Speaking freely: on free will and the epistemology of testimony

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Abstract Peter Graham has recently given a dilemma purportedly showing the compatibility of libertarianism about free will and the anti-skeptical epistemology of testimony. In the first part of this paper I criticize his dilemma: the first horn either involves a false premise or makes the dilemma invalid. The second horn relies without argument on an implausible assumption about testimonial knowledge, and even if granted, nothing on this horn shows libertarianism does not entail skepticism about testimonial justification. I then argue for the incompatibility of (i) a view entailed by Open Theism, viz., that there are no true counterfactuals of freedom, (ii) a popular form of process reliabilism about justification and knowledge, and (iii) a weak anti-skepticism about testimonial justification and knowledge. I conclude that there is a costly tension between certain views about testimony and about free will.

1 Introduction

When memory or perception misinforms, it is typically not because of anything anyone else did. But when testimony misinforms it is because someone else did something. Testimony crucially involves the agency of others. If others are free to misinform, in a way that the world and memories are not, is testimony an inferior source of evidence is it a source at all? Some philosophers worry that certain views about free will and about the non-skeptical epistemology of testimony are incompatible.¹ Peter Graham

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¹ Faulkner (2000) for instance hints at this worry and Graham (2004) articulates it.

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alone argues for any compatibility among these views, and his argument has not been criticized. In this paper I show that his argument is for several reasons unsuccessful. I then defend a hitherto unoccupied position: some of these views are incompatible. In particular, given a modest and widely held anti-skepticism, any view involving a very popular form of reliabilism rules out the view that there are no true counterfactuals of freedom. All else being equal, it is better if one's epistemological view does not constrain one's metaphysics of free will, so this reliabilist view turns out to be at a unique disadvantage. Epistemologists of testimony should start double-checking their metaphysical baggage.

2 Graham's argument

The particular worry that Graham addresses concerns the compatibility of testimonial non-reductionism and libertarianism about free will.² Testimonial reductionism is the view that testimonial justification and knowledge, first, reduce to justification or knowledge from memory, induction, perception, etc., and second, require evidence of the trustworthiness of testifiers. In other words, if one knows or has reason to believe something because it is said or written by another, the saying or the writing itself does not ultimately do the important epistemic work. Rather, this work is done by whatever memorial or inductive or perceptual (and so on) reasons one has to believe that testimony is usually accurate. In contrast, testimonial non-reductionism is the view that testimony by itself is ultimately a source of justification and knowledge and, according to Graham, it requires a kind of counterfactual regularity in human behavior (I make efforts below to state the kind he has in mind).

But libertarianism about free will is the view that human agents in fact act freely and that free acts cannot be causally determined, so free human acts are indeterministic.³ That is, libertarians think that we act freely, and that a free act is one that the laws of nature and the actual past do not jointly cause or require, and so a free act is in a causal sense performed independently of the laws of nature and the actual past. If testimony is free in the libertarian sense (hereafter "free"), then testifiers apparently lack the counterfactual regularity that testimonial non-reductionism requires. Conversely, non-reductionism apparently has counterfactual requirements that libertarianism cannot accommodate. This is troubling, since one's theory about free will should not simply be read off one's theory about testimony (or vice versa). The debates about each sort of theory have become lively and sophisticated, and it is illegitimate to draw a conclusion in one debate simply by drawing a conclusion in the other. The conclusions seem to require independent support. Since there seems to be unique tension between libertarianism and non-reductionism, a defender of either view should show there is

² Graham (2004) addresses this worry because it has often been raised "in private conversations and public presentations" (p. 39). To my knowledge, no one else has published on this worry.

³ This generalization about libertarianism isn't quite right, but it is the one Graham (2004, p. 41) gives. Exceptions to the generalization include libertarians like Kane (1996) who hold that some free acts can be causally determined (but ultimately any such act is determined by some other free act of the agent). I follow Graham in restricting discussion to non-Kanian libertarianism.

none, or that the evidence for her view is so strong that it is good reason to deny the other.

Graham (2004, p. 39) aims to show that there is no unique tension by supporting the following claim: libertarianism is either compatible with non-reductionism, or it entails skepticism regarding testimonial knowledge and justification. According to such a skepticism, when others testify, one cannot thereby know or acquire reasons to believe what they testify. Graham's central thesis is that if libertarianism precludes testimonial justification and knowledge, it doesn't do so on non-reductionism uniquely. Below I reconstruct and rephrase his argument, then explain and criticize where appropriate.

Graham's Dilemma

P1. Either libertarianism allows predictability or it doesn't.

P2. If it does, then libertarianism is compatible with there being testimonial counterfactuals.

P3. If libertarianism is compatible with there being testimonial counterfactuals, then non-reductionism is compatible with libertarianism.

P4. If libertarianism doesn't allow predictability, then that there are testimonial counterfactuals is incompatible with libertarianism.

P5. If is it incompatible with libertarianism that there are testimonial counterfactuals, then libertarian testifiers are unreliable.

P6. If libertarian testifiers are unreliable, then libertarianism entails skepticism about testimonial knowledge.

C1. Either libertarianism is compatible with non-reductionism, or it entails skepticism about testimonial knowledge. (P1, P2–3, P4–6)

The argument seems to be a dilemma and so it seems valid. (P1) is an obvious tautology and is therefore uncontroversial. The sort of predictability Graham has in mind in (P1) requires that what free agents "choose to say and do say can occur in a reliable, counterfactually regular way. An ordinary observer could predict [with a high degree of accuracy] what they would do in counterfactual circumstances" (p. 42). In other words, if free people are predictable one can often tell what they would do in a counterfactual circumstance—that is, in a possible circumstance.⁴ (P1) says that this is either allowed by libertarianism or it isn't.

(P2) says that, if libertarianism allows this predictability, then "testimonial counterfactuals" (as they will be called in this paper) are compatible with libertarianism. What is this kind of counterfactual? It could stand for either of two things Graham discusses, something epistemic or something metaphysical. Unfortunately, whichever one it stands for, either (P2) or (P3) is unsupported. In the epistemic sense, a testimonial counterfactual states a "regularity that is not a *mere* regularity, where in actual circumstances two things just happen to come together. It is a regularity that supports

⁴ Note that use of 'counterfactual' can be misleading, since an actual circumstance is of course also a possible one.

or explains what would happen in counterfactual circumstances" (p. 40). A testimonial counterfactual is a proposition that is (i) about whether S would testify truly in a counterfactual circumstance, and (ii) reasonable to believe because it is supported by S's (apparent) actual behavior. Consider the proposition that Smith would tell the time accurately if asked. This proposition has to do with whether someone would in a counterfactual situation tell the truth, and there is reason to believe it because Smith tells the time accurately when actually asked, and so it is a testimonial counterfactual. A testimonial counterfactual is a reasonable prediction about whether some agent would testify the truth or not. Importantly, testimonial counterfactuals in this sense needn't be true. For example, it may merely seem that Smith tells the time accurately when asked, but in fact he's usually wrong. Perhaps he only ever reports the wrong time, but afterwards he secretly changes all the clocks nearby to match his report, so that one gets a false impression of accuracy. It would then be reasonable to believe the false testimonial counterfactual that Smith would tell the time accurately if asked. On the epistemic reading, (P2) is plausible. If on libertarianism one can predict how free agents would behave, then there could be propositions about whether the agents would testify truly or falsely that are reasonable to believe.

However, on this epistemic reading, (P3) is implausible. Grant that it could be reasonable to believe whether libertarian free agents would be truthful. It does not follow that non-reductionism is compatible with libertarianism. Non-reductionism requires that certain counterfactuals about testifiers are true, not that they are reasonable to believe. Supposing libertarianism allows there to be reason to believe those counterfactuals, it does not follow that all of those counterfactuals, or even any, are true. (*Possibly A&B, therefore possibly A&C* is true only if A&B entail C.) The fact that it is reasonable to believe those counterfactuals is indeterminate with respect to their truth. It could be that there is inductive reason to believe some or other counterfactual about free testimony, and yet that none is true. There is no reason to accept the epistemic reading of (P3).

"Testimonial counterfactual" could instead stand for something metaphysical that Graham discusses: "even if there is an important metaphysical difference between physical necessity and action, it does not follow that there are no regularities that 'govern' human behavior. Both physical causation and action involve regularities that are counterfactual supporting" (p. 41). If just those regularities that concern testimonial behavior are called "testimonial counterfactuals", then a testimonial counterfactual in the metaphysical sense is a counterfactual about a testifier that's made true by something about the testifier in the actual world. Smith's actual character could, for instance, ground the truth of the testimonial counterfactual Smith would tell the date accurately if asked. Importantly, it needn't be the case that it is reasonable to believe a testimonial counterfactual. For example, perhaps one has never observed or heard about Smith's superb testimonial behavior, but one has noticed that Smith has the shifty-eyed mannerisms of a shameless liar. On this interpretation (P3) is plausible. If testimonial counterfactuals can be true given libertarianism, then a form of non-reductionism that requires the truth of these counterfactuals is compatible with libertarianism. So the metaphysical reading of (P3) works.

Not so with (P2). Given libertarianism, one could often be able to tell what free agents would do, but it doesn't follow that libertarianism is compatible with counter-

factuals about testifiers being made true by something about how the testifiers actually are. Induction and inference to the best explanation could yield highly accurate predictions about counterfactual free behavior. That says nothing about whether something about *actual* free testimony or testifiers grounds true counterfactuals about free testimony. It could be necessarily false that actual features of testifiers make counterfactuals about their behavior true. Perhaps they are all false, or perhaps if anything makes them true it is the testifiers' *counterfactual* features. So on a metaphysical reading, (P2) is unsupported. The first horn of Graham's Dilemma has shattered, then. On no uniform reading of "testimonial counterfactual" are both (P2) and (P3) true; and if the epistemic reading of (P2) and the metaphysical reading of (P3) are used, both would be true but the argument would be invalid.

The second horn (P1, P4–P6) fares no better. We can however grant (P4). According to Graham, if what free people would do can't be accurately predicted, then "people would be metaphysically random" (p. 45). So, (P4) is about testimonial counterfactuals in the metaphysical sense. If it's *impossible* to predict accurately what free agents would do, then nothing about how free agents in fact behave grounds truths about how they would testify. We can grant this.

(P5) and (P6) make troubling use of "reliable". Graham uses it to describe at least three things: testimony (pp. 42, 46), testifiers (p. 45), and ways of forming beliefs (p. 45). The first and second uses seem to be, for Graham, shorthand for the third. Only the third use straightforwardly links up to some account of testimonial justification and knowledge—in particular, it links up to accounts involving process reliabilism. Graham claims, in accordance with process reliabilism, that if S knows that P, then S's belief that P was formed in a reliable way (p. 45). For Graham, if part of S's forming the belief that P involves a free agent's testifying that P, then S's belief that P is reliably formed only if that agent is not "metaphysically random" regarding testimony-only if there are true counterfactuals about the agent's free testimonial behavior. Now, there are indefinitely many "ways" or processes by which any particular belief is formed. A belief formed upon reading the newspaper is for instance formed by way of reading, but also by way of reading a newspaper, by way of reading this day's newspaper, by way of reading some free testimony in this day's newspaper, and so on. Without a solution to the generality problem for process reliabilism-the problem of identifying in a principled manner which of the many ways of forming a belief must be reliable in order for the belief to be known or justified—assessing (P5) and (P6) is not easy.⁵ Graham seems to have picked testimony by a free agent as (part of) the relevant way of forming a belief, so I will follow his lead.⁶ Note also that Graham seems to be assuming a kind process reliabilism about knowledge that can be called Modal Reliabilism (MR), which entails the following: S knows P only if P is the output of a process of belief-formation that mostly produces true beliefs in a relevant set

⁵ See Feldman (1985) and Conee and Feldman (1998). Some philosophers (e.g., Bishop 2010), argue that every theory of epistemic justification faces a generality problem. Conee (2013) shows otherwise.

⁶ This process could be understood as the process type of which free testimony by any free agent is a token (e.g., the process type of which Smith's free testimony and Jones' free testimony, etc., are tokens). Or, this process could be understood in an agent-relative way, such that every free testifier tokens a different process type: (e.g., *free testimony by Smith, free testimony by Jones*, etc. would be different processes). Neither understanding affects the present discussion, so I will ignore the distinction.

of possible worlds.⁷ Graham seems to identify the relevant set of possible worlds simply with non-actual nearby worlds. These are the possible worlds that are most similar to the actual world, such as a world that is otherwise the same but in which I have an additional freckle, or a world in which we went to the theater last Friday rather than last Saturday. Worlds that aren't nearby are fairly dissimilar to the actual world, such as a world in which there is no external world but in which I am massively deceived by an evil demon to think otherwise, or a world in which the sky is polkadotted. So for Graham, S knows that P only if S's belief that P is formed by a process that produces more true beliefs than false ones in nearby worlds. On this interpretation of (P5), if there are no true counterfactuals about whether free testifiers would tell the truth or not, then the process of belief formation *testimony by a free agent* is unreliable because it is not the case that in the nearest worlds free testimony mostly produces true beliefs. There are no facts about whether what's freely testified in nearby worlds is true. (P5) seems plausible, then. If libertarianism is incompatible with there being testimonial counterfactuals (in the metaphysical sense), then testimony by free agents isn't a reliable belief-formation process.

(P6) says that the modal reliability of testimony by free agents is necessary for testimonial knowledge—without this reliability no one knows anything from testimony. Graham's defense for (P6) is unsatisfactory. It is an assertion that even internalism about testimonial knowledge requires modal reliability: "If not reliable, testimony cannot warrant belief, period...for if testimony cannot be reliable, then it cannot satisfy a condition on knowledge that both the internalist and externalist accept" (p. 46). Similarly, he says: "All parties agree that knowledge depends on reliability. They disagree on whether it is also required for justification" (p. 50 n.22). But it's not true that internalists must accept that testimonial knowledge requires modal reliability.⁸ Internalists

⁷ MR isn't just a view about knowledge—it's also about justification—but Graham only invokes it with respect to the former. Perhaps the majority of philosophers, including epistemologists of testimony, endorse MR. Sometimes it is assumed (Goldberg 2005), sometimes it is argued for (Goldman 1986; Henderson and Horgan 2001), and sometimes it is argued for with particular reference to testimony (Gerken, forthcoming). In the above, only one of MRs necessary conditions on knowledge and justified belief is stated. Those who endorse MR state this necessary condition less generally than it has been stated here, and they often define differently the set of worlds that is in their view relevant. Importantly, the set of worlds must include at least two words; on MR facts about the actual world alone do not determine the reliability of belief-formation processes.

⁸ Internalists can, for instance, employ in their account of testimonial knowledge an analysis of knowledge like Feldman's (2003, Chap. 3), according to which knowledge is justified true belief with no essential dependence on a falsehood. Feldman's account states no reliability requirement (modal or otherwise) on knowledge, but one might still wonder whether his account inevitably introduces one in some way. How might he explain fake barn cases-that is, explain why a subject does not know that that is a barn when looking at a real barn in an area infested with fakes? One might suppose that the essential falsehood that the subject believes concerns reliability. However, even if the subject's false belief concerns reliability, reliability itself needn't play a part in the analysis of knowledge. Suppose the essential falsehood that the subject believes is that perception is reliable in these circumstances. On Feldman's account, the fact that the subject essentially depends on this false belief explains why the subject doesn't know that that is a barn. The content of the false belief does not indicate what knowledge requires. To see this, consider Bertrand Russell's stopped clock case: a subject glances at a stopped clock that happens to be displaying the right time. The subject doesn't thereby know what time it is because she essentially depends on such a false belief as that that clock is working. The content of the subject's false belief does not indicate a requirement on knowledge. We should not suppose that the true analysis of knowledge mentions working clocks!

hold that justification depends solely on a subject's mental states and not on contingent environmental factors such as reliability, and that testimonial knowledge is justified true belief plus whatever it takes to avoid Gettier cases (cases in which one's justified belief isn't knowledge because it is in a certain sense only "accidentally" true). No combination of elements in this kind of analysis of testimonial knowledge requires any form of process reliabilism. (P6) is true only if there is antecedent reason to deny every internalist-friendly analysis of knowledge, and there is not. Additionally, not all externalist views about justification (views that deny internalism) require modal reliability—some just require that the subject's belief, given her evidence, has a sufficiently high objective probability.⁹ There is no reason to assume that this variety of externalism cannot be incorporated into an analysis of knowledge that doesn't require MR. (P6) should be rejected. The second horn of Graham's Dilemma also shatters.

Further, even if the second horn is granted, (C1) does not quite address the more general epistemological topic that is Graham's stated concern. His paper begins as a discussion of whether libertarianism is compatible with non-reductionism about testimonial knowledge *and justification*. Most of his paper goes on to discuss this. But his support for the second horn doesn't support the compatibility of libertarianism and non-reductionism about testimonial justification. Even if Graham is right that both internalists and externalists must hold that MR is necessary for knowledge, since internalists deny that it is necessary for justification, a variant of (P6) that is about justification would be unsupported. For all he has shown, internalist reductionism about testimonial justification is compatible with libertarianism. So a variant of the second horn that's about justification fails; libertarianism wouldn't entail skepticism about testimonial justification.

In short, there is serious doubt about (P6) and, depending on the reading, about either (P2), (P3), or the validity of Graham's Dilemma. Further, the Dilemma is silent about testimonial justification. Graham has not shown that either libertarianism and non-reductionism are compatible or libertarianism entails skepticism about testimonial justification and knowledge. An anti-skeptical non-reductionism requires that certain counterfactuals are true, and any tension between this requirement and libertarianism remains. This puts each view at a disadvantage.

3 Free will and the epistemology of testimony

Graham tries to resolve an apparent tension between libertarianism and nonreductionism by making critical reference to MR. His discussion helps make part of a genuine source of tension salient: MR. In this section I argue that MR conflicts with a view I will call NOTCOF—there are *no* true counterfactuals of freedom:¹⁰

NOTCOF. $\Box \sim$ (S is in C $\Box \rightarrow$ S freely does A)

⁹ Cf. Alston (1988) and Baumann (2009), among others. Different philosophers explain "objective probability" differently, and not all explanations result in a modal reliability requirement on justification.

¹⁰ More exactly, there are no true counterfactuals of *creaturely* freedom. There may be true counterfactuals about divine freedom, but this is not relevant to my argument. So I will omit the 'creaturely' qualification.

This is to be read as follows: necessarily, it's not the case that S is in C counterfactually implies that S freely does A. Counterfactual implication is the relationship between two propositions such that consequent would be true if the antecedent were. Whether the entire counterfactual is true depends on whether, in the nearest world where the antecedent is satisfied, the consequent is satisfied as well. Consider the following counterfactual: Brown chops onions for the first time counterfactually implies that he starts crying. This should be understood to mean that, if Brown were to chop onions for the first time, then he would proceed to cry. This counterfactual, if true, is true because in the nearest possible world in which Brown chops onions for the first time, he then cries. If it's false it is false because in the nearest world in which Brown chops onions for the first time, he does not go on to cry. Importantly, the nearest possible world to the actual world is always the actual world—nothing is more similar to it than it. So, facts about the actual world determine the truth or falsity of some counterfactuals. If Brown has in fact chopped onions for the first time, then the truth of the counterfactual about Brown depends on whether he actually went on to cry. If Brown has never chopped onions, then its truth depends on whether, in the world most like ours but in which he has chopped onions, he starts crying. It's also important to note that for some counterfactuals there is no single nearest world in which the antecedent is satisfied, but rather there are two or more nearest worlds. In such a case the counterfactual is true only if in all of these nearest worlds the consequent is also satisfied, and false if the consequent is not satisfied in all of these worlds.

NOTCOF denies every counterfactual of a certain kind, namely, counterfactuals of freedom. In other words, every proposition of the form *If S were in circumstances C*, *S would freely do act A* is false.^{11,12} Propositions of this form are false because if S were in C, there may be a nearby world in which S freely does A, but there is always an equally nearby world in which S does not freely do A. If S is free, then some events are not causally determined, because it is always undetermined whether would S freely do A in C—it is always just up to S. In one case S could be in C and freely do A, and if events were "rewound" so that S is in C again, S might not freely do A.

To be clear, NOTCOF is not entailed by and does not entail libertarianism. Some libertarians—in particular, Molinists—think there *are* true counterfactuals of freedom.¹³ Molinists hold that God has *infallible* foreknowledge of contingent truths about the actions of free creatures—his reasons guarantee the truth of his beliefs about free creatures' future actions. Molinists explain this foreknowledge in part by positing

¹¹ On an alternative interpretation of NOTCOF that I otherwise ignore here, propositions of this form are not false but undefined.

¹² NOTCOF is restricted to contingent counterfactuals of freedom. It doesn't deny necessary counterfactuals of freedom—e.g., any counterfactual of freedom with a necessarily false antecedent or any of the form: if S were in a circumstance in which S freely does A, then S would freely do A. Another qualification is that NOTCOF needn't deny any counterfactual of freedom that is made true by states of affairs in the actual past, as long as the counterfactual was only made true when the states of affairs obtained. On NOTCOF it could be true that S would freely do A if S were in C, as long as this was only made true upon S's actually freely doing A in C. Importantly, NOTCOF denies contingent counterfactuals of freedom with *contingently false* or *not yet true* antecedents. For simplicity, I will not in the above restate NOTCOF in such a way that it captures these qualifications.

¹³ Cf. Flint (1991), Otte (1987), Plantinga (1974), and Wierenga (1989)

true counterfactuals of freedom. And some non-libertarians accept NOTCOF. Hard determinists hold that determinism is true and that free will is incompatible with determinism, and so they hold that human agents don't have free will. A hard determinist can accept that there are no true counterfactuals of freedom, because she thinks that no one does anything freely in any circumstances. And a hard incompatibilist—someone who endorses hard determinism plus the thesis that free will is incompatible with *in*determinism (the denial of determinism)—would say the same.¹⁴ However, NOT-COF *is* entailed by, but doesn't entail, Open Theism. Open Theism is roughly the view that God does not *infallibly* know what free creatures will do *because* the counterfactuals he would need to know in order to have infallible foreknowledge can't be true (not, at least, prior to the obtaining of what God would foreknow).¹⁵ God may have very good reasons to believe that a free creature will and won't behave certain ways, but his good reasons don't guarantee that he is right. NOTCOF straightforwardly follows. But since Open Theism entails theism, and NOTCOF has actual adherents.

NOTCOF conflicts with certain anti-skeptical accounts of testimonial knowledge and justification. It is straightforwardly incompatible with any such account that entails the following: if H knows or justifiably believes S's free testimony that P, then not-P counterfactually implies S doesn't freely testify that P.¹⁶ Such an account requires a true counterfactual of freedom: if S were in C (C = a circumstance in which not-P), then S would freely do A (A = refrain from testifying that P). If all forms of non-reductionism are accounts with such a requirement, then non-reductionism is incompatible with a view about free will. In any case, there is at least some uncontroversial conflict between some views about the epistemology of testimony and about free will.

I will now show that NOTCOF is incompatible with the conjunction of an extremely weak form of anti-skepticism about testimony and any account of testimonial knowledge or justification that entails MR. The weak form of anti-skepticism (hereafter "AS") is just the view that in some world, testimony by some free agent justifies some belief or confers knowledge. That world needn't be the actual world—AS does not require that in fact free testimony ever justifies or confers knowledge. AS is so weak that perhaps only those who think freedom impossible would deny it. (So if I am right, it turns out that any reason to endorse AS and NOTCOF is thereby reason to deny MR. Defenders of MR face objections from an unexpected quarter). To be clear, AS is just the following:

AS. $\diamond \exists H \exists P \exists S$ (H knows/justifiably believes P on the basis of S's free testimony)

That is, it's possible that there is a hearer who knows or justifiably believes something based on someone's free testimony.

¹⁴ Pereboom (2000) endorses hard incompatibilism—see esp. Chap. 5. Another view about free will that could endorse NOTCOF is the view that human agents have free will and that determinism is necessarily false. But it is not clear that anyone endorses this view.

¹⁵ Cf. Adams (1977), Hasker (1986), Rhoda et al. (2006), and van Inwagen (1997).

¹⁶ Endorsed by Faulkner (2007), and Graham (2000), among others, but minus the "free" and "freely," which I have added for reasons I mention below.

Now, according to MR, S's belief that P is justified or known only if P is the output of a process belief-formation that yields mostly true beliefs in a relevant set of possible worlds. Testimonial justification and knowledge require the modal reliability of some relevant belief-formation process. Absent a solution to the generality problem, and following the lead of those who incorporate MR into the epistemology of testimony, I will assume that the relevant process is simply *free testimony*—the process that involves a speaker S freely testifying to a hearer H some proposition that H thereby believes. Nearly any other process would allow us to trivially avoid tension between views about free will and about the epistemology of testimony; if the relevant process were almost any other, then it would be hard to see why there is any worry in the first place about tension between views about the epistemology of testimony and about free will. Note that MR entails two important principles. First:

MR1. $\diamond \exists H \exists P \exists S$ (H knows/justifiably believes P on the basis of S's free testimony) $\rightarrow \forall P \forall F^x : F^x \in F^x (F^P \Box \rightarrow P)$

where F^{x} is a special set of acts of free testimony that P in whichever set of possible worlds determines on MR the reliability of belief-formation processes, and where F^x is any member of F^{x} . The consequent in MR1 says that for any proposition and any act of free testimony that is among those acts that fix the reliability of free testimony, if a proposition were freely testified it would be true. MR1 itself says that if it's possible that someone knows or justifiably believes something due to free testimony, then, in a special set of cases in a relevant set of possible worlds, if anything were freely testified it would be true. The set of possible *worlds* that is relevant is fixed by the kind of MR endorsed. Some reliabilists about testimonial justification and knowledge suggest that the special set of *cases* is just every case of free testimony in the relevant set of possible worlds.¹⁷ They suggest that justification or knowledge from free testimony requires that, in the relevant set of possible worlds, free testimony is perfectly reliable. But all a reliabilist needs is that free testimony, in the relevant set of worlds, produces more true beliefs than false ones. All a reliabilist needs is that, in the relevant set of worlds, in *the* majority of cases, if it were freely testified that P, it would be the case that P. A charitable interpretation of MR would be that F—the special set of acts of free testimony—is identical to that majority of cases where free testimony is perfectly reliable.

MR entails a second important principle:

MR2. $\diamond \exists H \exists P \exists S$ (H knows/justifiably believes P on the basis of S's free testimony) $\rightarrow \exists W : W \in W \exists H \exists P \exists S$ (in W S freely testifies to H that P)

¹⁷ I.e., they think that free testimony justifies belief or confers knowledge only if $\forall S \forall H \forall P \forall W : W \in W$ (if S were to testify freely to H that P in W, it would be the case that P in W), where W is the set of relevant worlds. For any speaker, hearer, proposition, and world in the relevant set, if a proposition were freely testified then it would be true. That is, in the relevant set of possible worlds, free testimony is *perfectly* reliable. It produces only true beliefs when what's believed is what the speaker expressed. Perfect counterfactual reliability seems much too strong, but some philosophers require it of testimony, or at least of testified; cf. Goldberg (2005, p. 302): "Mary's testimony is unreliable: it is not the case that she would have testified that there is milk in the fridge only if there had been milk in the fridge."

W is the set of possible worlds that, on MR, determines the reliability of beliefformation processes. The consequent in MR2 says that in at least one world in W, someone freely testifies. According to MR2 if it's possible that someone knows/justifiably believes something due to free testimony, then in some relevant world someone freely testifies something to someone. MR2 prevents MR1 from being trivially satisfied. Without MR2, MR1 would be true if no one ever testified in the relevant set of possible worlds.

Now, it's important to note that AS is just the antecedent of MR1 and of MR2. Assume AS and MR, and the consequent of MR1 follows:

ASMR1. $\forall P \forall F^x : F^x \in F^x(F^P \Box \rightarrow P)$

and so does the consequent of MR2:

ASMR2. $\exists W : W \in W \exists H \exists P \exists S$ (in W S freely testifies to H that P)

So, taking stock, two things follow on MR if possibly anyone justifiably believes or knows anything on the basis of free testimony. First, in a special set of worlds, in the majority of cases, if S were to freely testify to H that P, then it would be the case that P. Second, in one of these worlds, someone testifies. Now, to show that AS, MR, and NOTCOF are incompatible, ASMR1 and ASMR2 must be reformulated so that they can more obviously link up with NOTCOF in a proof. By restricting the following to just those acts of free testimony that P that are in F—to that majority of cases in the relevant worlds in which free testimony is perfectly reliable—we can restate ASMR1 as:

ASMR1^{*}. S freely testifies that $P \Box \rightarrow P$

And ASMR2 as:

 $ASMR2^*$. \diamond (S freely testifies that P)

where the modal operator in ASMR2* is restricted to worlds in the relevant set of worlds. ASMR2 says that someone testifies freely in some possible world in that set of worlds that determines a process' reliability.

Finally, to show that AS, MR, and NOTCOF are incompatible, two rules of inference are required. First:

RULE1.
$$(\alpha \Box \rightarrow \beta) \rightarrow [\alpha \Box \rightarrow (\beta \Box \rightarrow \alpha)]$$

This rule is easily proven, since conditional proofs for counterfactual implication are valid (see Appendix 1). The antecedent of RULE1 is true if in the nearest world in which α is true, β is also true (put differently, if the nearest α -world is also a β -world). When the antecedent of RULE1 is true, it must also be true that in the nearest α -world, the nearest β -world is also an α -world. If Obama were to have lost the 2012 U.S. Presidential election, then Romney would have won (rather than a third

party candidate). That's true because in the nearest world in which Obama loses, Romney wins. Since that's true it follows that if Obama had lost, then if Romney had won Obama would have lost. Second:

RULE2. $[(\alpha \Box \rightarrow \beta)\&\Box \sim \beta] \rightarrow \Box \sim \alpha$

This rule is simply a sort of modus tollens under counterfactual implication and is presumably uncontroversial. If the consequent of a counterfactual is necessarily false, it follows that its antecedent is too. For if the antecedent were true in some world then the consequent would be too, but the consequent is true in no world. I will now show that AS, MR, and NOTCOF are incompatible.

Incompatibility Proof	
(I1) AS & MR & NOTCOF	(Assumption)
(I2) S freely testifies that $P \Box \rightarrow P$	(I1, ASMR1*)
(I3) S freely testifies that P $\Box \rightarrow (P \Box \rightarrow S \text{ freely testifies that P})$	(I2, RULE1)
(I4) $\Box \sim (P \Box \rightarrow S \text{ freely testifies that } P)$	(I1, NOTCOF)
(I5) $\Box \sim$ (S freely testifies that P)	(I3 – 4, RULE2)
$(I6) \diamondsuit (S \text{ freely testifies that } P)$	(I1, ASMR2*)

So there is a contradiction. Assume AS, MR, and NOTCOF, and it follows that it's both possibly true and necessarily false that S freely testifies to H that P in some world in *W*. Therefore, AS, MR, and NOTCOF are incompatible. Note that no set of worlds was ever picked out as the relevant one—no specific version of MR was used. It follows that every version of MR is incompatible with the conjunction of AS and NOTCOF. This popular reliabilist view has a surprising price.

Here is one measure of its price. Since AS is arguably the most plausible of the incompatible trio, MR faces off against NOTCOF. As a result, each of these two views has surprising implications. Consider: it seems that even if there are no omniscient beings, one exists in some *possible* world in which other beings freely act. Does that omniscient being infallibly know what any other being will freely do? Many incompatibilists are inclined to think not. Indeed, critics of theism (e.g. Pike 1965) have famously denied the possibility of there being infallible foreknowledge of others' free actions. NOTCOF allows a natural and attractive explanation of the seeming impossibility: any infallibly foreknown truth must be grounded in something, but since there are no true counterfactuals of freedom, nothing could ground infallible knowledge of what others will freely do. There is no developed alternative explanation of the seeming impossibility available to these incompatibilists and critics of theism. But MR would rule out NOTCOF. MR would therefore make it very difficult to offer any 'foreknowledge and freedom' objection to theism. Such an objection has some prima facie plausibility. Maybe it is ultimately misguided, but one should not be able to show this merely by supporting MR. Similarly, one should not be able to rule out MR simply by supporting the objection to theism. The surprising implications of MR and NOTCOF are in fact surprising costs.

4 Objections

Objection 1 The Incompatibility Proof must be unsound. Even if NOTCOF is true, "One can say or predict what an agent *most likely* or *nearly definitely* would do. One can say it is nearly certain what the subject would do. One just cannot say what the agent would do *full stop*. The agent's character would still be a metaphysical ground supporting counterfactuals" (Graham 2004, pp. 42–43; emphasis his). MR still has everything it needs if NOTCOF (as well as AS) is assumed, and so the views are compatible.

Reply 1 Most of what's stated in the objection is fine if it concerns what in this paper have been called testimonial counterfactuals in the epistemic sense. NOTCOF doesn't prevent it from being reasonable to believe counterfactuals about free testimonial behavior. However, this says nothing about whether NOTCOF allows there to be true counterfactuals of the sort MR requires, given AS. In other words, NOTCOF doesn't prevent everyone from reasonably believing propositions of ASMR1*'s form. But it wouldn't follow that any propositions of that form could be true, given NOTCOF. So on this interpretation, the objection is not mistaken but the incompatibility remains.

If what's stated in the objection concerns what have been referred to above as testimonial counterfactuals in the metaphysical sense, then the objection, if correct, would support the compatibility of NOTCOF, MR, and AS. But it's not correct. On NOTCOF, an "agent's character" *cannot* "be a metaphysical ground supporting counterfactuals" in the sense that the agent's character makes true some counterfactuals of freedom— NOTCOF denies any such counterfactual. And it is of no help to suggest that AS and MR together merely require that certain counterfactuals of ASMR1*'s form are true most of the time—that in the majority of cases of free testimony in a relevant set of worlds *W*, S would testify that P only if it were the case that P. I have already shown that this leads to contradiction.

Objection 2 Isn't the trouble really just with NOTCOF? If one considers any counterfactual of ASMR1*'s more general form—not just counterfactuals about free testimony—NOTCOF leads one astray. For instance, take the counterfactual:

(1) If Smith were to freely eat a piece of stinky cheese, Jones would leave.

By applying RULE1, it follows that:

(2) If Smith were to freely eat a piece of stinky cheese, then Jones leaves would counterfactually imply Smith freely eats a piece of stinky cheese.

But then by invoking NOTCOF and RULE2, an absurd result follows:

(3) Necessarily, it's not the case the Smith freely eats a piece of stinky cheese.

Since NOTCOF leads to this implausibility, one should conclude that NOTCOF is false.¹⁸ AS, MR, and NOTCOF may be incompatible, but that's only because the latter is clearly untenable. There is no tension between *plausible* views about the epistemology of testimony and about free will.

¹⁸ Or that RULE1 or RULE2 is invalid. But since NOTCOF is perhaps more suspicious than these rules, we'll let it take the blame.

Reply 2 NOTCOF does not lead to (3). Recall that NOTCOF is restricted to contingent counterfactuals of freedom. Fleshing out (2) reveals that it is less innocent than it might have looked:

(2*) If Smith were to freely eat a piece of stinky cheese, then Jones leaves *upon Smith's freely eating a piece of stinky cheese* would counterfactually imply Smith freely eats a piece of stinky cheese.

And NOTCOF does not imply that:

(4) Necessarily, it's not the case Jones leaves *upon Smith's freely eating a piece of stinky cheese* counterfactually implies Smith freely eats a piece of stinky cheese.

NOTCOF does not imply (4) because (4) alleges that a necessarily true counterfactual of freedom is necessarily false. And since NOTCOF does not imply (4), it does not lead to (3). So NOTCOF is not ruled out so easily.

Objection 3 But doesn't the above reply threaten the Incompatibility Proof?

Reply 3 No. Fleshing out (I3) does not reveal what fleshing out (2) did. An arbitrary fleshing out of (I3) yields the following:

(I3*) If Jones were to freely testify to Brown that Smith choked on stinky cheese, then Smith choked on stinky cheese would counterfactually imply that Jones freely testifies to Brown that Smith choked on stinky cheese.

There is no related necessary truth that the Incompatibility Proof requires NOTCOF to deny. The circumstances in which Smith choked on stinky cheese were not circumstances that included Jones' already having freely testified to Brown about anything, nor were they circumstances that included Jones' later freely testifying to Brown about anything, much less about Smith's having choked. Roughly put, the choking circumstances do not contain the freely testifying circumstances, so the consequent of (I3*) is not a necessary truth. However, the leaving circumstances do contain the freely eating circumstances. The circumstances in which Jones leaves are circumstances in which Smith has already freely eaten the stinky cheese. The consequent of (2^*) is a necessary truth. So Objection 2 can be dismissed without thereby discrediting the Incompatibility Proof. The Incompatibility Proof does not require NOTCOF to deny a necessary truth, but Objection 2 (mistakenly) does. It may seem otherwise because on MR, F is a set of acts of free testimony, where each act of free testimony that P counterfactually implies P. But on NOTCOF, no such counterfactual is true. It's always up to the agent what, if anything, is freely testified, no matter what the world is. It is by mere stipulation that the free actions in F would only take place in certain circumstances (i.e., circumstances where the freely testified proposition is true), but according to NOTCOF no such counterfactuals are true (unless necessarily true or made true by affairs in the actual past, but neither is the case here). Other than what's metaphysically necessary for a particular free action, no circumstances in any world are such that the free action occurs only in it.

Objection 4 Given RULE1 and certain inferences in the RULE1 Proof (see Appendix 1), we can show that NOTCOF itself is incompatible with free action. Here's

how. If freedom is possible, then in some world W S freely does A. Right before doing so S is in some circumstances, which we can call C. Just as in the RULE1 Proof, we can reason as follows: S is in C in W and S freely does A in W, so in W: S is in C $\Box \rightarrow$ S freely does A. NOTCOF denies that any such counterfactual is true, yet the possibility of freedom requires that one is. So, either some part of the reasoning used in the Incompatibility Proof is defective, or NOTCOF is clearly defective (and so its incompatibility with MR and AS is trivial).

Reply 4 According to libertarian defenders of NOTCOF, human agents in fact act freely. If they are correct, then freedom is possible, since it is actual. Does anything follow from this that these defenders must deny? I think not, and if I am right then NOTCOF is compatible with the possibility of freedom. Assume some S has in fact freely done some act A. Beforehand, S was in circumstances which we can call C. According to the rules of inference I use, it follows that if S were in C, then S would freely do A. This counterfactual of freedom is true, but the defender of NOTCOF can hold that it was only made true by S's actually doing A freely in C. Prior to S's doing so, the proposition was not yet true. As mentioned in Sect. 3, the defender of NOTCOF need not deny such a counterfactual. There are still no true counterfactuals of freedom that have false, or not yet true, antecedents-no facts about what S would freely do in non-actual or in not yet actual circumstances. (Note that, for Open Theists, this would be enough to prevent God from having infallible foreknowledge of contingent free creaturely actions. The fact which God needs to know-i.e., that S would freely do A if S were in C-in order to infallibly foreknow that S will freely do A in C isn't true prior to S's freely doing A in C. God's reasons for believing S will freely do A do not guarantee its truth.) In short, the defender of NOTCOF can accept that freedom is actual and therefore possible, and no counterfactual of freedom follows from this that the defender of NOTCOF must deny.

One may worry that the counterfactuals of freedom made true by past actual free actions may be used to show, contrary to the Incompatibility Proof, that NOTCOF is compatible with MR. For it may seem that these counterfactuals are enough to determine whether forming a belief on the basis of free testimony is reliable. However, as mentioned in Sect. 2, according to MR reliability is not wholly determined by facts about the actual world. Distinctive of MR is that according to it facts about other worlds help fix facts about the reliability of belief formation processes in our world. Facts about the actual world determine the reliability of free testimony only according to a view called Actual World Reliabilism, a view distinct from, and much less popular than, MR. So, MR is not helped by the fact that there are counterfactuals of freedom with antecedents and consequents that have been made true by free actions that occurred in the actual past.

5 Conclusion

Certain views about free will and about the anti-skeptical epistemology of testimony are incompatible. I have shown that Graham has not resolved any apparent tension between libertarianism and non-reductionism. I have also shown that there is tension

between MR (which according to Graham is required by every account of testimonial knowledge), a weak form of anti-skepticism, and the view that there are no true counterfactuals of freedom. If, as per Graham, non-reductionism entails MR, then it's incompatible with a certain view about free will if possibly anyone knows or justifiably believes anything on the basis of free testimony. Reductionism has internalist variants that do not entail MR, and so reductionism avoids obvious incompatibility with views about free will, and so it has an unappreciated advantage. There is reason to avoid having to tailor views about free will to the epistemology of testimony, and so the Incompatibility Proof reveals that MR and NOTCOF are at a disadvantage. And if MR is at all less plausible than the view that there are no true counterfactuals of freedom, then we should reject MR so as to avoid testimonial skepticism or incoherence.

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Appendix

RULE1 Proof	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Assumption Assumption RP2 RP3–RP4 RP2–RP5
$C2. \ (\alpha \Box \rightarrow \beta) \longrightarrow [\alpha \Box \rightarrow (\beta \Box \rightarrow \alpha)]$	RP1-RP6

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