Moral Encroachment
SARAH MOSS
MORAL ENCRYPTION

SARAH MOSS
UNIVERSITY OF MICHIGAN

MONDAY, 5 MARCH 2018
17.30 - 19.15

**LOCATION CHANGE**
CIEE GLOBAL INSTITUTE
NOTTING HILL ROOM
46 - 47 RUSSELL SQUARE
WC1B 4JP

This event is catered, free of charge & open to the general public

CONTACT
mail@aristoteliansociety.org.uk
www.aristoteliansociety.org.uk

© 2018 THE ARISTOTELIAN SOCIETY
Sarah Moss is an Associate Professor of Philosophy at the University of Michigan. She works primarily in epistemology and the philosophy of language, and often on questions at the intersection of these subfields. She is the author of *Probabilistic Knowledge* (forthcoming with Oxford University Press), in which she defends a unified probabilistic theory of the contents of belief, assertion, and knowledge. For instance, she argues in her book that credences can constitute knowledge, in just the same way that full beliefs constitute knowledge. Her current work concerns the consequences of her theory of probabilistic knowledge for how we think about racial profiling and legal standards of proof.

**EDITORIAL NOTE**

The following paper is a draft version that can only be cited or quoted with the author’s permission. The final paper will be published in *Proceedings of the Aristotelian Society, Issue No. 2, Volume CXVIII* (2018). Please visit the Society’s website for subscription information: aristoteliansociety.org.uk.
Moral encroachment

Sarah Moss
ssmoss@umich.edu

This paper develops a precise understanding of the thesis of moral encroachment:

The epistemic status of an opinion can depend on its moral features.

There are four notions in this thesis that deserve close examination: epistemic status, opinion, dependence, and moral features. The first four sections of this paper examine each of these notions in turn. Along the way, I raise some objections to existing accounts of moral encroachment. For instance, many theories fail to give sufficient attention to moral encroachment on credences. Also, many theories focus on moral features that do not have the correct structure to support standard analogies between pragmatic and moral encroachment. The fifth and final section of the paper addresses several objections and frequently asked questions.

Throughout the paper, I focus on racial profiling as a case study of moral encroachment. For several vivid examples of racial profiling, consider the following excerpt from the poem “BANG!” by Daniel Beaty:

Yes, Officer. Is there a problem?
Yes, this is my car…
BANG! You don’t know me.
Man, I live on this block, third house on the right…

So, when my Beamer’s in the shop and a cabby passes me by on the street…
Hey man, I’m already late! What, you think I won’t tip? Here’s one…
BANG! You don’t know me.

1. Thanks to audiences at Rutgers University, Simon Fraser University, the 2017 Ranch Metaphysics Workshop, and the 2018 UBC Pragmatic and Moral Encroachment Workshop for feedback on the ideas in this paper. Thanks to Rima Basu, Andrew del Rio, Sophie Horowitz, and Rebecca Kukla for helpful discussion, and thanks especially to Eric Swanson for comments on early drafts.
In this poem, Beaty interacts with four subjects: a police officer, a cab driver, a pedestrian, and a store clerk. All four subjects form opinions about Beaty, where opinions are defined to include all doxastic states studied by either traditional or formal epistemologists—full beliefs, for instance, as well as credences and other probabilistic beliefs. All four subjects engage in racial profiling, where my use of this term in this paper is restricted to a doxastic practice—namely, forming opinions about a person on the basis of statistics about members of their racial group. As many advocates of moral encroachment have pointed out, the moral encroachment thesis can help us account for one respect in which opinions formed by racial profiling are problematic.3

1 Epistemic status

Let me be clear about the scope of my discussion. I discuss one problem with racial profiling. It almost goes without saying that there are likely many others. For instance, some argue that it is morally wrong to form opinions about individuals by profiling them. In his discussion of stereotyping, Blum 2004 argues that “respect for other persons, an appreciation of others’ humanity and their full individuality is inconsistent with certain kinds of beliefs about them” (262). Basu 2017 agrees that subjects who form beliefs by racial profiling can “wrong others in virtue of what they believe about them” (1). Forming opinions by racial profiling may also be morally problematic in virtue of having harmful consequences—in virtue of enabling wrongful discrimination, for instance, or in virtue of sustaining harmful social structures.

These moral problems with profiling are important, but they are not the primary subject of this paper. In the poem quoted above, Beaty draws our attention to a problem with profiling that is not moral, but epistemic in character. “You don’t know me.” This refrain highlights another problem with profiling. Opinions formed by profiling can be epistemically deficient in virtue of failing to constitute knowledge. More generally, opinions formed by profiling could be deficient in virtue of lacking any number

3. For recent applications of moral encroachment to racial profiling, see Basu 2018, Bolinger 2018, and Schroeder 2018. For critical discussion of these accounts, see Gardiner 2018.
of positive epistemic features, such as being justified, counting as evidence, or being warranted enough to be a reason for belief.\(^4\)

According to advocates of moral encroachment, opinions formed by profiling could lack positive epistemic features in virtue of having certain moral features. More generally, these advocates accept that there is at least one epistemic feature \(F\) such that whether an opinion has \(F\) can depend on the moral features of that opinion. Let us define the *epistemic status* of an opinion to be the set of its epistemic features. Then the moral encroachment thesis is equivalent with the claim that the epistemic status of an opinion can depend on its moral features.

In order to motivate our study of moral encroachment, it is useful to consider an example of how the moral features of an opinion could in principle affect its epistemic status. Suppose that a pedestrian sees a pit bull in front of her, and she crosses the street in order to avoid coming into close proximity with it. She forms an opinion about the pit bull on the basis of her knowledge of general statistics about pit bulls, including their disproportionate representation among dogs that harm pedestrians. If someone challenges her opinion by saying, “You don’t know that pit bull,” the pedestrian could truly respond by saying:

\(1\) I know it is more likely to bite me than any dog across the street.

By contrast, consider an example of racial profiling. A pedestrian sees Beaty in front of her, and she crosses the street in order to avoid coming into close proximity with him. She forms an opinion about Beaty on the basis of her knowledge of general statistics about race and crimes of robbery. Beaty challenges her opinion by saying, “You don’t know me.” By contrast with (1), the following response sounds false:

\(2\) I know you are more likely to steal my purse than anyone across the street.

The contrast between (1) and (2) reflects an epistemic difference. The pedestrian uses statistical evidence to form an opinion about a pit bull and also to form an opinion about a person. The former opinion is knowledge, and the latter is not. The moral encroachment thesis accounts for just this sort of contrast, allowing that the moral status of a profiled object can make a difference to the epistemic features of opinions that are formed by profiling it.

Of course, the contrast between profiling pit bulls and people is far from uncontroversial. Indeed, it has been challenged from both sides. **Schafer 2003** defends limited uses of profiling directed at people, and he begins his defense with the following rhetorical question: “If the principal argument against the opponents of breed-specific

\(^4\) See §4 of *Kim 2017* for a more detailed taxonomy of epistemic features cited in encroachment theses.
restrictions on dogs is that the restrictions are little different from widely accepted bases for restriction, then is not the same true for people as well?” Conversely, many dog owners have campaigned against breed-specific legislation, arguing that judging a dog by its breed is “canine racism.” In this paper, I am not taking any stand on whether it is permissible to profile pit bulls. The upshot of my discussion is simply that moral encroachment offers an effective brake on slippery slope arguments in either direction.

A cautionary note is in order here. It can be tempting to suppose that opinions formed by racial profiling exhibit one distinctive epistemic problem, so that moral encroachment provides us with a comprehensive diagnosis of what is epistemically wrong with profiling. But the truth is much more complicated. Just as there are many potential moral problems with opinions formed by racial profiling, there are many potential epistemic problems as well. BLUM 2004 argues that beliefs in statistical claims about social groups can be problematic in virtue of tacitly relying on false or misleading stereotypes (258), and FRICER 2007 adds that opinions based on stereotypes are often epistemically culpable in virtue of being resistant to counter-evidence (35). HASLANGER 2011 argues that some statistical claims about groups appear to license normative conclusions about natural or essential properties of individuals (200). MUNTON 2018 argues that beliefs in statistical generalizations are problematic in cases where “errors in the circumscription of the domain constitute an epistemic flaw and can lead to downstream errors in reasoning” (3). For instance, suppose that almost all Chinese Elms in the United States are cultivated as bonsai trees, so that 98% of these Chinese Elms are under 18 inches in height. Munton points out that a true belief in this statistical claim could prompt the following error in reasoning:

Kohava phones up Tristan, concerned about a small tree sprout she’s found in a corner of her garden. “I think it’s a Chinese Elm,” she tells him. “I hope it isn’t going to grow and block the light.” “I wouldn’t worry!” Tristan tells her. “Chinese Elms rarely grow beyond 18 inches in the States.”

According to Munton, true beliefs in statistics about crime rates often prompt just the same sort of epistemic errors.

All of these problems deserve attention. But there is an important difference between each of the problems just mentioned and the epistemic problems that result from moral encroachment—namely, the former do not essentially involve any moral facts about profiling. For instance, it is epistemically problematic to have beliefs that are resistant to counter-evidence, whether or not those beliefs have any moral import.

It is epistemically impermissible to make invalid inferences from statistical claims to normative conclusions. And as the bonsai example illustrates, there is nothing essentially moral about the tendency of a statistical belief to prompt errors in the circumscription of its domain. These mistakes are instances of familiar epistemic failings, and subjects making these mistakes can be diagnosed as irrational using familiar epistemic resources. According to many objective Bayesians, for instance, you should form your opinions by starting with rationally permissible priors, you should update these priors in ways that are responsive to counter-evidence, and you should avoid making invalid inferences from statistical claims to unjustified conclusions.

Advocates of racial profiling assume that it is possible to engage in profiling without making any of these familiar epistemic mistakes, and their support of racial profiling is often explicitly restricted to instances of profiling that avoid them. Mogensen 2018 observes that “[i]t is common in the philosophical literature to try to abstract away from... wrong-making features” such as the “questionable evidential import” of statistics about crime rates among members of various racial groups (3). For instance, some advocates of profiling restrict their discussion to unalloyed racial profiling in the sense of Lippert-Rasmussen 2006. By definition, unalloyed profiling is based on accurate statistical regularities, and it is free from the prejudices that often influence our actual beliefs in statistics about crime and race. Lippert-Rasmussen 2011 explains that “it is of little interest to discuss statistical discrimination based on flawed generalizations” (55).

An opponent of profiling might simply reject the possibility or relevance of unalloyed racial profiling, and exit the debate here. But moral encroachment can play an important dialectical role in strengthening our case against profiling. If the moral encroachment thesis is correct, then we can grant the possibility of unalloyed profiling for sake of argument, and yet still identify an epistemic problem with this sort of profiling. For instance, suppose for sake of argument that the pedestrian who profiles Beaty starts with rationally permissible priors, responds adequately to counter-evidence, and carefully circumscribes the domain of her statistical beliefs. If the moral encroachment thesis is correct, there could still be some further epistemic problem with her opinions about Beaty, some problem that would not arise for any similarly careful profiling of pit bulls. According to moral encroachment, moral facts can play an essential role in grounding epistemic differences between opinions, such as our opinions about pit bulls and people.

Having defined and motivated our study of the epistemic status of opinions af-

---

6. This exit strategy could be supported by certain eliminativist claims about race, or by the claim that races are social kinds and hence necessarily fail to license certain projections from observed statistics to unobserved cases. For further discussion, see Hildebrand & Emerick 2018.
fected by moral encroachment, we are ready to start our critical discussion of other central notions in the moral encroachment thesis. But first I should briefly mention several complicating factors that I have set aside for the purposes of this paper. I restrict the focus of my discussion to moral encroachment on opinions, setting aside encroachment on other states.\(^7\) I simplify my discussion by presupposing that the features of an opinion can be divided into moral and non-moral features. In addition, I model my definition of moral encroachment on standard statements of pragmatic encroachment, such as the thesis that “whether an agent knows that \(p\) can depend on pragmatic factors,” or that “whether a proposition has [an epistemic feature] for a subject depends not only on the subject’s epistemic position with respect to the proposition, but also on features of the subject’s non-epistemic, practical environment.”\(^8\) In Moss 2018, I argue that these dependence claims are inadequate formulations of pragmatic encroachment theses. The same goes for our working definition of moral encroachment in this paper. But since this concern does not make a difference to my arguments, I set it aside for present purposes.

In addition to these assumptions about encroachment, I also adopt several simplifying assumptions about profiling. I focus on subjects using profiling to form opinions, though profiling is also used to maintain, support, and undermine opinions. I focus on racial profiling, though people are profiled on the basis of their membership in many social groups, and often on the basis of their membership in multiple groups at once. Finally, I do not spell out the conditions under which an opinion about a person is formed on the basis of statistics about members of their racial group. Actual cases of racial profiling often involve opinions based on some combination of statistical and non-statistical evidence, and moral encroachment challenges such opinions insofar as it challenges the epistemic credentials of the former sort of reasoning.

2 Opinions

At the start of this paper, I defined opinions to include both full beliefs and probabilistic beliefs. These probabilistic beliefs include precise credences, as well as subjective judgments of comparative probability, such as the belief that it is at least .3 likely that Jones is shoplifting, or the belief that Jones is more likely than Smith to be shoplifting. Although I refer to these subjective probability judgments as beliefs, it is important to understand that they are not full beliefs in propositions about objective chances.

\(^7\) Bari 2013 argues that practical considerations can bear on whether a disposition is an epistemic excellence—for instance, whether the disposition to be open-minded is an epistemic virtue.

\(^8\) These formulations of pragmatic encroachment are taken from Ross & Schroeder 2014, p.259 and Fantl & McGrath 2012, p.27.
or other probability facts. As some might put it, they are attitudes of comparative confidence. In the vocabulary of Moss 2017, they are *thoroughly probabilistic beliefs*. For instance, to believe that it is at least .3 likely that Jones is shoplifting is to have at least .3 credence that Jones is shoplifting, and to believe that Jones is more likely than Smith to be shoplifting is to assign higher credence to the claim that Jones is shoplifting than the claim that Smith is shoplifting.

Having distinguished full beliefs from probabilistic beliefs, we can address an important question: which opinions are such that their epistemic status can depend on their moral features? According to many existing accounts of moral encroachment, the answer is that moral encroachment is limited to *full beliefs*. Fans of moral encroachment often accept an evidentialist theory of credences, according to which the epistemic status of probabilistic beliefs does not depend on moral facts. As Pace 2011 explains, “[t]he moral encroachment view of reasoning accepts evidentialism...The advocate of moral-pragmatic reasoning can accept degree-of-confidence evidentialism and match his confidence to the evidence” (262). Bolinger 2018 argues that if demographic statistics justify your having high credence that an individual has a given feature, “it seems morally and epistemically permissible to increase your credence in proportion with your statistical evidence” (12). By contrast, moral facts are commonly recognized to affect the epistemic status of full beliefs. In particular, according to many accounts of moral encroachment, moral facts affect the strength of the evidence required for justified full belief:

[As the moral considerations against belief increase, so does the evidence that is required in order to epistemically justify that belief. (Basu & Schroeder 2018, 20)]

Several theorists have recently argued that [if] a belief might wrong a person or group, the threshold for justified belief is higher than for a belief that is morally neutral. More evidence is required to justify the belief. (Gardiner 2018, 8)

It is not surprising that advocates of moral encroachment endorse this distinction between full beliefs and probabilistic beliefs. For starters, many of these authors intend for their accounts to be analogs of existing accounts of pragmatic encroachment, and nearly all theories of pragmatic encroachment are also limited to full beliefs. As Ross & Schroeder 2014 observe, “[i]t is widely held that there is no pragmatic encroachment on justified degrees of belief, or levels of confidence, as the latter, it is maintained, should be strictly apportioned to the evidence” (260). Furthermore, some evidentialist claims about credences are extremely compelling. It is difficult to deny that a statistical claim about a racial group could raise or lower the evidential

---

9. Gao 2018 is an exception to the rule. Gao endorses a stronger moral encroachment thesis than I defend here, arguing that pragmatic facts can affect which credences are justified by a given body of evidence.
probability that a person in that group has a certain feature.\textsuperscript{10} The alternative is an extremely strong claim—namely, that it is a condition on rationally permissible credal states that according to any such state, all statistical claims about a racial group are independent of propositions about its individual members. And if statistical claims about racial groups can raise or lower the evidential probability that an individual person has a certain feature, then it is natural to conclude that a subject could be justified in adjusting her credences about an individual on the basis of such statistics.

However, further reflection on examples suggests that intuitively speaking, moral encroachment is not restricted to full beliefs. For instance, recall the four interactions that Beaty describes in his poem. All involve paradigmatic examples of profiling, resulting in opinions that should be in the domain of our account of moral encroachment. But most of these examples involve subjects forming and acting on probabilistic beliefs. The police officer stops Beaty for questioning because the officer has some significant credence that Beaty is engaged in criminal activity, not because the officer fully believes this proposition. The pedestrian “clenches her purse and crosses the street” because she has a higher credence that Beaty is going to steal her purse than that anyone across the street will steal it. The store clerk does not believe that Beaty is going to shoplift; she merely has some significant credence in this claim.\textsuperscript{11} These examples of profiling present a challenge for existing accounts of moral encroachment. There is intuitively some epistemic problem that is common to all of the instances of profiling that Beaty discusses. Just as it is epistemically irresponsible to form a full belief about an individual person on the basis of statistics about his or her racial group, it is irresponsible to form credences about an individual on the basis of those statistics. But existing accounts of moral encroachment cannot help us identify any epistemic problem that is common among these cases.

Having posed this problem for existing accounts of moral encroachment, I want to propose an account that solves it. Let us accept the following evidentialist thesis: in a familiar sense, your credences are justified if and only if they match your evidential probabilities. Justified credences can still fall short, epistemically speaking—namely, by failing to constitute knowledge. Hence our evidentialist thesis is consistent with moral encroachment on credences; moral features of credences can affect whether they are knowledge.

\textsuperscript{10} This notion of evidential probability should be roughly understood as the probability that results from feeding your propositional evidence to an initial measurement of “the intrinsic plausibility of hypotheses prior to investigation” (Williamson 2000, 211).

\textsuperscript{11} These cases are structurally similar to examples cited by Schiffer 2007 and Cresto 2010 in support of the claim that rational agents can act on probabilistic beliefs. In a discussion of these examples, Hawthorne & Stanley 2008 object that such agents are actually acting on “beliefs about chances” (581). For responses to this objection, see §9.3 of Moss 2017, as well as the detailed discussion of the role of credences in reasoning in Staffel 2013.
At first, it might sound like a category mistake to say that credences can constitute knowledge. After all, credences are not full or outright beliefs; rather, they correspond to levels of confidence in propositions. Although it is widely acknowledged that credences and full beliefs have many epistemic properties in common—they are both subject to norms of consistency; they can be justified or unjustified; they play an important role in practical reasoning—it is standardly presupposed that credences are not the sort of states that could constitute knowledge. According to the theory of probabilistic knowledge that I defend in Moss 2017, this is a mistake. Credences and other probabilistic beliefs can constitute knowledge, in just the same sense as full beliefs can constitute knowledge.

For example, suppose you undergo several cancer screening tests, and some medical experts study your results and come to believe that it is .6 likely that you have cancer. Their credences could constitute probabilistic knowledge. By contrast, the credences of your paranoid friends do not constitute knowledge. If you flip a fair coin and form .5 credence that it landed heads, your credence could constitute probabilistic knowledge. If you examine a piece of cloth by candlelight, you might come to know that it is .4 likely to be blue, without coming to know any proposition about its color. To give an example from van Fraassen 1981, suppose that a soldier calls her officer on the radio, and the officer says, “I don’t know whether or not you have strayed into Red Army territory. But if you have, the probability is 3/4 that you are in their Headquarters Company Area.” On the basis of this testimony, the soldier could come to have .75 conditional credence that she is in the Headquarters Company Area, given that she is in Red Army territory. If the officer is reliable, the soldier’s probabilistic belief could constitute knowledge. Inference, perception, testimony, and so on—you can get probabilistic knowledge in all the same ways you can get propositional knowledge.

Furthermore, there are cases in which justified probabilistic beliefs fail to be epistemically good, and they fail in just the same way that justified full beliefs fail to constitute knowledge. For example, if you are driving through fake barn country and you have high credence that a certain distant figure is a barn, your high credence may be justified and yet fail to constitute knowledge. Here is another example:

*Nerves:* Alice enters a psychology study with her friend Bert. As part of the study, some participants are injected with a heavy dose of adrenaline, while the others are injected with a saline solution. All participants are then sent to meet their friends. Alice is not told anything about the nature of the injection or the experiment. As it happens, Alice receives the adrenaline injection. As she meets Bert, Alice

---

12. The example is from Jeffrey 1968. For further discussion of probabilistic perceptual knowledge, see §§5.3–4 of Moss 2017.
reflects on her fluttering nerves and comes to have high credence that she finds Bert attractive. And indeed, she probably does find Bert attractive.  

Alice’s high credence that she finds Bert attractive is justified on the basis of her inference to the best explanation of her fluttering nerves. In addition, since Alice probably finds Bert attractive, her credences are the correct ones to have. But intuitively, her high credence that she finds Bert attractive is still deficient in some respect. As a symptom of this deficiency, notice that the following is intuitively false:

(3) Alice knows that she probably finds Bert attractive.

After all, we may stipulate that Alice could easily have received an injection that would have left her without any fluttering nerves, and hence without the belief that she probably finds Bert attractive. Like the full beliefs of subjects in Gettier 1963, Alice’s justified high credence is the result of epistemic luck. As a result, her probabilistic belief lacks a certain positive epistemic feature—in short, it is not knowledge.

Just like full beliefs, then, justified probabilistic beliefs are subject to moral encroachment. Suppose for sake of argument that the store clerk is epistemically justified in believing that Beaty is more likely to shoplift than another customer in the store. In other words, she is justified in having higher credence that Beaty is going to shoplift. This probabilistic belief is still epistemically deficient. Following Beaty, we can criticize the store clerk by pointing out that she lacks knowledge. Even if the clerk is justified in believing that Beaty is more likely to shoplift, she does not know that he is more likely to shoplift merely on the basis of his race. After all, her probabilistic belief about Beaty is inconsistent with certain other probabilistic contents that she cannot rule out, such as the content that Beaty “can buy ten of these leather coats” and is less likely to shoplift than other customers in the store. 14 Similarly, suppose for sake of argument that the police officer who stops Beaty is justified in having a certain credence that Beaty is engaged in criminal activity, or that the pedestrian is justified in believing that Beaty is more likely to steal her purse than someone across the street. These probabilistic beliefs do not constitute knowledge. Credences based on merely statistical evidence can be responsible in one respect and yet deficient in another, namely by matching your evidential probabilities while failing to be knowledge.

At this point, one might wonder—does it ever really matter whether your credences are knowledge, as long as they are justified? There are certainly some respects in which it does not matter. The epistemic status of your credences does not affect the expected utility of actions, for instance, or the verdicts of standard decision theory.

---

13. This example is adapted from Moss 2013, and my present discussion of it borrows from Moss 2017.
14. For a definition of consistency that applies to probabilistic contents, see p.10 of Moss 2017. For discussion of the notion of ruling out probabilistic alternatives, see p.143–4 of Moss 2017.
But it can nevertheless matter whether your justified credences fall short of knowledge, for just the same reasons that it matters whether justified full beliefs fall short of knowledge. For instance, some argue that the difference between justified belief and knowledge matters for assertion. Even if you are justified in believing that your ticket lost the lottery, it is inappropriate to assert that it lost, given that you don’t know that it lost. More precisely, (4) is unassertable because (5) is false:\(^\text{15}\)

(4) My ticket lost the lottery.
(5) I know that my ticket lost the lottery.

If this explanation is correct, then the same goes for the assertion of probabilistic contents. For example, it sounds bad for the pedestrian to assert:

(6) You are more likely to steal my purse than anyone across the street.

And the unassertability of (6) can be explained by an observation made in §1 of this paper, namely that the following is false as uttered by the pedestrian:

(2) I know you are more likely to steal my purse than anyone across the street.

Even if the pedestrian is justified in believing that Beaty is more likely to steal her purse than someone across the street, she cannot rule out the relevant possibility that her statistical evidence does not reflect the likelihood that Beaty will steal her purse. Hence her probabilistic belief fails to be knowledge, which explains why it is inappropriate for her to assert it.

The difference between justified belief and knowledge also matters in legal contexts. As I argue at length in Moss 2017, legal proof requires knowledge.\(^\text{16}\) This explains a significant fact about legal verdicts—namely, that they generally cannot be sustained by merely statistical evidence. For instance, a verdict of liability in a civil case requires only proof of liability by a preponderance of the evidence. But this proof generally cannot be provided by merely statistical evidence, even if that evidence justifies having greater than .5 credence that a defendant is liable. Similar constraints govern the use of statistical evidence in legal actions such as sentencing and policing.

Suppose that the police officer stopping Beaty has at least .3 credence that Beaty is engaged in criminal activity, and suppose that the officer formed this belief on the basis of merely statistical evidence. Even if we were to suppose for sake of argument that his probabilistic belief was justified by his evidence, the officer cannot legally act

\(^{15}\) This explanation for the unassertability of (4) is neutral between first-order and meta-linguistic knowledge norms of assertion. For a more detailed discussion of knowledge norms of assertion and the assertability of lottery propositions, see DeRose 1996, Williamson 1996, and §1.3 of Hawthorne 2004.

\(^{16}\) This account stands in contrast to the proposal by Buchak 2013 that legal proof requires full belief. For arguments in favor of my account, see §10.1–2 of Moss 2017.
on that belief. It is unconstitutional for police to detain an individual merely on the basis of his or her race, absent any specific evidence of criminal activity.  

These constraints on legal action are naturally explained in terms of the distinction between justified belief and knowledge. Although statistical evidence may justify various probabilistic beliefs, it often fails to provide probabilistic knowledge in legal contexts. And according to my account, each legal standard of proof requires knowledge of a probabilistic content. For example, proof by a preponderance of the evidence requires knowing that a fact is at least .5 likely. The clear and convincing evidence standard requires knowledge of a stronger probabilistic content—roughly, that a fact is .75 likely. According to a study of 171 federal judges and United States Supreme Court justices, the reasonable suspicion standard is associated with an average probability threshold around .3. This last standard is relevant for our traffic stop case, as the reasonable suspicion standard governs the temporary detention of a driver of a vehicle. Hence in order to legally detain someone, a police officer must have at least .3 credence that they are engaged in criminal activity, and this probabilistic belief must constitute knowledge. But the police officer detaining Beaty cannot rule out the relevant possibility that Beaty “lives on this block, third house on the right.” Hence his probabilistic belief about Beaty fails to be knowledge, and that explains why it is unconstitutional for him to act on it.

3 Dependence

As defined in §1, the thesis of moral encroachment states there is some epistemic feature $F$ such that whether an opinion has $F$ can depend on its moral features. Taking a cue from the literature on pragmatic encroachment, we can state this thesis more precisely as the negation of a supervenience claim:

There is some epistemic feature $F$ and some pair of opinions $X$ and $Y$ such that $X$ and $Y$ have all the same epistemically relevant non-moral features, yet differ with respect to whether they have $F$.

This thesis is logically equivalent with the claim that there is a pair of opinions that have all the same epistemically relevant non-moral features, yet differ in their epistemic status. We abbreviate this claim by saying that the epistemic status of an opinion

17. See Stark 2016 for decisive arguments that racial profiling by police violates the Equal Protection Clause.
21. For analogous interpretations of pragmatic encroachment as the negation of a supervenience claim, see p.2 of Stanley 2005 and p.594 of Weatherston 2011.
can depend on its moral features.

Having spelled out this more precise interpretation of the moral encroachment thesis, we can distinguish it from nearby claims about the interaction of moral and epistemic concerns. Consider the following rule of consideration introduced in Moss 2017: “in many situations where you are forming beliefs about a person, you morally should keep in mind the possibility that they might be an exception to statistical generalizations” (221). As the store clerk forms probabilistic beliefs about Beaty, for instance, she should keep in mind the possibility that her statistical evidence does not reflect the probability that he will shoplift. The moral rule of consideration is not an epistemic norm. But it does have epistemic consequences. As long as the clerk is abiding by her moral obligations, she will pay attention to certain possibilities that she cannot rule out. As she pays attention to those possibilities, they will be relevant alternatives to her probabilistic beliefs, including the belief that Beaty is more likely to shoplift than other customers in the store. Regardless of whether that probabilistic belief is justified by her evidence, it will fail to constitute knowledge.

By analogy, imagine that you are visiting a zoo with a philosopher friend of yours. The friend has been pleading with you to take certain skeptical hypotheses more seriously. You promise your friend that for the next fifteen minutes, you will pay careful attention to the possibility that the animals in the zebra cage are cleverly disguised mules. In order to keep your promise, you morally should consider this skeptical possibility. As you consider it, you will fail to know that the caged animals are indeed zebras. The rule to keep your promise is a moral norm with epistemic consequences.

In other sections of this paper, I present objections to other authors. In this section, I want to present an objection to myself—namely, to my discussion of moral encroachment in chapter 10 of Moss 2017. In that chapter, I identified the epistemic impact of the moral rule of consideration as an instance of moral encroachment. I stand by the claim that the rule of consideration has an epistemic impact. I also stand by my claim that knowledge is subject to moral encroachment. But I take back the claim that the former is an instance of the latter. The moral rule of consideration does not establish the dependence of epistemic features on moral features of an opinion. Again, consider the analogy with promising. As you walk through the zoo, your belief that the caged animals are zebras is not knowledge. But that is because it is inconsistent with a salient possibility that you cannot rule out. This is an epistemic feature of your belief, rather than a moral one. Similarly, if the store clerk abides by the moral rule of consideration as she forms an opinion by racial profiling, that opinion will not be knowledge, since it will be inconsistent with salient possibilities that she cannot rule
To spell this out more precisely, consider a pair of subjects who are forming beliefs on the basis of statistical evidence. Both subjects abide by the moral rule of consideration. Subject A is forming a belief about a person. She keeps in mind the possibility that the person does not fit her generalization, and her belief fails to be knowledge. Subject B is forming a belief about a pit bull. She does not keep in mind the possibility that the pit bull does not fit her generalization, and her belief constitutes knowledge. The beliefs of A and B differ in their moral features, since only the former is about an individual that morally demands a certain sort of consideration. The beliefs also differ in their epistemic status. But this pair of beliefs does not establish the moral encroachment thesis, since there is a non-moral difference between the beliefs—namely, in whether they are inconsistent with certain salient possibilities.

The epistemic impact of moral features need not be mediated by salience. Just like facts about practical stakes, moral facts can matter even when the subject is ignorant of them. Suppose it is extremely important for Hannah and Sarah to deposit their paychecks by Saturday; it would be a financial disaster for them to be late. Perhaps Hannah and Sarah financially ought to be considering the possibility that a late deposit would have bad consequences. But whether or not they are considering that possibility, it has an epistemic impact: Hannah and Sarah do not know that the bank is open on Saturday.\(^22\) The same sort of epistemic criticism applies to morally culpable subjects. A police officer morally ought to consider the possibility that Beaty is not accurately represented by statistics about members of his racial group. But whether or not he is considering that possibility, it has an epistemic impact. Suppose a racist police officer fails to abide by the moral rule of consideration. His opinions about Beaty still fail to constitute knowledge. The moral encroachment thesis can help explain this fact, whereas the moral rule of consideration cannot. To sum up: even if we accept the rule of consideration, moral encroachment can play an important role in epistemic arguments against profiling—namely, accounting for the epistemic deficiencies of unreflective subjects.

4 Moral features

There is just one question remaining: what moral features of opinions can make a difference to their epistemic status? A standard answer to this question is that moral encroachment should be understood by analogy to pragmatic encroachment, and that the relevant moral features can be understood by analogy to the practical

\(^{22}\) The original bank cases are due to DeRose 1992. For some representative discussions of “ignorant high stakes” cases, see Stanley 2005, Nagel 2008, and Buckwalter & Schaffer 2015.
features of opinions that can make an epistemic difference. These practical features are commonly defined using the notion of practical stakes; at a first pass, the idea is that it is harder for an opinion to have positive epistemic features as the practical stakes of forming that opinion increase. Accordingly, many authors have defined moral encroachment by appealing to a notion of moral stakes:

A natural way of extending thoughts of pragmatic encroachment is to think about how what is morally at stake can affect the relevant epistemic standards. (Enoch 2016, 35)

As the moral stakes increase, the exact same level of evidentiary support can result in different consequences with respect to whether an individual justifiably believes that \( p \) or whether they know that \( p \). (Guerreiro 2018, 19)

Fritz 2017 takes this idea a step further, arguing that there are direct moral analogs of the high-stakes cases that motivate pragmatic encroachment:

Our beliefs are often insufficiently warranted to allow us to rationally take certain high-stakes gambles. But our beliefs are also often insufficiently warranted for us to permissibly act on them when something very morally important hangs in the balance. To the extent that the former phenomenon illustrates pragmatic encroachment on knowledge, the latter phenomenon illustrates moral encroachment on knowledge. (Fritz 2017, 657–8)

For instance, suppose that Hannah and Sarah believe that the bank is open on Saturday. If they acted on their belief and it turned out to be false, then a financial disaster would occur. Fritz points out that there are cases that have just the same structure, but where the relevant disaster is moral in character. For example, suppose a maniacal traffic officer is going to kill five innocent people just in case you have a false belief about whether your car is legally parked. Fritz observes that even if you are radically apathetic about other human lives, so that there is nothing practically at stake for you, you may intuitively fail to know that your car is parked legally, given that such a large moral harm hangs in the balance (650).\(^\text{23}\) The same sort of case can be constructed by simply tweaking the original bank case, so that Hannah and Sarah are not depositing a check on their own behalf, but on behalf of a life-saving charity towards which they are themselves apathetic. The central idea in all these cases is the same: if acting on a belief would lead to a disastrous outcome if the belief turned out to be false, then that belief may fail to constitute knowledge.

The close analogy between pragmatic encroachment and moral encroachment means that the latter can be challenged in all the same ways as the former. For

\(^{23}\) The same point is illustrated by the case of the apathetic shipbuilder on p.257 of Pace 2011.
instance, some authors argue that pragmatic encroachment is inconsistent with plausible stability principles governing rational belief. Some authors argue that theories of pragmatic encroachment entail counterintuitive counterfactual claims about knowledge. Against the theories of encroachment discussed above, some argue that it is difficult to spell out any notion of stakes that can play the desired role in defining pragmatic encroachment. For the purposes of this paper, I am going to set aside these general challenges for encroachment theses. I am interested in a problem that arises specifically for discussions of moral encroachment. The problem is that moral encroachment is often used to account for an epistemic problem with racial profiling, but the moral features of profiling that are discussed in this literature do not have the right structure to sustain such an account.

In particular, as discussed above, moral encroachment occurs in cases where acting on a belief would lead to a disastrous outcome if the belief turned out to be false. But in the moral encroachment literature, most discussions of racial profiling focus on moral harms that occur as a result of profiling, regardless of whether the resulting belief turns out to be true or false. I briefly mentioned some of these moral harms at the start of §1. Using racial profiling to form a belief about a person may harm her in virtue of failing to treat her as an individual or in virtue of failing to treat her with respect. These harmful conditions obtain regardless of whether the belief turns out to be true. Forming opinions by racial profiling may also be harmful in virtue of leading to harmful actions—for instance, actions that express demeaning messages, perpetuate invidious racial distinctions, flout constraints on fair treatment, or contribute to structural oppression. Again, any of these harms could result from an instance of racial profiling, regardless of whether that instance of profiling produces a true belief. All of these harms constitute moral considerations against forming beliefs on the basis of racial profiling. According to some authors, this fact is sufficient to ground moral encroachment:

As the moral considerations against belief increase, so does the evidence that is required in order to epistemically justify that belief. (Basu & Schroeder 2018, 20)

Most advocates of moral encroachment hold that more evidence is required if the belief contributes to, or accords with, the disadvantage of socially disadvantaged groups. (Gardiner 2018, 19)

28. For further discussion, see Hellman 2014, Lever 2005, Mogensen 2018, and Haslanger 2004, respectively.
But moral considerations against forming beliefs are not the right sort of moral features to ground moral encroachment on the epistemic status of those beliefs. Let us say that a belief is *costly* just in case acting on the belief would lead to a significant harm, and say that a belief is *risky* just in case acting on that belief would lead to a significant harm if and only if the belief turned out to be false. According to the notion of moral encroachment spelled out at the start of this section, moral encroachment merely affects the epistemic status of risky beliefs.\(^{29}\) Recall that moral encroachment is to be understood by analogy to pragmatic encroachment. In the classic high-stakes bank case, acting on the belief that the bank is open on Saturday will lead to significant financial harm if and only if that belief turns out to be false. If the bank is open on Saturday, then Hannah and Sarah are not in any danger of missing their deposit, and their belief that the bank is open will not lead to any harm. In other words, classic instances of pragmatic encroachment involve financially risky beliefs, not financially costly beliefs. Analogously, the moral stakes of having a belief are high just in case that belief would lead to a significant moral harm if and only if it turned out to be false. This notion of moral stakes does not match the notions that are often cited in applications of moral encroachment to racial profiling:

> [T]he history of racism at the Cosmos Club... makes relying on race, despite it being the best indicator and the strongest evidence that someone is a staff member (in the context of the Cosmos Club), problematic. That is the moral stake in question that an epistemically responsible agent must be sensitive to. (Basu 2017, 14)

Accounts of moral encroachment face a challenge. If moral encroachment is to be understood by analogy to pragmatic encroachment, then beliefs formed by racial profiling must have certain moral features, over and above their tendency to cause or enable moral harms, or even their ability to constitute intrinsic moral harms.

Could advocates of encroachment answer this challenge by arguing that our traditional accounts of pragmatic encroachment ought to be expanded?\(^{30}\) Could a belief fail to be knowledge simply in virtue of being financially costly? Unfortunately, this idea is not very promising. Consider the following pair of cases:

**Costly Rodents:** A home inspection company has just sent you photographs of the insides of the air ducts of your house. You are trying to figure out whether there are rodents living there. If you come to believe that there are rodents, you will have to hire a costly exterminator and evacuate your house for several days.

**Costless Rodents:** An anonymous blogger has just posted photographs of the insides of the air ducts of another house. You are trying to figure out whether there were

\(^{29}\) Again, I am setting aside some important challenges for this naïve interpretation of stakes in terms of risky belief; see Worstof 2015 and Anderson & Hawthorne 2018 for discussion.

\(^{30}\) I am grateful to Deborah Hellman for encouraging me to address this question.
Suppose that your photographic evidence for rodents is just the same in *Costly Rodents* and *Costless Rodents*. It is intuitively not the case that the higher financial cost of your belief in the former case should make you any more reluctant to believe that there are rodents in the ducts. In fact, insofar as you are more reluctant to believe the more costly proposition, it seems that you are engaged in irrational wishful thinking. Advocates of racial profiling argue that their opponents are endorsing just the same sort of irrationality. Rather than approving of this sort of encroachment, it seems preferable to explore other answers to our challenge.

In my view, the most promising answer to the challenge is to accept that there are special moral harms that arise in cases of false racial profiling. Returning again to the racial profiling that Beaty describes, this answer is responsive to an important feature of his poem—namely, that Beaty does tell his audience that the opinions formed about him are inaccurate. “Man, I live on this block. Third house on the right.” “I can buy ten of these leather coats if I want them.” An account of encroachment that is centered around morally risky belief reflects the fact that the inaccuracy of the racial profiling directed at Beaty is part of its harmful character, significant enough to merit mention.\(^{31}\)

False profiling may be distinctively harmful in multiple respects. For instance, moral harms that are suffered by all victims of profiling may be more harmful to victims of false profiling. In addition, victims of false profiling may suffer distinctive sorts of harm. For instance, consider the following narrative by poet Ross Gay:

> I’ve been afraid walking through the alarm gate at the store that maybe something’s fallen into my pockets, or that I’ve unconsciously stuffed something in them; I’ve felt panic that the light skinned black man who mugged our elderly former neighbors was actually me, and I worried that my parents, with whom I watched the newscast, suspected the same; and nearly every time I’ve been pulled over, I’ve prayed there were no drugs in my car, despite the fact that I don’t use drugs; I don’t even smoke pot. That’s to say the story I have all my life heard about black people—criminal, criminal, criminal—I have started to suspect of myself. (Gay 2013)

In this passage, Gay describes harms that come from confronting stereotypes that do not reflect his character. A false opinion formed by racial profiling can be harmful in this same respect—and perhaps more harmful than a general stereotype, in virtue of being targeted at an individual person.

---

31. Applying our present discussion to probabilistic beliefs requires that there be some sense in which probabilistic contents can be *false*. For detailed discussion of the notions of truth and falsity as they apply to probabilistic contents, see §6.2, §6.5, and §7.5 of Moss 2017.
The above examples of moral harms are illuminating, but they are not dialectically essential. There is a vast literature on looping effects that constitute distinctive harms for victims of false profiling.\(^{32}\) The goal of this section is not to present any catalog of such harms, but simply to argue that it is these harms that provide the basis for an adequate application of moral encroachment to cases of racial profiling. To sum up, cases of racial profiling can have just the same structure as classic cases of pragmatic encroachment. Suppose Hannah and Sarah act on their belief that the bank is open on Saturday, namely by driving past the bank on Friday night. This action might cause Hannah and Sarah a significant financial harm, namely missing an important deposit. Hannah and Sarah only suffer this harm if their belief is false. But the risk of such a harm means that their belief that the bank is open fails to be knowledge, even if it happens to be true. Similarly, suppose the cab driver acts on his belief that a potential customer will not tip him, namely by driving past him to pick up someone of another race. This action might cause the potential customer a special sort of moral harm, such as causing him to be disoriented by a false opinion about his character. The customer only suffers this special harm if the cab driver’s belief is false. But the risk of such a harm means that the cab driver’s belief fails to be knowledge, even if it happens to be true.

5 Frequently asked questions

Q1. On your account, isn’t the problem with racial profiling ultimately moral in character, rather than epistemic? After all, the problem only arises because forming beliefs by profiling can have morally harmful consequences.

There is no unique problem with racial profiling. I have focused on one problem in this paper, though, and that problem is indeed epistemic—namely, that a certain opinion fails to constitute knowledge. Compare: we wouldn’t say that the problem with the belief in a standard bank case is ultimately financial in character. The potential financial consequences of the belief give rise to an epistemic problem with it.

There is an interesting modal distinction between the epistemic problem discussed in this paper and the moral problems that give rise to it. According to moral encroachment, merely possible moral harms can give rise to actual epistemic problems. Even if a belief formed by profiling is true, and hence cannot cause any of the moral harms discussed in §4, the mere risk that it would cause those harms means that it

\(^{32}\) The term ‘looping effect’ is from Hacking 1995. For discussion of looping effects and criminal behavior, see Taylor 2001 and Hacking 2001.
actually fails to be knowledge.

Q2. What if the moral harms in question are not even possible, though? Consider the covertly profiling pedestrian. She fails to abide by the moral rule of consideration. She profiles Beaty and comes to have higher credence that he will steal her purse, compared with someone across the street. But she doesn’t cross the street. She has decided that in cases like these, she will act as if she had the opinions that she would have had, had she not engaged in racial profiling. There is no risk that her opinions will harm anyone. But shouldn’t our account of moral encroachment still identify an epistemic problem with her opinions?

In this paper, I have set aside challenges that are faced by all theories of encroachment, addressing challenges faced by moral encroachment in particular. This question is in the former category. Suppose Hannah believes that the bank is open on Saturday. It would be a financial disaster if she acted on this belief and it turned out to be false. But she has decided that in cases like these, she will act as if the bank is not open on Saturday, and so there is no risk of her missing her deposit. Should our account of pragmatic encroachment identify an epistemic problem with her belief?

I hesitate to take a stand on this question (or its moral counterpart), in part because the relevant cases seem underdescribed. Are the subjects considering the possibility that some disaster is in the offing? It is natural to imagine that they are refraining from acting on their beliefs for just this reason. But in that case, their beliefs may fail to be knowledge for reasons that do not concern their stakes. Also, in what sense is there no risk of moral or financial disaster in these cases? Are there literally no possible circumstances under which Hannah would postpone her trip to the bank until Saturday? In addition to acting as if the bank is closed on Saturday, does she also reason as if it is closed, lest she arrive at some practical conclusion that presupposes that it might be open? And if her belief that the bank is open does not play any role in guiding her actions, or perhaps in her practical reasoning, then does she really count as believing that the bank is open, or is she merely paying lip service to this belief? We can ask the same questions about the pedestrian and her alleged credences about Beaty.

Suppose that all of these questions turn out to have good answers. The least comfortable result from the perspective of this paper would be the following: there are financial conditions under which Hannah believes that the bank is open on Saturday without failing in any epistemic respects, and there are analogous moral conditions under which the covertly profiling pedestrian forms an epistemically problematic be-
belief about Beaty. Suppose that’s right. Insofar as moral encroachment is the moral analog of pragmatic encroachment, it is not going to ground any criticism of the pedestrian, in the absence of any pragmatic encroachment on Hannah. This result is consistent with everything I have said in this paper. It just entails that moral encroachment is not the end of the story. In addition to the many epistemic problems discussed in this paper, there are still more epistemic problems for racial profiling, and moral encroachment may end up being less central to our understanding of these problems than we had initially thought.

Q3. It is easy to understand that full beliefs based on merely statistical evidence can fail to be knowledge. But when it comes to probabilistic beliefs, isn’t statistical evidence exactly the sort of thing that should yield probabilistic knowledge? For example, if I believe that my ticket lost the lottery on the basis of statistical evidence, then that belief is not going to constitute knowledge. But when I have high credence that my ticket lost on the basis of statistical evidence, shouldn’t that high credence be knowledge?

Statistical evidence sometimes but not always yields probabilistic knowledge. Compare: looking up the hours of a bank online sometimes but not always yields knowledge of whether that bank is open on Saturday. Whether statistical evidence is sufficient for knowledge depends partly on what is at stake. For example, suppose that when you are profiling a pit bull, there is nothing morally at stake in your falsely believing that it is fairly likely to bite you. Then your statistical evidence about pit bulls may suffice to ground knowledge that the pit bull is fairly likely to bite you. By contrast, it is morally risky to engage in racial profiling, given that false opinions formed by racial profiling lead to significant moral harms. And that is why statistics about crime and race do not suffice to ground knowledge about the likelihood that some individual person is engaged in criminal activity.

These facts about probabilistic knowledge have several nice consequences. So far in this paper, I have been focusing on potentially harmful uses of racial profiling. But not all instances of racial profiling are potentially harmful. For example, medical experts can come to have probabilistic knowledge about an individual on the basis of statistics about racial groups. As a medical expert forms an opinion about the likelihood that an individual person has sickle cell anemia, for instance, her belief may not have the potential to cause the moral harms mentioned in the previous section, such as those connected with looping effects. As a result, opinions regarding sickle cell anemia may not be subject to moral encroachment. The same goes for some
uses of racial profiling by social, political, and legal experts advocating on behalf of historically disadvantaged groups.

Another nice consequence is that my account enables us to identify problems for instances of profiling that do not rely on statistical generalizations about a particular social group, but rather on statistics about people in general. For example, consider the belief that some particular person probably has a certain random sequence of nucleotides in their genome, on the basis of the statistical fact that most people have this trait. For comparison, consider the belief that some particular person is probably heterosexual, on the basis of the statistical fact that most people are heterosexual. The second opinion seems more problematic than the first. This difference can be explained by my account of moral encroachment. There is a special moral harm suffered by individuals that are falsely profiled as being probably heterosexual. Hence it is morally risky to form the belief that someone is probably heterosexual on the basis of profiling, and that is why it is harder for such a belief to constitute knowledge.

I have not stated necessary and sufficient conditions for statistical evidence to yield probabilistic knowledge. In fact, I expect this project is just as difficult as stating necessary and sufficient conditions for any given sort of evidence to yield knowledge. The same goes for the project of giving a theory that could say whether any given instance of profiling was subject to moral encroachment. I have not aimed to legislate cases here, but rather to spell out a more precise understanding of moral encroachment, one that can be applied to racial profiling and to probabilistic beliefs. As probabilistic knowledge enters the epistemological stage, it can play an important role in our theory of the epistemic problems with profiling.
References


—. 2018. “Beliefs That Wrong.” Ms., Department of Philosophy, University of Southern California.


