged in this discussion is a certain kind of epistemic constraint on having a question open in the relevant sense, on asking it (again). My thought has been that having a question open for inquiry involves suspending judgment and given that there are epistemic limits on when that attitude is appropriate, there are, by extension, constraints on when further inquiry is.

The sort of limit on appropriate suspension of judgment that has been relevant to this discussion is one that subjects can get to when their epistemic circumstances are too good or too strong to make suspension of judgment justified. I’ve called these sorts of epistemic circumstances ‘suspension-proof’, and I’ve already said a little bit about what suspension-proof epistemic circumstances can look like. In particular, as I’ve said, it looks as though suspension-proof epistemic circumstances are fairly easy to get into: we are regularly in the sorts of favourable epistemic circumstances with respect to 𝑝 in which agnosticism about whether 𝑝 is true is no longer justified.

Just how easy is it to get into suspension-proof epistemic circumstances? I don’t have a precise account here, but I do want to say a bit more about some important data points in thinking about this question since one’s position on the boundaries of suspension-proof epistemic circumstances interacts in critical ways with one’s position on acceptable re-checking. For instance, here’s a Tidy Proposal: S is in suspension-proof epistemic circumstances just in case S is in the kind of epistemic circumstances that justify believing 𝑝. If this Tidy Proposal were right, it would put significant constraints on acceptable re-checking. In particular, no one who was justified in believing 𝑝 could (even!) double-check without epistemic transgression.\(^\text{17}\)

If one wants it to be possible for a subject with a justified belief to re-check even just once (double-check) on whether that belief is true without doing anything wrong epistemically, then the Tidy Proposal will have to be false. More specifically, there will have to be some overlap between the kinds of epistemic circumstances that justify believing

\(^{17}\)Say S is justified in believing 𝑝 at 𝑡₁ given epistemic circumstances 𝐸 and double-checks on whether 𝑝 is true at 𝑡₂ (a moment later). We can also assume that S’s epistemic circumstances do not change between 𝑡₁ and 𝑡₂ (I assume this throughout this discussion). If the Tidy Proposal is true, then 𝐸 is suspension-proof. But that means that S’s double-checking at 𝑡₂ is epistemically problematic.
and those that justify suspending judgment.

Let’s call the thesis that there are at least some cases in which subjects have justification for suspending judgment about whether $p$ is true and also have justification for believing either $p$ or its negation, the ‘Overlap Thesis’. The Overlap Thesis does not say or imply that some epistemic circumstances put one in a position to both justifiably believe $p$ and suspend about whether $p$ is true at the same time. Rather it says that in some cases, one’s epistemic position is such that whichever of these moves one made—e.g., believe $p$, suspend judgment about whether $p$ is true—one could end up with a justified doxastic attitude.

The Overlap Thesis is connected to theses having to do with ‘permissivism’ in epistemology. In broad brush, permissivism is the denial of ‘uniqueness’ which says that a set of epistemic circumstances (say, total evidence) permits at most one doxastic attitude. If permissivism is true then there are at least some epistemic circumstances that leave more than one doxastic attitude epistemically permissible. Although the Overlap Thesis is a claim about justification in the first instance, I think we should say that if the Overlap Thesis is true, then at least some form of permissivism is true.

What’s clear now is that questions about whether and when double-checking is epistemically appropriate are highly relevant to the question of whether the Overlap Thesis is true. If we think it’s ever epistemically unproblematic for someone who knows or even just justifiably believes to double-check whether they’ve got things right then, given the arguments in this paper, we should also think that the Overlap Thesis is true since those cases will be ones in which both believing $p$ and suspending judgment about whether $p$ is true will be justified.

I’m happy for the view here to remain flexible: one can balance one’s views on justificational overlap and re-checking in all sorts of different ways. That said, I do want

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18See White (2005) for the canonical discussion.

19In some form or other epistemic permissivism is a fairly popular position. I’m not sure that anyone endorses a clear analogue of the form I’m contemplating here—i.e., that there are some epistemic circumstances that permit believing that also permit suspending judgment—but I think many of the arguments in favour of some of the more commonly discussed forms of permissivism bring my version along. For some of those arguments see, e.g., Kelly (2013) and Schoenfield (2013).

20The existence of suspension-proof epistemic circumstances puts some limits on how far justificational overlap can go. Let’s say that the ‘Extreme Overlap Thesis’ says that every case in which one has justification for believing $p$ is also a case in which one has justification for suspending judgment about whether $p$ is true. If the Extreme Overlap Thesis is true then any epistemic circumstances that justify believing also justify suspending judgment, and so there are no suspension-proof epistemic circumstances. The Extreme Overlap Thesis should be rejected.
to at least record my own feelings on the issue.

It seems to me that double-checking is often perfectly acceptable epistemic practice, even for a knower. This seems right to me because it seems right that it’s often perfectly appropriate from the perspective of epistemology to question our beliefs. We are reflective subjects and we engage in epistemic review and revision all the time; or at least we should. Part of that process may involve putting back up to question something we already believe or even know. The good and reasonable epistemic subject doesn’t only care about belief formation but cares about epistemic maintenance as well. Double-checking is an important part of that maintenance project. So my own view is that even justified believers and knowers can often double-check without irrationality. Which means I also want to say that the Overlap Thesis is true.

All of this puts an interesting squeeze on the space of suspension-proof epistemic circumstances. First, if knowers can even sometimes double-check and it’s not at all epistemically problematic, then we should say that knowing \( p \) is not sufficient for being in suspension-proof epistemic circumstances with respect to whether \( p \) is true. Second, I argued that suspension-proof epistemic circumstances are not all that extraordinary: they are not reserved for angels or supercomputers; subjects like us are regularly in these sorts of circumstances. So: we can fairly easily be in suspension-proof epistemic circumstances, but knowing \( p \) isn’t enough to get us there. Knowing doesn’t look necessary either since subjects can be in suspension-proof epistemic circumstances with respect to \( p \) without having any opinion about whether \( p \) is true at all. Being in a position to know is plausibly necessary though. The question then is: what more could it take?

I don’t have much more than speculation to offer here, but I think that some observations about re-checking point to at least one path. Let’s focus on just simple double-checking. While it often seems fine to double-check on whether \( p \) is true when you

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21One of the upshots of the arguments in this paper might be thought of as insight into the limits of this maintenance project: that double-checking may be good epistemic practice doesn’t mean that incessantly checking is.

22I also think that the Overlap Thesis is independently plausible. When Descartes decided to set his knowledge on a firmer foundation he started by suspending judgment about much of what he had taken himself to know. His suspending judgment doesn’t seem epistemically problematic in this case (and such an accusation is not typically levelled against the Cartesian method of doubt). But that Descartes was justified in suspending judgment at that time also doesn’t seem to imply that the beliefs that he gave up were all unjustified. Descartes had a set of beliefs, and then without getting any new evidence, he shifted to suspending judgment on many of the issues so that he could re-investigate. But neither his believing nor his suspending seem unjustified.
know \( p \), I don't feel as sanguine about the double-checker who not only knows \( p \) but is fully aware that they know \( p \). If it's clear to you that you know \( p \), then what is there to check on? So the starting suggestion here is that suspension-proof epistemic circumstances might be thought of as closely related to the sorts of epistemic circumstances in which subjects know and are aware that they do. Fleshing this suggestion out is not at all straightforward. For instance, I don't think we should capture this “awareness” in terms of more knowledge: just as first-order knowledge can be hidden from view, so can higher-order knowledge. Capturing what it takes for knowledge to be “visible” in the relevant sense and how that connects to improvements in epistemic standing are obviously serious projects. For now, all I can do is point in that direction.

7 CONCLUDING REMARKS

Figuring out just what is going on in the mind of the incessant checker cannot be done without leaving the armchair. What I’ve argued here though is that whatever their reasons or motivations, their incessant checking is going to put them on some epistemic path with respect to the questions and answers they are checking on. My strategy in this paper has been to show that all of these paths are epistemically fraught.

In incessantly checking a subject opens and closes a question over and over again. But what about cases in which inquirers don’t do that, but instead keep performing further tests without ever settling in between tests? If we assume, following Friedman (2017), that an inquirer is always suspending judgment, then the arguments here can give us some guidance in these cases as well. We can wonder about why this non-settling inquirer is not settling. If the tests don't give them sufficiently good evidence, then further inquiry seems just fine. If the tests put them in the sorts of epistemic circumstances that permit belief, but also permit suspension of judgment, then further inquiry can still proceed flawlessly given all I’ve said here. But, like the \( m \)-checker, with enough good tests, this inquirer too can end up in suspension-proof epistemic circumstances. At that point given that suspending judgment is no longer justified, I think further inquiry is going to be epistemically problematic.

So there is scope here for some general conclusions about epistemic norms on ending inquiry. And I want to be clear about what I think these norms are going to tell us. Let’s say that one's epistemic standing with respect to \( p \) is ‘improvable’ if it can be made better or stronger. I assume that most epistemic circumstances are improvable. It’s not
at all obvious to me how to think about epistemic circumstances that are literally as
good as they can be. I certainly think that typical suspension-proof epistemic circum-
stances are going to be improvable and that inquirers can easily know that they are.
But if what I've argued here is sound, then I think we should say that epistemology can
at least sometimes declare further inquiry in epistemic circumstances that inquirers
know to be improvable problematic. Sometimes even though there's more evidence to
be had, and epistemic improvements to be made, and you know all this, epistemology
says you shouldn't keep inquiring.

This conclusion may seem surprising at first glance, but I think it does sit nicely
with thoughts about the end or goal of inquiry. We don't usually think that the end
of inquiry is absolute certainty or epistemic perfection, but something more modest
like knowledge. But many cases in which we know p are cases in which our epistemic
position with respect to p can be made better or stronger – even if we know p we can
typically get more evidence in support of p. In fact many of the cases in which we're
fully aware that we know the answer to some question are ones in which another test
could further confirm it. Nonetheless, it doesn't make much sense to carry on once
the goal is reached (or at least once it's reached and we're aware of that). If the goal
of inquiry is something we can achieve while being in improvable epistemic circum-
stances, then plausibly there are going to be plenty of cases in which further inquiry
is epistemically inappropriate despite the fact that it could improve our epistemic
positions.23

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REFERENCES


