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DEBUNKING, EPISTEMIC ACHIEVEMENT, AND UNDERMINING DEFEAT

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ABSTRACT

Several anti-debunkers have argued that evolutionary explanations of our moral beliefs fail to meet a necessary condition on undermining defeat called modal security. They conclude that evolution, therefore, does not debunk our moral beliefs. This article shows that modal security is false if knowledge is virtuous achievement. New information can undermine a given belief without providing reason to doubt that that belief is sensitive or safe. This leads to a novel conception of undermining defeat, and it shows that successful debunking of moral realism is possible.

Debunking arguments purport to undermine the justification of a belief by showing that that belief was formed by an epistemically defective process (Nichols 2014). Evolutionary debunking arguments are a special case, which purport to show that evolutionary explanations of our moral beliefs undermine all or some moral beliefs, at least if the contents of the beliefs are understood as moral realists understand them, namely as beliefs about mind-independent moral truths (Street 2006; Joyce 2016; Sinclair 2018). These arguments have been much discussed recently, both in terms of their empirical (e.g., Buchanan and Powell 2015; Nichols 2014) as well as their epistemological premises (e.g., Bogardus 2016; Sinclair 2018; Wielenberg 2010; Lutz 2018; Hanson 2017; Tersman 2017; Clarke-Doane 2012; Vavova 2015; Klenk 2017b, 2017a).

If true, evolutionary debunking arguments threaten moral knowledge.[1] But according to realists, defending moral realism without moral knowledge "has just about zero appeal" (Shafer-Landau 2012, p. 1).[2] Consequently, prominent non-naturalist moral realists regard debunking arguments as their most arduous test (Scanlon 2014; Parfit 2011; Enoch 2011; Shafer-Landau 2003) and important types of naturalist moral realism are threatened, too (cf. Barkhausen 2016; Bogardus 2016).

But debunking arguments have recently been contested. Apart from challenging the empirical basis of debunking arguments (e.g., Buchanan and Powell 2015), anti-debunkers have disputed that valid epistemic principles show that evolution support the evolutionary undermining of moral beliefs (e.g., Bogardus 2016; Wielenberg 2010; Clarke-Doane 2012; Klenk 2018b). Several anti-debunkers have explicitly or implicitly accepted the Modal Security principle as a necessary condition on undermining defeat. Modal Security says that if information undermines a given belief, then that information gives us reason to doubt that that belief is safe and sensitive. So, according to anti-debunkers, a successful debunking argument needs to show that

evolutionary explanations of moral beliefs also provide reasons to doubt that our moral beliefs are safe and sensitive. The Modal Security principle has been indicated by Clarke-Doane (2012, pp. 320–321), and since then been defended in several publications (e.g., Clarke-Doane 2016; 2017; 2020; Baras and Clarke-Doane 2019). Though the importance of Modal Security for debunking can be challenged, the principle, and the type of anti-debunking argument that depends on it, has gathered a large following, thereby turning the tide in the debunking debate (e.g., Baras 2017; Srinivasan 2015; Hanson 2017).[3]

Note that the success of anti-debunkers depends on the claim that information undermines a given belief only if it provides reasons to doubt that the belief is safe and sensitive. I draw on recent advances in virtue epistemology to contest this claim. To be more precise, I rely on the idea that knowledge is an achievement such that if a given agent knows a particular fact, then her success is sufficiently attributable to her cognitive abilities. I then show that this conception of knowledge indicates that Modal Security is false. Importantly, rather than merely adopting the achievement conception of knowledge for the sake of argument, I demonstrate the achievement conception is supported and strengthened by considerations about debunking arguments. We will see that the achievement conception of undermining defeat is capable of explaining undermining defeat where the orthodox conception of defeat fails. The upshot of this paper is that debunking arguments remain possible from a virtue epistemic perspective and moral realists still need to face their most arduous test.

The plan is as follows. The next three sections introduce the topic of this paper, providing the necessary details on Modal Security and the Modal Security argument against debunking. I will be brief in these sections, as they describe arguments defended elsewhere.

My contribution to the debate comes in the sections that follow. I show how virtue epistemology implies the falsity of modal security (in sections 4 and 5), defend a novel conception of undermining defeat and spell out the implications for future debunking arguments (in sections 6 and 7).

1. Modal Security

Modal Security is intended as a necessary condition on undermining defeat (Clarke-Doane 2016, p. 31):

Modal Security: If information, E, undermines [rather than rebuts] our belief that P, then E gives us reason to doubt that our belief is sensitive or safe.

The principle relies on safety and sensitivity. Both conditions have been defended as necessary conditions on knowledge, often to spell out the intuition that knowledge is immune from certain types of luck. Robert Nozick advanced the sensitivity condition on knowledge (1981). Accordingly, an agent S knows that p only if S's belief that p is sensitive, that is, if S would not believe that p if p were false.

The safety condition has been advanced by Ernest Sosa, Timothy Williamson, and Duncan Pritchard. Simply stated, the condition holds that S knows that p if S's belief that p is safe, that is if S would believe that p only if p is true. A lesson from the recent literature is that safety has to be qualified relative to a belief-forming method and that a belief should count as safe only if one avoids false beliefs regarding every proposition that is similar enough to the proposition in question (Williamson 2000, p. 124). So, S's belief that p is safe iff S were to believe that q (where q is any proposition sufficiently similar to p) only if q were true, using the method S used to determine whether or not p. Though sensitivity garners little support recently, safety is widely accepted by epistemologists.

Why accept Modal Security? In other words, what feature of epistemic importance must a given belief be lacking, so that learning of it undermines that belief? According to proponents of Modal Security, there is a "translation scheme" between knowledge and justification: if new information defeats a given belief of yours, then that information gives you reason to doubt that that belief qualifies as knowledge (see also Lutz 2018; Clarke-Doane 2017, p. 36). Accordingly, new information must give reason to doubt a belief's status as knowledge to be undermining, and conditions for knowledge are candidates for conditions for undermining. Safety or sensitivity are conditions for knowledge. Learning that a given belief is not safe and sensitive thus shows that that belief is not knowledge.[4] Given the translation scheme, one, therefore, ought to relinquish the belief (Clarke-Doane 2016, pp. 31–32). I will return to the translation scheme with a critical assessment in section 4 as it plays an important part in the rejection of Modal Security.

Modal Security also gains abductive support from explaining well some paradigmatic cases of undermining defeat. Consider a pill that destroys the cognitive capacities of those who ingest it. Learning that you ingested the pill gives you reason to think that you could have easily believed the contrary of what you now believe; thus, you have reason to doubt that your beliefs are safe. Or suppose you are on a factory visit looking at what appear to be red wedges on a conveyor belt. Learning that a red light illuminates them gives you reason to doubt that you would not believe that they are red if they were not; thus, you have reason to doubt that your beliefs are sensitive. Modal Security gives the right verdict here.

Therefore, Modal Security is prima facie plausible, insofar as sensitivity and safety are required for knowledge, and if there is a translation scheme between justification and knowledge.

2. The Modal Security Argument against Debunking

Given Modal Security, anti-debunkers can raise the modal security argument against debunking:

1. Modal Security: If information, E, undermines [rather than rebuts] our belief that P, then E gives us reason to doubt that our belief is sensitive or safe.[5]
2. Evolutionary explanations of morality do not give us reason to doubt that all moral beliefs are sensitive.
3. Evolutionary explanations of morality do not give us reason to doubt that all moral beliefs are safe.
4. So, evolutionary explanations of morality do not undermine moral all beliefs.

The modal security argument against debunking is deductively valid, and the previous section provided support for premise 1. Premises 2 and 3 appear in good standing, too. I will first explain why this is the case, and in the next section, I will address three initially plausible objections to the argument. The argument is premised on the view that contents of at least the fundamental moral beliefs, such as "survival is pro tanto good," are metaphysically necessary, as assumed by moral realists, whose view debunkers accept for the sake of argument (e.g., Scanlon 2014, p. 41; Shafer-Landau 2003, p. 85).

The focus on fundamental moral beliefs is crucial, both for the proponents of modal security and for my argument against modal security. It is, therefore, important to emphasize that the modal security argument against debunking does not imply that no moral beliefs can be undermined (by genealogical, evolutionary evidence). A large number of commonly held moral beliefs may indeed be susceptible to undermining, but that is not the point. Insofar as debunkers target all moral beliefs, they have to show that evolutionary evidence undermines even fundamental moral beliefs, such as "survival is pro tanto good,"

and that is the claim that proponents of modal security contest.[6]

So, the safety and sensitivity conditions are trivially true when applied to true fundamental moral beliefs because the antecedent of each conditional is always false, at least on a standard interpretation of counterfactuals (Roland and Cogburn 2011). For example, the sensitivity conditional says that S would not believe that P if P were false. When P is always true, then the antecedent 'if P were false' is always false and so the conditional 'if P were false, then S would not believe that P' is always true. Therefore, according to anti-debunkers, evolutionary explanations of morality do not give us reason to doubt that our moral beliefs are safe and sensitive, vindicating premises 2 and 3 of the modal security argument against debunking.

Hence, the modal security argument against debunking is at least prima facie plausible, and several anti-debunkers have recently defended some or all of its premises (Clarke-Doane 2016; Baras 2017; Wielenberg 2010; Bogardus 2016; Hanson 2017; Shafer-Landau 2012; Baras and Clarke-Doane 2019).

3. Corroborating the Anti-Debunking Challenge

I will now explain why three salient counterarguments concerning premises 2 and 3 of the modal security argument against debunking likely fail, which corroborates the challenge to successful debunking. Rather than aiming at a decisive refutation of these counterarguments, I hope to show that they face considerable problems, so that an attempt to refute the Modal Security principle itself will become worthwhile.

First, debunkers can try to reject the claim that premises 2 and 3 are trivially satisfied. In impossible worlds, say, survival is not pro tanto good, but we would still believe that survival is pro tanto good, and so even fundamental moral beliefs might be insensitive and unsafe. This objection will not do because considering impossible worlds in evaluating sensitivity implies global scepticism. Arguably, all beliefs about the links between supervenient properties and their bases would then turn out insensitive. For example, if atoms arranged table-wise would not make a table, we would still believe that there is a table and so that belief would be insensitive (Clarke-Doane 2015). Triviality for safety could arguably be avoided without invoking impossible worlds by rendering safety as follows: S's belief that P is safe just in case that, using the method S actually used, S could not have easily had a false belief as to whether or not P is true (Pritchard 2009, p. 34). Still, debunkers rely on evolutionary explanations of moral beliefs that suggest that beings like us would endorse similar beliefs across nearby evolutionary scenarios, thereby rendering these beliefs safe nonetheless (Clarke-Doane 2016, pp. 34–35; Klenk 2018a, p. 120). So, even if the safety condition could be reformulated, debunking arguments themselves suggest that moral beliefs are safe.[7]

Second, debunkers can attack the assumption that moral beliefs are true. That is, if some of the moral beliefs that we currently hold are true, then evolution gives us no reason to doubt that they are sensitive and safe. But we do not know that our moral beliefs are true, and therefore the argument is of no help for moral realists (Tersman 2017; Schechter 2018). However, this objection misinterprets the scope of the debunking challenge, which is to show that evolutionary explanations provide reasons to give up (realist) moral beliefs assuming that moral beliefs are true. Interpreting the debunking challenge like this makes sense because it sets it apart from more generic sceptical challenges. As others have shown, relinquishing the belief that p on the mere possibility that it may be false, without it being probable that the belief is false, would imply general scepticism (Vavova 2015).

Absent an argument that shows how debunking does not generalise, even if the truth of moral beliefs is not granted; debunkers are better off by rejecting Modal Security.

Third, debunkers may want to defend explanatory requirements for knowledge and use that to show that modally stable (i.e., sensitive and safe) beliefs can be undermined nonetheless. However, accounts that defend explanatory requirements for knowledge but then elucidate explanatory relations in modal terms (Setiya 2012; Unger 1968; Yamada 2011; Faraci 2019) will be of little help against modal security, for the reasons elucidated above.[8] Some existing accounts construe explanatory connections as requirements for knowledge, but do not cash them out in modal terms (e.g., Lutz 2018). However, it can be shown that they would imply that realist moral beliefs are not justified to begin with, and thus they would not allow for undermining, which requires previous justification (see Klenk 2019).[9] Therefore, as discussed in more detail in section 6, the problems and open questions with such explanatory approaches should give sufficient impetus for debunkers to take seriously the anti-debunking challenge posed by modal security.[10] Therefore, initial objections to the Modal Security argument against debunking leave it unscathed. To retain the hope of successful debunking, debunkers should attack the Modal Security principle directly.[11]

4. Learning of a Lack of Knowledge Undermines Belief

In this section, I take the first step to rejecting Modal Security by strengthening the link between conditions for knowledge and justification undermining. In the next section, I will then use that link to show that Modal Security is false. The purpose of this section is thus to explain how proponents of Modal Security rely on a particular view of the relation between knowledge and defeat, which I will then exploit to attack modal security in section 5.

As section 1 has shown, anti-debunkers accept a translation scheme between knowledge and justification to establish the initial plausibility of Modal Security. To be precise, let us consider the following translation scheme, as defended by anti-debunkers (e.g., Baras and Clarke-Doane 2019; Lutz 2018):

> Translation scheme N: Whenever information, E, undermines or rebuts a given belief, then E implies that that belief is not knowledge.[12]

The intuition captured by translation scheme N is that one ought to give up a justified belief only if one learns that the belief lacks an "important epistemic feature," such that the belief fails to "satisfy conditions for knowledge" (Baras and Clarke-Doane 2019, p. 4). Which conditions for knowledge are relevant for undermining? Following translation scheme N, the conditions relevant for undermining must be individually necessary and (jointly) sufficient for knowledge. Clearly, the conditions we are looking for must be (individually) necessary because that makes them count for whether a given belief qualifies as knowledge. But they must also be (jointly) sufficient because otherwise we will leave out at least one way in which the belief could be undermined. So, translation scheme N paves the road to the modal security principle if we assume that new information, E, gives reason to doubt a belief's status as knowledge if and only if E gives reason to doubt that the belief is sensitive and safe. Given translation scheme N, anti-debunkers also have reason to accept the converse of translation scheme N. Both schemes are motivated by the intuition that conditions for knowledge plays a crucial role in an account of undermining:

> Translation scheme S: Whenever information, E, correctly implies that a given justified belief is not knowledge, then E undermines or rebuts that belief.[13]

According to translation scheme S, any information that implies that a given belief is not knowledge defeats that belief. The principle is plausible: if some belief is not knowledge, then that belief must lack some criteria of epistemic relevance, such as truth or justification. In the former case, E would be rebutting information. In the latter case, E would be undermining information. Of course, knowledge arguably requires more than justified true belief. Consequently, learning that a given belief lacks whatever else is required for a belief to be knowledge would also undermine it.[14]

Apart from establishing a helpful conceptual symmetry about the role of knowledge for undermining, translation scheme S has a distinct dialectical advantage. It highlights the crucial point that modal security is false if new information can suggest that a given belief is not knowledge without suggesting that the belief fails to be modally secure. So, even though noting the commitment of anti-debunkers to translation scheme N is technically sufficient to mount my attack on modal security[15], I will end this section with a brief defence of translation scheme S.

Can anti-debunkers reasonably reject the translations scheme S? In principle, the answer is 'yes,' because the link between the modal security principle and both translation schemes is not a logical one; the latter merely motivate the former. Anti-debunkers might argue that new information can show that moral beliefs are not knowledge but that, at most, we ought to give up the belief 'my belief that p is knowledge' but not the belief that p (Clarke-Doane 2017, p. 36). They might thus concede that we do not know some of the things we believe to be true provided that we can still maintain that we are justified in believing them. However, rejecting translation scheme S comes at too high a cost. First, anti-debunkers would owe an explanation for taking the conditions for knowledge to be significant in preventing undermining (by

accepting translation scheme N) and to deny that they suffice to facilitate undermining (by denying translation scheme S). Translation scheme N, the ground for Modal Security, plausibly commits them to translation scheme S, too. Most importantly, however rejecting translation scheme S would commit anti-debunkers would to akratic sentences like "p, but I do not know whether p" and there are good epistemic reasons to think that endorsing such beliefs is irrational (see Klenk 2020a).

Therefore, there are good reason for anti-debunkers for accepting the translation scheme S such that learning that a given belief is not knowledge undermines that belief.

5. If Knowledge Is Achievement, Then Modal Security Is False

Thus far, I argued that learning that a given belief is not knowledge undermines that belief. I will now show that a given belief can be safe and sensitive but not knowledge. In a nutshell, Modal Security relies on the assumption that safety and sensitivity are individually necessary and jointly sufficient for knowledge. But they are not: a given belief might be epistemically safe and sensitive, but not knowledge. Learning that a given belief is not knowledge undermines that belief (according to the translation scheme S defended above). Therefore, it is possible that new information about our moral beliefs undermines them, without providing reason to doubt that they are safe and sensitive, which implies the falsity of Modal Security.

More precisely, an account of undermining which says that a belief is undermined only if we have reason to doubt that it lacks properties $x_1 \ldots x_n$ will be true only insofar as $x_1 \ldots x_n$ are individually necessary and jointly sufficient for knowledge.[16] Because if $x_1 \ldots x_n$ are not individually necessary and jointly sufficient, then the account of undermining will leave out an important condition for knowledge, x_n+1, and thus leave open that

information about a belief's (lack of) possession of $x_n +1$ may undermine it. Safety and sensitivity may be necessary for knowledge, but they are not sufficient.[17]

My argument relies on the achievement thesis, the view that knowledge is a kind of virtuous achievement (Pritchard 2012; Sosa 2007; Greco 2012; Zagzebski 1996). The idea that knowledge is a kind of success from ability goes back at least to Aristotle (cf. Greco 2012, p. 2). For example, a competent archer hits bullseye because she shoots competently. Her shot is competent, and her bullseye is an achievement (Turri, Alfano, and John 2019). A competent knower, then, has true beliefs because she reasons and thinks competently. Her having a true belief is an achievement. An important distinction amongst adjacent but competing interpretations of the achievement thesis concerns the degree to which cognitive ability must contribute to cognitive success for a given true belief to count as knowledge. For this paper, I will adopt Pritchard's (2012) modest interpretation of the achievement thesis, according to which cognitive ability must to a significant degree contribute to cognitive success. Cognitive abilities or virtues are reliable, knowledge-conducive belief-forming dispositions that are suitably integrated within the agent's other belief-forming dispositions (Pritchard 2012, p. 261). If the reader is convinced by this account of knowledge (or others sufficiently similar), then they can reject modal security.

The achievement view therefore helps explaining the force of debunking arguments, which have considerable intuitive appeal (which I will explore in more detail in sections 6 and 7).[18] Thus I take the argument presented in this paper as a (metaethical) point in favour of the achievement view. Apart from this point, however, I do not aim to offer a full epistemological defence of the achievement thesis in this paper, which has been done elsewhere (e.g., DePaul and Zagzebski 2010; Pritchard 2012).[19] Instead, I aim at clarifying

the view by discussing a typical case, and to introduce a related case that will serve as a bridge to the debunking discussion. Given the achievement thesis's considerable following and more widely shared concerns about purely modal analyses of knowledge (e.g., Roland and Cogburn 2011), the connection to debunking defended below should suffice to make a discussion of the achievement thesis worthwhile.

5.1 Safe but not Knowledge

Consider first the following case by Schafer (2014, p. 384), which illustrates why sometimes safety is not sufficient for knowledge:[20]

> The Little Prince: The crown prince, Etienne—purely out of a deep sense of arrogance—believes that he is the strongest boy of his age in Paris. As a matter of fact, his belief is correct, but solely because his father has decreed that no stronger boy should be allowed to live in the city—a decree that the king's secret police are extremely efficient at carrying out.

In most nearby possible worlds in which the little prince believes that he is the strongest boy in Paris, his belief is true because the king's secret police are extremely efficient at making this the case. Moreover, let us stipulate that his father is strongly disposed to issue the decree, so we may assume that he may not readily have failed to give the command. So, the prince's belief is safe. But it still seems that little prince's belief is not knowledge.

According to proponents of the achievement thesis, the little prince's belief is not knowledge because "while his belief is true (and safe), its truth (and safety) cannot be attributed to him in the sense that knowledge seems to require" (Schafer 2014, p. 385). No relevant cognitive ability played some crucial part in the production of the target true belief (Pritchard 2010, p. 135). Most relevantly, the prince's arrogance is not a knowledge conducive process. As we have seen above, according to proponents of the achievement

thesis, when one knows, then one's cognitive success should be creditable to one's cognitive ability (Pritchard 2012, pp. 247–48).[21]

Before turning to an extension of the case, it is important to address an objection to the achievement view's analysis. Schafer's case may not seem like a genuine counterexample to the sufficiency of safety for knowledge. After all, whether the prince's beliefs are safe indeed depends on whether worlds in which he forms false beliefs about similar propositions are close enough to the actual world. But what would be similar and close enough? It seems fair to say that all current epistemologies struggle to give a principled answer to this question (Bishop 2010). Absent a solid criterion, there is of course room for anti-debunkers to dispute the present analysis. But note that anti-debunkers themselves depend on equally contestable interpretations of nearness and similarity to defend premise 3 of the modal security argument against debunking. Therefore, if there is a reason to resist the achievement view, this does not seem to be it. We should conclude that it is possible to have safe beliefs but not knowledge.

5.2 Safe and Sensitive But Not Knowledge

A variant of Schafer's case illustrates that sometimes beliefs that are both sensitive and safe (and thus safe and sensitive) are not knowledge:

> The Geeky princess: Etienne's sister, Estrella the geeky princess, believes that everything in her green book is true—purely out of love for the colour green. As a matter of fact, all these beliefs are correct, but solely because her father has decreed that only true mathematical statements should be written in the green book—a decree that the king's court mathematicians are extremely efficient at carrying out.

The geeky princess's beliefs concern necessary truths, and so they are sensitive. They are also safe: we can stipulate that the king will always decree that there be only truths in the book that is to his daughter's liking,

that he has devised a secure method to predict which book his daughter will like and that the king's court mathematicians never make a mistake in filling the relevant book with truths. The geeky princess's method is therefore extremely reliable also for beliefs in similar propositions. So, the geeky princess's beliefs are safe and sensitive. Despite having safe and sensitive beliefs, the geeky princess's cognitive success is in a certain sense accidental.[22] Her epistemically horrible method is cancelled out by environmental luck, and her cognitive abilities played did not play a significant role in her cognitive success. Anything the princess believes about the contents of the abortively-colored books will be bound to be true, and she has cognitive success by merely forming a belief at all. That is hardly cognitive success due to a significant contribution of cognitive ability. So, according to proponents of the achievement thesis, the geeky princess does not know any of the propositions written in her green book. Therefore, if the achievement view is correct, then it is possible that beliefs that are both safe and sensitive are not knowledge. This is almost enough to reject modal security.

Before returning to Modal Security and the debunking debate, I want to consider a critical objection to the achievement thesis. The analysis presented thus far relies on the verdict that the princess's cognitive success is not in the relevant sense creditable to her cognitive abilities (see Pritchard 2012, p. 264). This analysis might seem, implausibly, to rule out, amongst other things, knowledge through testimony.[23] In cases of testimony, for example, one's cognitive success may not seem creditable to one's cognitive abilities. However, a lesson from the literature is that that depends on the details of the case. In cases where knowledge seems transmitted through testimony, proponents of the achievement thesis can often show that substantial cognitive ability is involved. For example, when one gains knowledge through testimony, one's

cognitive ability to rely correctly the context (e.g., the place and time where one receives the testimony) contribute to one's cognitive success (Pritchard 2012, p. 269; Greco 2012, p. 4). Therefore, the achievement view does not, in general, impose overly restrictive or individualistic requirements for knowledge, but it has the resources to explain why, in special cases like that of the geeky princess, modal security as a property of a belief and knowledge can come apart.

5.3 Debunking and Lack of Moral Knowledge

Thus far, I have shown that learning that a given belief is not knowledge undermines that belief (by defending the translation scheme) and that a given belief can be safe and sensitive but not knowledge (and the achievement thesis is a particular way of accounting for that intuition). The final step required to refute Modal Security is to show that new information can show that a given belief is not knowledge according to the achievement view and thereby undermine that belief.

The geeky princess's case provides a bridge back to the debunking debate. The situation of the geeky princess in some sense mirrors our situation in regards to moral beliefs, at least as debunkers portray that situation. In the geeky princess's case, the king ensures that the princess's beliefs are bound to be true. The truth of her beliefs has nothing to do with her abilities and everything with a fortuitous circumstance of her royal life.

Here is the rub: the very conditions that ensure the princess's cognitive success (the king's interventions) are responsible for the intuition that the princess's beliefs do not qualify as knowledge because they make it the case that the princess is not creditable for her cognitive success. Thus, the king makes it the case both that the princess's beliefs are safe and sensitive and that they fail to be knowledge. Though the geeky princess's case is a tad fantastical, an analogous

point holds in the case of moral beliefs. In the moral case, two conditions are 'king;' the—at least according to the evolutionary debunker's story—ensure our moral beliefs reliable, and they make it the case that they do not, all else being equal, qualify as knowledge as long as our cognitive abilities did not substantially contribute to our cognitive success:

> Fixed truth value: Some true moral beliefs are true in all possible worlds.[24]

> Fixed content: S holds some true moral beliefs in all nearby possible worlds because of some factor F (such as evolutionary pressures), where F is not creditable to S's cognitive ability.

The debunkers' claim that we ultimately hold our moral beliefs because of our evolutionary trajectory, which suggests that our moral beliefs satisfy fixed content (Clarke-Doane 2015, p. 95).[25] To illustrate, imagine that we "replay the tape of life" (in Stephen Jay Gould's evocative metaphor): starting conditions may be a little different, probabilistic processes may have slightly different results. Still, if the result of replaying the tape of life is the evolution of a species fairly similar to us, then its members would share our core moral intuitions and beliefs (Klenk 2018a). So, our moral beliefs satisfy fixed content. And since their content is necessarily true, they satisfy fixed truth value. So, if we learn that moral beliefs satisfy fixed truth value and fixed content, we will know that all true moral beliefs are safe and sensitive. Granted the assumption that some of our moral beliefs are true, we will have no reason to doubt that our true moral beliefs are safe and sensitive. At the same time, if that is all that we know about our moral beliefs, then learning that our moral beliefs satisfy fixed truth value and fixed content because of some factor not creditable to our cognitive ability, we will have learned, ceteris paribus, that our moral beliefs are not knowledge. So, new information can undermine a belief without

giving one reason to doubt that the belief is safe or sensitive.

Therefore, the achievement thesis implies that the modal security principle is not a necessary condition on undermining defeat. You can learn that your belief that p is not knowledge even though you get no reason to doubt that p is safe and sensitive, which undermines your belief that p.[26]

6. The Achievement Conception of Undermining Defeat

I have shown how debunkers can remove Modal Security as an obstacle for successful debunking by endorsing the achievement thesis. As emphasised in the introduction, however, this does not show that evolutionary debunking, in fact, undermines our moral beliefs. The answer to that question depends on whether evolutionary explanations of morality show that our moral beliefs violate the achievement condition. That is a task for another paper (I explore that question in Klenk forthcoming).

In the remainder of this paper, I demonstrate wider epistemological implications of rejecting Modal Security and what this means for attempts to debunk moral realism. Rejecting modal security puts pressure on debunkers to a accept a novel conception of undermining defeat:[27]

> The Achievement Conception of Undermining Defeat: It is possible that new information undermines all our beliefs of a kind D by showing that cognitive success with regards to D-beliefs is not sufficiently creditable to our cognitive abilities.

If the achievement conception of undermining defeat is implausible, then the rejection of modal security is implausible (in lieu of an alternative route to resisting modal security, which seems unlikely given the considerations elaborated in section 3). But the achievement view of undermining defeat is plausible for both metaethical as well as perfectly general epistemological reasons.

Consider the general epistemological reasons first. The achievement conception correctly identifies paradigm cases of undermining defeat. Recall the pill that destroys your cognitive faculties, or the red wedges illuminated by a red light. In both cases, you learn that the bases of your beliefs might lead you to cognitive success, but your cognitive success will not be creditable to your cognitive abilities. Hence, you learn that you do not know whatever you believe after ingesting the pill, or that the widgets are red. That is sufficient to undermine your respective beliefs.

Moreover, the achievement conception is capable of dealing with undermining defeat in cases where the orthodox conception fails. For example, there would be no way to call into question the justification of all moral beliefs without showing that they are false. Adherents of the orthodox conception would, therefore, have to say that there is no undermining defeat in domains such as morality (realistically construed). Arguably, the same is true in other a priori domains such as mathematics and logic. It is possible, however, that beliefs that satisfy fixed truth value and fixed content do not qualify as knowledge and the achievement conception explains why even such 'failsafe' beliefs ought to be given up. This should be of interest for anyone wishing to defend an fallibilist epistemology of a priori truths, which encompasses virtually all current discussions of such topics. From the perspective of metaethics, debunkers of course have reason to accept the achievement conception because it helps them to resist the modal security argument against debunking. In itself, this would be to beg the question of course. However, debunkers and anti-debunkers also have reason to endorse the achievement conception of undermining defeat for independent reasons. It helps realists to accept that moral beliefs can in

principle be undermined, for otherwise they would be committed to the implausible result that some beliefs are not revisable. That is a reason for accepting the achievement conception because, given larger fallibilist leanings in current epistemology, it would be a cost for realists to maintain that moral beliefs are non-underminable.

Moreover, the achievement conception of undermining defeat may help to explain when experimental data in normative ethics undermines a moral belief. Given a burgeoning experimental and philosophical literature on situationist influences on moral belief that extends far beyond the discussion about evolutionary explanations of moral beliefs, the achievement conception offers the start of an explanation for when and why situational influences undermine even fundamental moral beliefs. Findings about the influence of situational factors on beliefs about fundamental moral matters may give us reason to doubt that even our fundamental moral beliefs are a cognitive achievement and thus give us reason to doubt that they qualify as knowledge. Consequently, in contrast to the orthodox conception of defeat, the achievement conception of defeat helps us to explain why we should revise our moral beliefs, if we should, vis-à-vis new findings about the influence of situational factors on our fundamental beliefs and consequently prompt us to revise our confidence in our beliefs.

The most significant feature of the achievement conception of undermining defeat is that it goes beyond mere concern with forming reliably true beliefs. The orthodox conception of defeat maintains that new information undercuts the support conferred on a belief by its base. The orthodox conception does so by implying that the content of the belief might misrepresent the facts (Pollock and Cruz 1999). The achievement view, in contrast, maintains that new information undercuts the support conferred on a belief by its base by implying that the way the thinker formed her belief might not qualify the belief as knowledge.

7. Implications for Debunking Moral Realism

The discussion thus far implies that debunkers must switch focus in their attack on moral realism. Rather than focusing on accuracy of moral beliefs, they must focus on moral knowledge. Debunking arguments are an instance of genealogical worries, and virtually all discussions of the "unsettling feeling" that sometimes arises when we discover the mechanisms that produced our beliefs diagnose that feeling as a case of what might be called alethic anxiety, a worry about the truth of one's beliefs. This is evident in, for example, talk about moral beliefs being "disconnected" from the truth, or "unlikely to be true" (Joyce 2016).

However, we should now be in a position to see that the focus on the orthodox conception of undermining is misguided in discussions of debunking arguments. Such alethic anxiety (taking a cue from Amia Srinivasan, who talks about genealogical anxiety) is unwarranted when we consider the fundamental moral beliefs: they are in a sense bound to be true. However, neither does, nor should alethic anxiety exhaust the epistemic phenomena that we care about, as indicated by proponents of the achievement thesis, and recent epistemological concerns about non-alethic concepts such as understanding. If alethic anxiety is the sole epistemic malaise that we ought to have, debunking moral realist beliefs would be inefficacious.

Debunkers and anti-debunkers alike should therefore ask how genealogical explanations in general, and evolutionary explanations of morality in particular, show that our presumed cognitive success in morality is not sufficiently creditable to our cognitive abilities. Answering this question will, in turn, require a nuanced engagement with the nature of a cognitive ability, as well as

the "creditable" relation. Two fascinating questions arise in its wake. To begin with, depending on the answer, how can evolutionary explanations inform us about a lack of knowledge while still undermining our moral beliefs? That is, how can we accept the anti-debunkers's reasoning that our moral beliefs are safe and sensitive and yet interpret this as a reason to doubt our cognitive capacities, rather than seeing them corroborated? As suggested above, answering these questions will ultimately require an answer to the question of when we can attribute a cognitive ability, and the output of such an ability, to us. More generally, given a link between realism about moral norms and realism about epistemic norms, can debunkers maintain the achievement thesis, and can anti-debunkers coherently deny it? By developing answers to these questions, debunkers can evade the obstacle posed by modal security and the overly narrow underlying focus on the accuracy of moral beliefs. For now, they must can rest content with the removal of modal security as an obstacle to successful undermining of moral realism and the partial defence of the achievement conception of defeat.

8. Conclusion

I have argued that if Modal Security is true, then evolutionary debunking arguments against moral realism fail; they do not undermine moral beliefs. However, since knowledge is virtuous achievement, modal security is false. Consequently, debunkers should be virtue epistemologists; they thereby remove a considerable obstacle for successful debunking, and moral realists still face their most arduous test.

I have also shown that debunkers thereby commit themselves to the achievement view of undermining defeat. The achievement view of undermining defeat has implications beyond the debate about debunking argument in metaethics as it helps to explain how beliefs in other a priori domains, such as mathematics or logic, can be undermined. To conclude, though I have not shown that evolution debunks moral beliefs, the removal of Modal Security shows that there is hope for the 'survival of defeat.'

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NOTES

1. Evolutionary debunking arguments might immediately threaten moral justification (see Sinclair 2018), but thereby ultimately threaten moral knowledge. For simplicity, I will from now on write "debunking" instead of "evolutionary debunking."

2. That is, those realists who endorse the possibility (if not actuality) of moral knowledge. I thus exclude realist sceptics from counting as realists in the context of this paper. Note also that realist commitment may be inessential to the target of debunking arguments, though I will focus on the narrower case in this paper.

3. The most prominent alternative to interpreting debunking arguments as depending on modal security is to interpret them as raising issues related to the epistemic significance of (peer) disagreement, see Bogardus (2016) and Mogensen (2017). However, it is doubtful that disagreement can explain the epistemic significance of debunking, as I argue in Klenk (2020b; 2018a).

4. In what follows, I will write as if justification is binary. However, this is only to simplify expression and everything I write is compatible with a view of degrees of justification.

5. Clarke-Doane, and other proponents of modal security, sometimes formulate modal security in relation to classes or types of beliefs rather than single beliefs, as I do here (e.g., Clarke-Doane 2015, p. 97). However, the difference seems insignificant in the current context. Modal security is intended as a general condition on undermining, not as a general condition on undermining of classes of beliefs, and thus it should apply to single beliefs, too.

6. The point about the scope of the modal security argument against debunking is especially important when considering debunking arguments like that of Street (2006), whose argument can be construed as, roughly, leading to the claim that realists ought to revoke their metaethical stance once they become aware that none of their moral beliefs would be justified in light of evolutionary evidence. If debunkers following Street would allow that some moral beliefs would remain justified, then realists could take these as starting points to find justification for additional moral beliefs and thereby rebut Street's argument. So, proponents of modal security target what May (2018) and Sauer (2018) have called "global" debunking arguments.

7. Establishing whether a given belief is safe is difficult because of the vagueness of the "nearness" criterion; I return this point in more detail in section 5.1.

8. Note that the achievement view that I introduce in section 5 contains non-modal elements of knowledge which enable it to explain the undermining defeat of beliefs that are modally stable (as I show in more detail below).

9. Recently, and relatedly, Korman and Locke (forthcoming) have made a case for the epistemic importance of explanatory connections by arguing against the general anti-debunking strategy pursued by proponents of modal security by advocating for a proper understanding of what they call "e-connections" between moral beliefs and moral truths. However, they fail to flesh out the details of such e-connections.

10. An anonymous reviewer helpfully suggested that debunkers may want to escape modal security by distinguishing between different kinds of possibility. Modal security may be trivially satisfied when the possibility in question is metaphysical, but not when the possibility in question is epistemic or conceptual. However, there are two replies that block this escape route. First, a debunking argument based on epistemic or conceptual possibility plausibly overgeneralises in problematic ways (see Clarke-Doane 2020). Second, several anti-debunkers defend the epistemic necessity of some basic moral facts (see Cuneo and Shafer-Landau 2014). The epistemic necessity of some moral issues may plausibly be regarded as part of the realist assumptions that debunkers want to take aboard for the sake of argument, as I argue in Klenk (2018a). Of course, it is also reasonable to ask whether moral judgments are indeed epistemically necessary (see Evers and Streumer 2016). However, the demanding construal of the debunking challenge seems worth preserving, because it would offer considerable dialectical leverage, should it succeed), as I discuss in Klenk (2017b; 2017a). Following up the debate about the conceptual necessity of moral facts would be an altogether different project that may work well on the assumption that modal security is true.

11. The apparent inability of modal security to make sense of undermining defeat in domains where propositions are true (if true) as a matter of metaphysical necessity already suggests that there is a problem with the principle, as some have already pointed out. However, the interesting problem is to show where modal security goes wrong (see note 27 for details).

12. To be precise, the inverse of the statement endorsed by Baras and Clarke-Doane is the converse of the translation scheme defended here.

13. As I argue in Klenk (2019), merely (subjectively) taking some information to be undermining cannot suffice for a belief to be undermined. Hence, 'correctly' indicates that false information, or an unreasonable belief, does not undermine.

14. Taking some belief to be knowledge is plausibly understood as a meta- or higher-order belief. New information E can bear on one's justification for that belief, and of course it is possible to attain reasons both for and against the higher order belief that some belief that p is knowledge. What counts, then, are all-things-considered reasons for taking some belief that p to be knowledge. If that belief turns out unjustified, the target (or first-order) belief is defeated.

15. The ensuing discussion would still show that modal security fails to incorporate all relevant conditions for knowledge, and thus fail as an account of undermining.

16. In keeping the common ground with anti-debunkers that there is a tight connection, or translation scheme, between knowledge and justification. Departing from that common ground may open up routes to showing that conditions other than conditions for knowledge (e.g., conditions for understanding) may play a relevant role for undermining. Since my concern is with modal security, I will not pursue that route here.

17. Thanks to an anonymous referee for suggesting this clarification.

18. It should be noted that the achievement view might make things easier for debunkers in at least two ways. First, there are cases, such as the one discussed here, where human moral beliefs satisfy (modal) conditions for knowledge, but since knowledge is understood as requiring epistemic achievement, too, the door is open for undermining defeaters based on a lack of knowledge, as described in this essay. Another way in which the achievement thesis might make things easier for debunkers is if modal conditions for knowledge depend on a kind of epistemic achievement; (Pritchard 2018; Hirvelä 2019), which would not directly question modal security.

19. Recently, some have defended the importance of understanding in moral epistemology, either as an epistemic concern in addition to moral knowledge (Hills 2009) or as a component of moral knowledge (Riaz 2015; Sliwa 2017). The general direction of this debate, shifting away from an overly exclusive concern with reliably justified true belief as components for knowledge, provides further credibility to the general insight of the achievement thesis, though the link has rarely been explicitly been defended thus far.

20. Schafer assumes that sensitivity is not required for knowledge. I will loosen this assumption in the next section and show that the argument holds even if sensitivity is required for knowledge.

21. To forestall a possible objection, note that the little prince's beliefs are plausibly justified on both externalist and internalist notions of justification. Plausible externalist notions of justification depend on modal criteria like safety and sensitivity. In both cases, the little prince's beliefs will indeed be justified. On internalist notions, the details of the case can plausibly be fleshed out so as to ensure that the prince's beliefs are justified, too. For example, consider an evidentialist notion of justification. The prince's method may have never failed him, we can assume, and thus all information available to the prince points toward the reliability of his beliefs (and method). Hence, his beliefs are justified, too; cf. (Feldman and Conee 1985, p. 15).

22. Calling the princess's beliefs "accidental" may seem odd, given that they are both epistemically safe and sensitive. However, proponents of the achievement thesis suggest that there is a relevant difference between knowers and those who have 'merely' modally stable beliefs, that a (lack of) accidentality accounts for the difference, and that accidentality be interpreted in terms of the fact that the princess's beliefs are not a product of her cognitive abilities (e.g., Yamada 2011).

23. The worry that the achievement thesis in some sense 'overintellectualizes' knowledge is a common objection to the achievement thesis. However, though I cannot offer a full defence of this claim here, it must be clear that proponents of the achievement thesis have developed the resources to alleviate for this worry (e.g., Greco 2009; 2012; Pritchard 2012).

24. Recall from section 2 that the focus is on fundamental moral beliefs, and those are considered true in all possible worlds, both by debunkers and their foes.

25. The relevant sense of 'because' at work here is both etiological and at least partly normative: most debunkers and anti-debunkers agree that evolutionary forces influenced our moral beliefs indirectly, by influencing our psychological mechanisms and belief forming processes as well as our fundamental moral intuitions that make us appreciate some things as supported by reasons.

26. It is a further question whether the particular genealogy of our moral beliefs implies that our moral beliefs are not true because of our cognitive ability. As I suggest in in section 7, that is a larger and complicated question raised in the wake of the achievement conception of undermining defeat. Amongst other things, it depends on the conditions for claiming cognitive ability, as I discuss in Klenk (forthcoming).

27. It is not necessary for my argument to establish that debunkers are committed, in a strict logical sense, to the achievement conception of undercutting defeat. There might be other ways of challenging the principle. However, available alternatives to modal security themselves rely on modal conditions to explain undermining, and thus they offer no recourse in the cases discussed above, (e.g., Setiya 2012; Yamada 2011). The achievement view of undercutting defeat is preferable for anti-debunkers because explanatory accounts, along the lines of Setiya and Yamada, rely on modal conditions, these accounts cannot explain the cases discussed in section 5—and thus these accounts could not explain the undermining of fundamental moral beliefs. An explicit attack on modal security that does without recourse to the achievement thesis, due to (Woods 2018; 2019), does not locate reasons for rejecting modal security in a broader conception of knowledge, but in an even broader critique of philosophical methodology. My argument against modal security arguably fares better in explaining where modal security goes wrong in epistemic terms, and it provides debunkers with an established theoretical position from which they can advance their debunking argument. Other arguments that attacks modal security in terms of arguably problematic consequences (e.g., Jonas 2017), altogether fail to address where modal security goes wrong.

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