

## Debunking the Genetic Fallacy

**Abstract** “Genealogical debunking” arguments feature in high-profile debates in philosophy, politics, religion, and more widely across the spectrum of public life. Such arguments purport to discredit the epistemic status of a belief, claim or judgement by drawing attention to its causal origins (e.g., the believer’s particular upbringing, religious influences, social class, familial loyalties, etc.). Despite the prominence of genealogical debunking as a philosophical strategy, it is commonly thought that genealogical debunking arguments commit the “genetic fallacy”—the fallacy of using the origins of something as a way of discrediting it. This article makes two new contributions to the state of the above debate. First, it shows that, far from being logically invalid, genealogical debunking arguments can be understood as having a deductively valid form. Second, it argues that some genealogical debunking arguments are sound. It does this by appealing to two different sets of considerations, one concerning defeat and the other concerning how our beliefs are based on the evidence we have for them.

### 1. Introduction

During a heated argument Laurie accuses Catriona of being selfish. Catriona retaliates: “you only said that because you are angry”. How should Laurie respond? A critical thinking textbook would tell her that Catriona has committed the “genetic fallacy”: the fallacy of arguing that the dubious origins of some attitude, judgement, object or practice discredit it. Specifically, Catriona has appealed to the fact that Laurie is angry to discredit her accusation that Catriona is selfish. This is supposedly fallacious because the fact that Laurie is angry (if it is a fact) doesn’t entail that her accusation is false. It may be that Laurie is angry *and* Catriona is selfish.

Now, one reason why Laurie should *not* respond by telling Catriona that she has committed a logical fallacy is that this would be very unlikely to defuse the situation. It is liable to make Catriona angry too. But another reason why Laurie should not respond this way is that it would be *uncharitable*. What Catriona *meant* is that Laurie’s anger is clouding her judgement. Because she is angry, Laurie has misevaluated the evidence and concluded that Catriona is selfish when, in fact, a fairer assessment of the evidence would not support this conclusion. As a result, Laurie’s judgement (that Catriona is selfish) is unjustified. Whether or not these claims are true, there doesn’t seem to be anything wrong with Catriona’s reasoning involving them. It might look like Catriona has committed a logical fallacy, but a more charitable interpretation of her argument reveals that she has not.

Catriona’s argument is an example of what is called a “genealogical debunking argument” (for brevity we will drop the “genealogical”). Here are some other examples:

- (1) You only believe in God because your parents did.
- (2) You only think that masks protect against Covid-19 because you are a Democrat.
- (3) You are only against gun control because you are a conservative.
- (4) You are only against environmental regulations because you are a Republican.

Our principal aim in this paper is to argue that there are some examples of sound debunking arguments. That is, we argue that, first, debunking arguments are deductively valid and, second, there are some such arguments with true premises. But we will argue for this second claim without committing to *any particular* debunking argument succeeding, and while granting that some such arguments—including (1)-(4) above—might fail.

There is a large literature on debunking arguments (Avnur and Scott-Kakures 2015; Clarke-Doane 2012; Dennett 2006; DiPaolo and Simpson 2016; Kahane 2011; Ladyman et al. 2007; Mogensen 2016; Queloz 2020; Schafer 2010; Sher 2001; Srinivasan 2015; 2019; Street 2006; Vavova 2018; White 2010). Our focus is on the *epistemology* of debunking arguments: under what conditions do they show that the target belief is unjustified. But what does our paper add to this burgeoning literature? We want to highlight two things. First, as noted above, we will argue that there are some sound debunking arguments without committing to any particular debunking argument being sound. One can accept all our conclusions while holding that some *kinds* of debunking arguments—for example, those targeting religious beliefs, as in Dennett (2006)—fail. What we want to insist on is that, if they fail, this is because they appeal to false premises, not because there is anything wrong with the underlying reasoning.

Second, the epistemological literature on debunking arguments tends to focus on one way of understanding their potential import. The thought is that debunking arguments get purchase—if they get purchase at all—in the context of first-personal reflection on the origins of our beliefs (see e.g. DiPaolo and Simpson 2016; Mogensen 2016; Nichols and Knobe 2008; Srinivasan 2015; Vavova 2018). You step back from your beliefs and reflect on how you came to have them. When you do so, you realise that, on the whole, you have the beliefs you have because of your particular course through life—who your parents were, where you grew up, where you went to school, and so on. This, some think, occasions a skeptical worry: if you would have had different beliefs if your life had been different, how can your beliefs be justified? Consequently, those who think that debunking arguments *can* get at least some purchase, like Katia Vavova (2018), tend to argue that this is because reflecting on the origins of our beliefs can provide defeaters for them.

We agree with Vavova that this is one way of understanding the epistemological import of debunking arguments and below we consider some recent developments

in the epistemology of defeat which bear on the viability of this way of understanding the epistemology of debunking. But we want to urge that debunking arguments be considered from a broader epistemological perspective, one not tied to the context of first-personal reflection. It may be that the causal origins of our beliefs discredit them irrespective of whether the believer has reflected on them. In particular, we pursue the idea that the causal origins of a belief can discredit it when they reveal that the belief is not based on whatever evidence there is for it in the way required for justification. If a belief is not properly based on the evidence, then—at least on a very plausible account of justification—it is not justified, irrespective of whether the believer is aware of this fact (Carter and Bondy 2019, chap. 1; Korcz 2021). If this is right, then the epistemological literature on debunking arguments has gone astray in not paying sufficient attention to this possibility.

Here is the plan for the paper. We start by identifying the underlying structure of debunking arguments (§2). Once we have done so, it becomes clear that debunking arguments do not involve any sort of logical fallacy. We then turn to the question of whether they are (sometimes) sound. While we offer some initial reasons for thinking they often are sound in §2, the remaining two sections further develop our case and address some objections. In §3 we look at one way in which you might argue that debunking arguments are rarely if ever sound, which has to do with defeat. We show that this attempt to “debunk” debunking arguments fails and so provides no reason to think that debunking arguments are rarely sound. In §4 we look at a different way of providing support for the crucial premise of debunking arguments which appeals to the basing relation. We argue that, while this strategy might not work in all cases, it clearly will work in some. We conclude that there must be some sound debunking arguments.

## **2. The Structure of Debunking Arguments**

Let’s return to the example we started with. Catriona responds to Laurie’s accusation that she is being selfish by claiming that Laurie only thinks this because she is angry. Here is how we propose understanding Catriona’s reasoning:

- 1) You (Laurie) said that I (Catriona) am being selfish because you are angry.
- 2) If you said that I am being selfish because you are angry, then your claim is unjustified.
- 3) Your claim (that I am being selfish) is unjustified.

Filling things in a little bit, Catriona has identified Laurie’s emotional state (her anger) as the explanation why Laurie said that Catriona is being selfish (the first premise), and she has reasons for holding that, when Laurie is in this emotional state, she tends to make ungrounded claims (the second premise). Catriona concludes from this that Laurie’s accusation that Catriona is being selfish is unjustified. Now, it may be that Catriona is wrong about some or all of this. Perhaps there is another, better

explanation why Laurie thinks Catriona is being selfish (Catriona *is* being selfish and Laurie has picked up on this). Or perhaps Laurie does not tend to make ungrounded claims when she is angry (her anger does not cloud her judgement). But this does not mean there was anything wrong with the *form* of Catriona's reasoning. The problem was that she relied on false premises.

We think this captures the reasoning underlying debunking arguments more generally. Imagine Archie (a non-believer) argues that Simon (a believer) only believes in God because their parents believed in God. We propose understanding his reasoning as follows:

- (1) You (Simon) believe in God because your parents believed in God.
- (2) If you believe in God because your parents believed in God, then your belief in God is unjustified.
- (3) Your belief in God is unjustified.

Again, it may be that Archie is wrong about some or all of this. Perhaps there is another, better explanation why Simon believes in God (he has studied the arguments and concluded that God exists). Or perhaps there is nothing wrong with believing in God because your parents believed in God (this might be a reliable way of forming beliefs about religious matters, whether in general or for Archie in particular). But, again, this does not mean there was anything wrong with the form of Archie's reasoning. The problem, again, was that he relied on false premises.

Here then is how we propose understanding the form of debunking arguments:

- (1) You said/think/believe X (e.g. that someone is selfish, that God exists) because of Y (e.g. you are angry, your parents believe that God exists).
- (2) If you said/think/believe X because of Y, then your claim/judgement/belief X is unjustified.
- (3) Your claim/judgement/belief X is unjustified.

This argument is deductively valid, not fallacious. So arguments of this form do not commit the "genetic fallacy", or indeed any other logical fallacy (Nagel and Cohen 1934. Cf. Crouch 1993; Klement 2002; Queloz 2020). If we are right in claiming that this is the right way of understanding debunking arguments, then the claim that debunking arguments commit the genetic fallacy is straightforwardly false.

Now, we haven't tried—and will not be trying!—to show that this is the best way of interpreting all the myriad philosophers and thinkers who appeal to the causal origins of things as a way of discrediting them. But we do claim that it is the best way of understanding the reasoning implicit in ordinary claims of the form "you only said/think/believe X because of Y" and the epistemological literature on debunking arguments almost exclusively focuses on claims of this form (cf. White 2010). If we

have erred in focusing on claims of this form, then so has the whole literature to which this paper is a contribution.

Deductively valid arguments can have false conclusions if one or more of the premises are false. Our aim in the rest of the paper is to show that there are going to be some sound arguments of this form. That is, there are going to be cases in which both the first and the second premise are true. In the rest of this section we provide some initial reasons to back up this claim. But our full argument is developed in the two sections that follow.

The first premise, which we will call the “genetic claim”, states that some X (an attitude, belief, judgement) has its origins in some Y (another attitude, some aspect of human psychology, a political ideology). Evidence for particular versions of this premise (e.g. “you only believe in God because your parents did”, “you only said I am selfish because you are angry”) can come from a wide range of sources. If the claim is made by one friend to another, it may be supported by familiar sorts of evidence such as interpersonal observation, visual cues (e.g. a red face) and a basic understanding of human psychology (e.g. which sorts of things make people angry). If the claim is about why members of some group believe (or tend to believe) something, then the claim might instead be supported by social psychological evidence (e.g. are views about an issue like gun control reliably correlated with political ideology?) or historical evidence (e.g. are there historical reasons why people in country A believe one thing whereas people in country B believe another?).

Not only must some instances of the genetic claim be true (our beliefs *have* origins, after all), we must sometimes be in a position to know what the causal origins of particular beliefs, claims and judgements are. To hold otherwise would be to endorse a widespread skepticism about the prospects of interpersonal observation, social psychology and history yielding knowledge about the origins of beliefs, claims and judgements. It may be that we are sometimes—perhaps even often—wrong about these things. But how could you argue that we are rarely right about such things? To do so you would need to argue that interpersonal observation, social psychology and history are usually wrong about the origins of our beliefs, claims and judgements and we see no (plausible) grounds on which to support such a widespread form of skepticism.

It is important to note that genetic claims are, by themselves, entirely neutral as to the justificatory status of the thing the origins of which is being explained. That (perhaps for contingent reasons) conservatives in the US tend to be strongly against gun control does not by itself show that there is anything wrong with being against gun control or that the beliefs of those who are against gun control are unjustified. This is where the second premise, which we will call the “debunking claim”, comes in. The intuitive thought behind it is that some ways of forming beliefs produce justified beliefs and some don't. If beliefs formed in the way in which the target

belief was formed tend to be false, then it makes sense to conclude that the target belief is unjustified in virtue of being formed in this way.

Now, there is a very traditional way of thinking about justification on which there is a strict division between how a belief is formed (or maintained) and whether that belief is justified. The thought is that the question of how you came by a belief is *psychological* whereas the question whether that belief is justified is *epistemological*. This latter question is settled by considering whether the evidence at your disposal *supports* the belief and this is not a psychological matter.<sup>1</sup> But one of the “founding insights” behind externalist epistemologies like reliabilism is that this neat division between psychology and epistemology cannot be maintained (cf. Kornblith 2020). For example, for a reliabilist like Alvin Goldman (1979), non-inferential beliefs (e.g. simple perceptual beliefs) are justified just in case they are produced by reliable belief-forming processes. On this view, the causal origins of beliefs matter epistemologically because the justificatory status of a belief depends on the reliability of the process that produced it. Reliabilism therefore gives us one way in which the debunking claim might be understood and particular instances of it defended. Some ways of forming beliefs produce unjustified beliefs (they are not reliable) so, if a belief was formed by a process that isn’t reliable, it is not justified.<sup>2</sup> We therefore get a valid debunking argument when a genetic claim identifies a source for a belief, claim or judgement that is not reliable.

To illustrate how this works, let’s return to Catriona and Laurie. The first premise (“You [Laurie] said that I [Catriona] am being selfish because you are angry”) is supported by Catriona’s interpersonal observation skills. Assuming that Catriona knows Laurie well and is reasonably perceptive, this claim is surely justified, and we can imagine a version of the case in which it is true. The second premise (“If you said that I am being selfish because you are angry, then your claim is unjustified”) can be defended along reliabilist lines. We can imagine that Laurie’s judgements about whether others have shown her due regard and respect are often mistaken

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<sup>1</sup> This thought comes in various guises, but one of them is Reichenbach’s (1938) famous distinction between the context of discovery (the context in which a scientific theory is discovered) and the context of justification (the context in which it is justified).

<sup>2</sup> One could make similar claims using standard modal conditions on knowledge or justification like safety (as defended by Sosa 2007) and sensitivity (as defended by Wallbridge 2018). The idea would be that some ways of forming beliefs tend to produce unsafe or insensitive beliefs, so beliefs formed in these ways tend to be unjustified. Srinivasan (2019; 2015) discusses this way of understanding debunking arguments and raises some objections. Because these objections largely parallel the objection we briefly consider below and address in more detail in §4 we don’t consider them here.

when she is angry. (This is not to say that, in general, anger is a source of unreliability. It is just to say that it is for Laurie). So, if Laurie said that Catriona is being selfish because she is angry, then her judgement is unjustified because it is not produced by a reliable process. The conclusion (that Laurie's judgement is unjustified) follows.

Now, this argument needs to be complicated in various ways. While reliabilists hold that the causal origins of a belief are important in determining its justificatory status, they can allow that a belief might be initially produced by an unreliable process (so is unjustified when it is formed) but then becomes justified, perhaps because the believer comes into possession of a new piece of evidence which they come to base the belief on (basing beliefs on good evidence is clearly reliable). As applied to Catriona and Laurie, it may be that Laurie initially came to think that Catriona was being selfish simply because she is angry at her, but then came to acquire good evidence that this was in fact true. As we discuss in §4, there are tricky issues here surrounding what is involved in (properly) basing a belief on good evidence, but for now we want to just grant the point that there may be situations in which, while Laurie initially came to think that Catriona was being selfish because she was angry at her, her claim that Catriona is being selfish is still justified because she later acquires compelling evidence that she is right. But we want to insist that there will also be situations—indeed, there will be many situations—where this is not the case. In these situations, Laurie continues to think that Catriona is being selfish simply because she is angry at her. Our contention is that, when this happens, a debunking argument can be used to show that Laurie's claim is unjustified. If this is right, some debunking arguments are sound.

Another complication is that we are relying on there being a way of identifying *the* process by which Laurie formed her belief (the process must be something like “interpersonal observation clouded by anger”). But, as is well known, reliabilism faces the “generality problem” (Conee and Feldman 1998)—the problem of specifying *the* process by which a belief was formed, given that any belief can be viewed as the product of a wide range of different belief-forming processes which may differ in reliability. For example, why not say Laurie formed her belief via the process of “accurate interpersonal observation”, which is in fact a reliable process?

While this is an important problem for reliabilism, we are inclined to think it doesn't pose a problem for the use to which we are putting it. We are not using debunking arguments to show that some class of beliefs (e.g. religious beliefs) are, as a whole, unjustified because of certain properties of the process by which they are arrived at. This project does seem to require an answer to the generality problem because it relies on a claim about the properties of a process by which a whole class of beliefs is arrived at. But all we are pointing out is that people sometimes form beliefs via unreliable processes and, when they do so, those beliefs are unjustified by the

reliabilist's lights. For these purposes we don't think we need an answer to the generality problem.<sup>3</sup>

So far we have argued that debunking arguments are deductively valid, given an initial indication how both premises might be defended and dealt with a couple of objections. In the next two sections we will consider some more objections and (especially in §4) say a little more about how debunking arguments might be defended. We start in the next section by addressing in some detail a potential line of resistance to debunking arguments as we understand them.

### 3. Defeating Debunking Arguments

One way to appreciate the epistemological import of debunking arguments is to consider their implications in the context of first-personal reflections on the causal origins of our beliefs. (As we indicated in the introduction, we don't think it is the *only* way to appreciate their epistemological import. But we'll focus on it for now). Focusing on this context, the question to ask is what happens when you become convinced that (a) one of your beliefs X has causal origin Y (the genetic claim) and (b) beliefs with origin Y are (or tend to be) unjustified (the debunking claim). Some have argued that this can provide you with grounds for doubting the beliefs in question (Vavova 2018). The basic thought is that learning, of some belief X, that it has causal origin Y can provide you with a *defeater* for the belief in question. In particular, it can provide you with a defeater when learning that X has origin Y *undermines* or *undercuts* your reasons for having the belief. We think that (something like) this thought is correct. But there is an objection to it that we also think is worth considering in detail. This section is devoted to considering—and ultimately rejecting—this objection.

In broad outline, the objection goes like this. Although coming to believe, of some belief X, that it has origin Y, and that beliefs with origin Y are unjustified can generate a defeater for your belief, defeaters can themselves be defeated (when this happens you have a “defeater defeater”). So one might try to argue that the defeater that is generated when you come to believe that a debunking argument applies to one or more of your beliefs is almost always defeated by a defeater defeater already in your possession, in such a way that you retain your justification for the target belief. Accordingly, while debunking arguments may not be strictly fallacious, they will almost always be unsound. This difference is logically important (the distinction

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<sup>3</sup> To be a little more concessive, we need an answer to the generality problem in much the same way that anyone who appeals to reliabilist ideas needs an answer to the generality problem. We leave it up to the reader to decide the extent to which this tells against our argument

between validity and soundness is one we try to drum into our students!) but it isn't really epistemologically important.

But how might this objection be motivated?. First, we will assume there is at least *prima facie* support for thinking that, when the genetic and debunking claims are true of a target belief (or more, weakly, when we believe they are true of a target belief, regardless of whether they are true<sup>4</sup>), they will generate defeaters. To see why it is plausible to assume this, it will be useful to sharpen our characterisation of genetic claims. We have claimed that they have the following structure: some X (an attitude, belief, judgement) has its origins in some Y (another attitude, some aspect of human psychology, a political ideology). In typical cases, the relevant causal origin Y is seemingly not a good epistemic reason for the target proposition – for example, because you're a Democrat, because of your upbringing, because you're angry, etc. This is important; after all, it would be no criticism at all to charge a thinker with having a belief X with causal origins Y where Y is a good epistemic reason to believe X (e.g. "you only believe that taxes should rise because you have compelling evidence that they should"). The interesting sort of genetic claims identify causal origins that are themselves *not* good epistemic reasons for a belief, regardless of whether they are good or otherwise accurate explanatory reasons. But what makes an epistemic reason for a belief good? A standard idea, which we will assume in what follows, is that good epistemic reasons *propositionally justify* you in believing a target proposition, p, by indicating (or entailing, or probabilising) that p is true. Putting this all together, then, interesting genetic claims identify causal origins of a belief where those causal origins are *not* such that they propositionally justify one in believing the target proposition. (All the examples we have considered are plausibly of this type).

Second, we can now see how to motivate the initial idea that coming to believe that this sort of genetic claim is true of one of your beliefs would potentially defeat your justification for that belief. In being made aware that this sort of genetic claim is applicable to you, you are made aware of a fact of this form: <my belief has its causal origins in something that does *not* propositionally justify my belief>. For example, *that you are a Democrat* does not propositionally justify you in believing that Covid-19 vaccines work and *that you are a Republican* does not propositionally justify you in believing that the government should not introduce new environmental measures.

Third, there is a further distinction you might want to draw within genetic claims understood along the lines indicated above. While genetic claims typically pick out

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<sup>4</sup> We ignore cases where these claims are true of a target belief, but the believer doesn't believe they are true of the target belief. We also ignore cases where these claims are not true of a target belief, but the believer believes they are (these are cases of *misleading* defeaters). We ignore these cases because they raise complications that aren't relevant for our purposes.

causal origins which are such that they do not themselves propositionally justify the believer in believing the target proposition, some genetic claims go further and pick out causal origins that not *only* fail to propositionally justify the target belief but are *also* such that, upon reflection, we see that they propositionally justify the believer in thinking the target belief is in some way unreliably formed. For ease of reference, let's call a genetic claim *weak* when it picks out causal origins that merely fail to propositionally justify the target belief and *strong* when it picks out causal origins that, in addition to failing to propositionally justify the target belief, also propositionally justify the believer in doubting the truth of the target belief.

Interestingly, our Laurie/Catriona example plausibly falls within this second category, at least as we are construing it (recall our discussion in §1). It may be that anger sometimes helps us see more clearly what had hitherto remained unclear (Jaggar 1989; Narayan 1988). But we are focusing on a version of the example where Laurie's anger does in fact cloud her judgement. So, if Laurie were to learn that her belief that Catriona is being selfish has its causal origins in anger, this would tell her not just that the causal origins of her belief *fail* to propositionally justify it, but also that they propositionally justify her in thinking that her belief is unreliably formed.<sup>5</sup> In this way, learning your belief has its causal origins in anger (when anger clouds judgement) is epistemically different from learning it has its causal origins in where you went to school or grew up. In the former case, we have a strong genetic claim; in the latter cases, we only have weak genetic claims.

Let's now begin to consider how you might attempt to argue for the following thesis: the defeaters generated by *both* weak genetic claims and strong genetic claims are such that, upon becoming aware of these claims, the thinker will almost always have a defeater defeater in their possession that can neutralise whatever defeater for the target belief would be generated by their awareness of the genetic claim.

Before getting into the argument for this thesis, a brief explanation of defeater defeaters. Consider a simple perceptual case. Suppose you believe you see a goldfinch. You then overhear that the glass you drunk from had been spiked with dimethyltryptamine (a hallucinogen). You've now got a defeater for your belief that you've seen a goldfinch; you have a reason that counts against the truth of the proposition that you've seen a goldfinch. You *could* defeat (or neutralise) this defeater by acquiring a new belief that counts against the veracity of the claim that you'd ingested a hallucinogen. For example, perhaps your friend tells you that the actual drugged glass had been switched at the last minute, and that you had luckily

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<sup>5</sup> There is a wrinkle here: what if Laurie isn't aware that anger clouds her judgement? This raises the question of whether a (potential) defeater needs to be recognised as such in order to be a defeater. As in ff. 4, we ignore these complications.

consumed normal water; or, perhaps you acquire testimony that the people you'd overheard referring to your drink as drugged had themselves mistaken dimethyltryptamine for something harmless. Both of these count against the *truth* of your having ingested a hallucinogen. But – crucially – another you could defeat the defeater you acquire when overhearing the conversation is to learn something that would *neutralise its rational force* against the target proposition even though it doesn't indicate that the defeater is false. Perhaps you learn from a doctor that, due to an unusual genetic marker, you are immune to the hallucinatory effects of dimethyltryptamine. If you learned *that*, then you could retain your justification for thinking you have seen a goldfinch even while continuing to accept wholeheartedly that you'd been spiked with dimethyltryptamine.

Against this background, we want to consider this argument:

- (1) Genetic claims are either *weak* or *strong* (in the two senses described above)
- (2) The kind of defeater generated by weak genetic claims is usually such that it will be neutralised by a defeater defeater.
- (3) The kind of defeater generated by strong genetic claims is usually such that it will be neutralised by a defeater defeater.
- (C1) Therefore, defeaters generated by genetic claims are usually neutralised by defeater defeaters (from 1,2,3)
- (4) If defeaters generated by genetic claims are usually neutralised by defeater defeaters, then it's not the case that, usually, one is unjustified in believing p if one becomes aware of a genetic claim applicable to their belief that p.
- (C2) It's not the case that, usually, one is unjustified in believing p if one becomes aware of a genetic claim applicable to their belief that p (from C1, 3)

The conclusion (C2) offers some support for thinking that the conclusions of debunking arguments are usually false. We say “some” because, as we discuss in the next section, the epistemological import of debunking arguments is not restricted to the context of first-personal reflection. It may be that debunking arguments can succeed in showing that certain beliefs are unjustified due to their causal origins irrespective of whether, in the context of first-personal reflection, they undermine our justification for these beliefs. Even so, this argument is one way in which you might try to show that debunking arguments are usually unsound, so it is important for us to explain where the argument goes wrong.

The main action is in (2) and (3). We are inclined to grant (2) but we think we should deny (3). And, as we'll see, the rationale for denying the (3) should lead us to think that – at least when we are aware of strong genetic claims – it is very much an open question whether we will have a defeater defeater in our possession. What this all implies, then, is that debunking claims will sometimes, perhaps even often,

be true (at least when the genetic claim at issue is strong), and their associated debunking arguments sound.

Before looking at (3), let's briefly explain why we are inclined to grant (2). The reason is that denying (2) leads to an overgeneralisation problem. Assume, for reductio, that when you become aware that a weak genetic claim is applicable to your belief X this awareness generates a defeater for your belief, where that defeater is *not* usually defeated. Thus, what we are assuming for reductio is that when you learn something like "you believe X because you're a Democrat" or "you believe X because you're from New York", you have an undefeated defeater. You lack any evidence that would either indicate such weak genetic claims are false or which would otherwise neutralise their rational force against the target belief. If this assumption is true, then we should expect the same to hold across the spectrum of weak genetic claims, including those where more trivial causal origins are identified of *known* beliefs. For an extreme case, consider that "your parents gave birth to you" is a causal origin of all of the beliefs you *know* (and so *ex hypothesi* for which you don't have undefeated defeaters). It's hardly plausible to maintain that, when someone points out, say, to a science professor "You believe Coulomb's Energy Law because your parents gave birth to you", the professor's awareness of this trivial causal origin generate for him an undefeated defeater. If this is right, then denying (2) would overgeneralise because it would seem to require countenancing beliefs as unjustified when those beliefs, as with the science professor's, clearly are justified (but see Moon Forthcoming).

(3), however, is a different story. One might be tempted to accept (3) due to the possibility of cases where it seems to be that one both (i) has a defeater generated by one's awareness of a strong genetic claim *and* (ii) is in a position to defeat the defeater. Consider, for example, PETTY LENDER:

PETTY LENDER-1: Eben lends money at interest to his acquaintances. Whenever Eben feels insulted by anyone to whom he has lent money, he retaliates by calculating the interest in his head and announcing what the borrower owes, to the penny. Bob has borrowed money from Eben and accidentally offends him at a dinner party. This offence triggers Eben to do the sums in his head and announce to everyone that Bob owes him (with interest) £12,508.34 on the original £10K loan. Bob, incredulous that the interest has gone up so much, disputes the total and announces that Eben's calculation was done in anger at Bob's offence.

In PETTY LENDER, Eben does not dispute the genetic claim asserted by Bob: Eben knows he was offended when he did the calculations, and knows further that his being offended is exactly what caused him to do the calculations. He knows that if Bob had not offended him, Eben wouldn't have felt compelled to call out what Bob owed. Even so, Eben also can clearly see how the interest rate adds up. He has

good mathematical reasons for thinking that the original £10K loan is now £12,508 with interest. Perhaps, as the thought goes, *although* awareness of his calculations' causal origin in his offence initially propositionally justifies Eben in doubting the £12,508.34 total, the clarity of his step-by-step calculations, which he recognises to be competent, propositionally justify him in thinking that the calculation is correct *despite* whatever epistemically deleterious influence his being offended might have had. Thus, Eben's appreciation of his own competence furnishes him with a defeater defeater that neutralises the force of the defeater that is generated by his awareness that his calculation has causal origin in an emotion that would generally risk the reliability of a given calculation.

Suppose we grant all of this to the proponent of premise (3). Even so, there is good reason to reject (3) nonetheless. The reason, in short, is that it's far from clear that most cases where we become aware that strong genetic claims are applicable to a given belief are relevantly similar to PETTY LENDER. In fact, it might well be that cases like PETTY LENDER are idiosyncratic. It is perhaps not an accident that epistemologists often appeal specifically to cases of clear and distinct mathematical reasoning when defending the position that knowledge is compatible with *misleading* defeat. For example, Lasonen-Aarnio (2010) and Williamson (2021) take similar such cases to be interesting examples where the known clarity by which one reasons through a proof means that (when this issues in knowledge) one retains knowledge even in the face of contrary indications (e.g., from misleading testimony). But something similar can't be said about other cases, which don't involve mathematical reasoning. To use a simple example, consider ubiquitous cases of motivated reasoning by sports fans (Braga et al. 2017; Boas and Boas 2020; Wann et al. 2006). Suppose I witness a penalty called against my favourite sports team. Angered by the call, I insist that the penalty call was unfair, attributing it to biased and incompetent referees. My friend says: "you just said the foul call is unfair because you are a die-hard supporter of the team!" It is common knowledge that sports loyalties can cloud the objectivity of our judgments. When my friend says my belief (that the foul call is unfair) has its origins in my loyalty, a moment's reflection on the genetic claim gives me some cause to doubt the claim's reliability. Here, though, I am not like Eben in PETTY LENDER: I cannot rationally dismiss the doubt simply by appealing to any plausible clear evidence I have that the call was unfair. More probably, I will lack (and realise I lack) any good epistemic reason to maintain that the foul was unfair in the first place.<sup>6</sup>

The question for our purposes is whether most cases where we become aware that a strong genetic claim is applicable to our belief are *generally* more similar to our case

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<sup>6</sup> The idea that 'knee-jerk' judgments (by individuals with self-reported sports-team loyalties) about referee calls and more generally about player performance are often not evidence based, see, e.g., Wann et al. (2006).

with the sports fans or to cases like PETTY LENDER. We think there is good reason to think they are not. To be clear, we are not insisting that *most* cases where strong genetic claims generate defeaters will be more akin to the sports case than to PETTY LENDER (though we do take this to be plausible). Rather, in order to reject (3) of the argument we are considering in this section, we hope to have simply given the reader good reason to doubt that *most* cases where we become aware of a strong genetic claim is applicable to our belief that p will be such that we will be in a position to defeat whatever defeater would be generated by our awareness of that strong genetic claim. Because we have reason to doubt (3) of the argument, we take ourselves to have defused the defeat-based rationale we've considered in this section for thinking that debunking arguments are usually unsound. Our closer look at (3) suggests that whether they will be unsound or not remains very much an open question in any given particular case. This is of a piece with our more general aim in this paper, which is not to show that any particular debunking argument is sound, but rather to argue that there are some sound debunking arguments.<sup>7</sup>

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<sup>7</sup> One might object that the discussion of defeat relations in this section presupposed 'internalist-friendly' assumptions about the mechanism of defeat – namely, that defeat is a fundamentally matter of rationality relations between our beliefs. This way of thinking about defeat is standard in the literature on defeat, perhaps in the light of the influence that seminal internalist-friendly discussions of defeat by, e.g., Pollock and Cruz (1999) and Lackey (1999) have had on the subsequent debate. According to both Pollock and Cruz and Lackey, the acquisition of a mental state that rationally indicates against the truth of the target proposition (either by directly indicating that it is false, in the rebutting case, or by indicating that it is unreliably formed, in the undercutting case) maps on to the term 'defeater'. However, as the objection goes, there are also 'externalist-friendly' ways of thinking about defeat which diverge from the above characterisation: A notable recent such line is due to Graham and Lyons (2022). On their proposal, possessing a defeater for your belief that p is *not* a matter of possessing a mental state that counts rationally against p, but rather, it is a matter of possessing propositional justification for believing either that p is false (in the rebutting case) or that what propositionally justifies your belief that p is inadequate. What makes their proposal especially externalist friendly is that they then recommend unpacking propositional justification in a way that is given an externalist gloss. For example: they hold that S has (prima facie) propositional justification for believing p if a *cognitive process* that satisfies the general theoretical requirement for prima facie doxastic justification (a) is available to S, and (b) if used at t, taking as inputs only states that S is already in, does or would likely produce p as output (Graham and Lyons 2022). What is important for our purposes is that adopting this view of defeat is going to make no material difference on our argument in this section. The available cognitive processes in the PETTY LENDER and

## 4. Debunking and Basing

In the previous section we considered the import of debunking arguments in the context of first-personal reflection on the causal origins of our beliefs. But a belief can be unjustified without us recognising that it is unjustified. Indeed, on many accounts of justification, a belief can be unjustified even though we have no way of recognising that it is unjustified (this is true for reliabilism, for example). If this is right, then there are ways in which the causal origins of our beliefs might reveal them to be unjustified other than in the context of first-personal reflection. In this section we canvass one such way and explain why we think that it must succeed in showing some beliefs to be unjustified. In doing so we will address what we take to be the most pressing objection to our argument.

Let's start with some terminology. The *epistemic basing relation* obtains between a belief and the reason(s) *for which* it is held. It is central to standard thinking about the relationship between propositional justification and doxastic justification, where doxastic justification for believing *p* requires not only that you *have* good reason for believing something *p* (i.e. that you be propositionally justified in believing *p*) but that you base your belief on the good reasons you have which propositionally justify *p*.<sup>8</sup> Because you can have good reasons for believing something without basing your belief on these good reasons, propositional and doxastic justification can come apart. Further, because beliefs that are not properly based on whatever good reasons there might be for them are unjustified, “bad basing” can undermine doxastic justification.

To gain some clarity on how bad basing can undermine doxastic justification, it is helpful to consider cases where the reason for which you believe something is a bad epistemic reason even though you also possess a good reason for believing the thing in question (a reason that provides propositional justification). For example, you might have just read on your BBC weather app that it is raining, but – due to superstition, or irrational distrust of BBC weather – you disregard this, and the reason *for which* you believe it is raining is the fortune cookie rather than the BBC. In this case, you are propositionally justified in believing that it is raining (given your evidence from the BBC); however, you are not doxastically justified given that your belief is not based on the good reason you have that propositionally justifies you in believing that it is raining.

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sports case, respectively, differ in a way that lines up with the verdicts we've suggested in these cases by framing defeat along Pollock/Cruz and Lackey's lines.

<sup>8</sup> See Carter and Bondy (2019, Ch. 1). For a critique of the orthodox way of thinking about basing as linking doxastic and propositional justification, see Turri (2010).

How might this apply to the cases of interest to us? Going back to our initial example, we have been assuming that Laurie lacks good reasons for thinking that Catriona is being selfish. But we can now relax this assumption and still maintain that Laurie's belief is unjustified. It may be that Laurie is aware of facts about Catriona and the situation that are good reasons for thinking that Catriona is being selfish. It may even be that Laurie *has* good reasons for thinking that Catriona is being selfish. But, unless she *properly bases* her belief on those reasons, she is not doxastically justified. Perhaps—as we have been assuming—she believes that Catriona is being selfish because she is angry with her, not because of the good reasons she has for thinking Catriona is being selfish (remember we are assuming that, in this particular case, that she is angry at Catriona is not good evidence that Catriona is being selfish). As a result, her belief is not properly based, and it isn't doxastically justified.

In the previous section, we distinguished between strong and weak genetic claims: a weak genetic claim picks out causal origins that fail to propositionally justify the target belief and a strong genetic claim picks out causal origins that, in addition to failing to propositionally justify the target belief, also propositionally justify the believer in doubting the truth of the target belief. The argument we are considering here works whether the genetic claim in question is strong or weak. In the example with Catriona and Laurie, the basis of Laurie's belief not only fails to provide propositional justification for believing that Catriona is selfish but actually provides propositional justification for doubting this. But let's take another example: Tim believes that masks are effective in preventing the spread of Covid-19 not because he has looked at the evidence but because wearing a mask has the property of being socially approved in Tim's particular (sub)community. This reason for believing that masks "work" fails to propositionally justify Tim's belief (assuming that Tim's community is not significantly more likely to be right about this than chance). Unlike Laurie's reason for believing that Catriona is being selfish, it doesn't also propositionally justify Tim in doubting that masks "work". Still, Tim is not doxastically justified in believing that masks "work" because, even if he has looked at the evidence that masks "work", he doesn't believe that they work because he has looked at the evidence.

Now that the argument is on the table, we want to consider—and reject—an objection to it. The envisioned line of response is that, even when genetic claims (whether weak or strong) are true of some target belief, the belief's causal origin (the origin that features in the relevant genetic claim) is usually not really the epistemic *basis* of the target belief. So the critical mistake in our basing argument is that it makes an illicit inference from the claim that a belief has a causal origin that does not provide propositional justification for the target belief (or even provides propositional justification for doubting the truth of the target belief) to the claim

that the belief is based on this origin in the relevant sense for determining doxastic justification.<sup>9</sup>

We could take this response further and argue that the source of this mistake (the mistake of supposing that genetic claims reveal the bases of our beliefs) is the tacit acceptance of a flatfooted causal theory of the basing relation, a *prima facie* intuitive but on reflection deeply flawed theory of basing, the acceptance of which would generate just such a mistaken view about the bases of our beliefs. On this flat-footed causal view of epistemic basing, for a subject S, proposition p, reason R, S's belief that p is based on R iff S's belief that p is caused by R.<sup>10</sup> If a simple causal theory of the basing relation were true, then the causal origins of our beliefs would indeed serve as their bases and bad basing would go hand in hand with true genetic claims. However, the simple causal account is widely recognised to be problematic, even if other more sophisticated causal views hold more promise.<sup>11</sup> Consider, for example, the following case due to Alvin Plantinga (1993)

Suddenly seeing Silvia, I form the belief that I see her; as a result, I become rattled and drop my cup of tea, scalding my leg. I then form the belief that my leg hurts; but though the former belief is a (part) cause of the latter, it is

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<sup>9</sup> Note that this objection is similar to the objection that we considered in §1 in our discussion of the generality problem for reliabilism. But our aim in this section is to develop a more thorough response than we did in §1. It is also similar to an objection that Srinivasan (2015) takes to be fatal to attempts to understand debunking arguments in terms of modal conditions like safety and sensitivity (recall ff. 4). While we lack the space to work through the details, we are inclined to think that the basic idea behind our response will work with Srinivasan's objection too. Srinivasan seems to think that the defender of debunking arguments needs to find some way of identifying the basis of a class of beliefs such that beliefs held on that basis lack properties required for justification (in her discussion, safety and sensitivity; in ours, being properly based) and she thinks they will be unable to do this. But we merely claim that, in particular cases, it is possible to identify a basis for a belief such that the belief lacks properties required for justification in virtue of the basis on which it is held. To deny that this is possible would be to deny that we can sometimes recognise that a belief is held on a basis such that it lacks the properties required for justification in virtue of being held on that basis. We think this denial is implausible and leads to an unusual form of (metaepistemological?) skepticism on which we can rarely recognise that people hold unjustified beliefs.

<sup>10</sup> Defenders of causal theories of the epistemic basing relation include, e.g., Harman (1970), Swain (1981), Moser (1989), Turri (2011), and McCain (2012). Most causal accounts since Swain have been more sophisticated than the flat-footed account noted here.

<sup>11</sup> For discussion on this point, see Korcz (2021, §1).

not the case that I accept the latter on the evidential basis of the former (1993, 69, n8).

In Plantinga's case, your belief that you see Sylvia is undeniably a cause of your belief that your leg hurts. However, it is not at all plausible that it is also a reason *for which* you believe your legs hurts. It is, quite clearly, not the base of your belief that you see Sylvia. It is merely one of the principal causes of it.

Cases like Plantinga's suggest why proponents of causal accounts of the epistemic basing relation require not merely causation but also (at least) that *causal sustaining* and *non-deviance* provisos be met. Regarding causal sustaining: even though your belief you see Sylvia is a cause of your belief your leg hurts, it does not causally sustain this belief; were you to forget entirely that you saw Sylvia, you would still believe your leg hurt, and on the basis of the scalding pain. Secondly, the kind of causal chain between the belief that you see Sylvia and the belief your legs hurts looks like (as Plantinga points out) a *deviant* causal chain.<sup>12</sup> This much suggests that any plausible causal account of the basing relation will need not only a causal-sustaining caveat, but also a non-deviance proviso. However, once this point is granted, it becomes much less plausible to think that genetic claims reveal the *bona fide* bases of our beliefs. This is because whenever we have a good reason for a belief (viz., a reason that propositionally justifies a belief), it's unlikely that the causal origin is going to *causally sustain* the belief even if it is a cause of the belief. Usually, the thought goes, whenever one has a reason that propositionally justifies one in believing the target proposition, one would continue to believe the target proposition so long as they retained that good reason and even if they'd completely forgotten (or become somehow cognitively extricated from the influence of) the relevant causal origin.

To bring this line of thinking into focus with a concrete example, consider the following case. Rajou is raised in a household where exposure to (and social praise of) sound climate science is abundant, and climate change "denial" is discussed only in a negative light. Rajou (like most around him) believes that global temperatures are rising, and that human activity is the cause. Rajou is speaking now with a friend, Ina, who was raised in a very different kind of environment, with Fox News blaring, and in which misinformation about climate change was prevalent. Ina, upon hearing Rajou affirm tenets of mainstream climate science (e.g., that humans are a leading cause of global warming), lobbies a genetic claim against Rajou – viz., that Rajou believes what he does about global warming because he grew up in a family where that view is prominent.<sup>13</sup> One would want to

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<sup>12</sup> For some notable discussions of deviant causal chains in basing relations, see, e.g., Moser (1989) and Harman (1970).

<sup>13</sup> For a variation on this case, see Carter and McKenna (2020).

say that, while Ina might have correctly identified the causal origins of Rajou's belief that climate change is real and caused by humans, she cannot run the sort of debunking argument we have been considering against Rajou because his belief is not based on these causal origins in the relevant sense. It is rather based on the sound evidence that global temperatures are rising and that humans are the cause of this that he is fortunate enough to have available in his environment. One way of putting it would be that, following Plantinga, while Rajou might have formed his belief as a result of his upbringing, what causally sustains his belief is the sound scientific evidence made available to him as a result of his upbringing.

We grant that this is one possible way of filling in the case. For example – call this Version 1 of the case – suppose that *even if* his family became climate deniers, Rajou would continue to believe in global warming for the reasons that now propositionally justify his beliefs in global warming (e.g., reasons to do with rising Co2 omissions, etc.). If this counterfactual is true of Rajou, then it is indeed plausible that what causally sustains his belief are these good reasons. However, we can very easily imagine a different way of filling in the case, one that also seems plausible enough, in light of the fact that we are sometimes easily swayed by the views of those who are close to us. In Version 2, suppose Rajou is deeply committed to his family, and (like many young people) intellectually impressionable. In this version of the case, suppose he has the same evidence (which he learned from his family) which propositionally justifies his belief in global warming as in Version 1, but let's assume that in Version 2, were his family (somehow) to become climate skeptics, the evidence Rajou presently has would not be enough to sustain his belief in global warming. In this version of the case, it's *not* the case that evidence that propositionally justifies his belief *causally sustains* his belief, despite being a cause of the belief.

We do not want to claim that there will be more cases that are like Version 2 than like Version 1. We are even willing to grant that it may be that there are substantially more cases that are like Version 1 than Version 2. All we need for our argument is that cases like Version 2 are not particularly rare or uncommon. While this is an empirical claim, and so our argument is in a way a hostage to fortune, we think it would be surprising if it turned out that cases like Version 2 are rare. After all, one reason why so many are worried about social pressures when it comes to what we believe about important matters like climate change is precisely that we take it that people are sometimes swayed by social pressures. If this is right—if cases like that of Rajou in Version 2 are not an anomaly—then we have shown that our beliefs are sometimes not only formed due to factors that provide no propositional justification for them but also sometimes causally sustained by such factors. As we have argued, even by the lights of sophisticated causal accounts of basing, such beliefs are not based on whatever evidence the believer might have for them in the way required for doxastic justification. So the causal origins of our

beliefs can reveal them to be (doxastically) unjustified, just as the defender of debunking arguments maintains. How often this happens is an open question, and we haven't committed ourselves to it happening in specific, real-world cases (our description of Rajou in Version 2 is just a description of the conditions that must be met for our argument to succeed). But we can see no grounds for holding that it rarely happens.

## 5. Conclusion

Let's briefly recap. We have argued that, far from being invalid or committing the genetic fallacy, debunking arguments are logically valid. More importantly, we have also argued that they are sometimes sound. That is, we have good reason to think that their premises and conclusions are sometimes true. Importantly, we have made our case without committing to particular debunking arguments being sound. Our general strategy has been to identify the conditions under which they would be sound and then to show that these conditions will, at least sometimes, be met. Along the way we have dealt with some objections to debunking arguments as we understand them. We have also shown how the epistemological import of debunking can be understood independent of the context of first-personal reflection on the origins of our beliefs. If we are right, then there are two important morals for the epistemology of debunking. The first is that we should view debunking arguments as getting a grip in part because they raise problems for the bases of our beliefs. They can do this independently of whether they raise problems in the context of first-personal reflection on the origins of our beliefs. The second moral is that the real question is not whether debunking arguments sometimes succeed in showing that certain beliefs are unjustified. The question is rather how often they succeed. How far can they extend?

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