Practice for Wisdom:

On the Neglected Role of Case-Based Critical Reflection

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Abstract: Despite increased philosophical and psychological work on practical wisdom, contemporary interdisciplinary wisdom research provides few specifics about how to develop wisdom (Kristjánsson 2022). This lack of practically useful guidance is due in part to the difficulty of determining how to combine the tools of philosophy and psychology to develop a plausible account of wisdom as a prescriptive ideal. Modeling wisdom on more ordinary forms of expertise is promising, but skill models of wisdom (Annas 2011; De Caro, Vaccarezza, and Niccoli 2018; Swartwood 2013b; Tsai 2023) have been challenged on the grounds that there are important differences between wisdom and expert skills (Hacker-Wright 2015, 986; Kristjánsson 2015, 98, 101; Stichter 2015; 2016; 2018). I'll argue that we can both vindicate the promise of skill models of wisdom and begin to specify practically-useful strategies for wisdom development by attending to a reflective process that I call Case-Based Critical Reflection. I begin by demonstrating the process as it arose in a notable example from everyday life, illustrating how the process can be usefully applied to a case study of interest to wisdom scientists, and explaining its philosophical pedigree. After isolating the key features that make it relevant to wisdom development, I argue that attending to the importance of Critical Reflection can defuse prominent objections to skill models of wisdom.

Keywords: practical wisdom, phronesis, expert skill model of wisdom, Mohandas Gandhi, practical reasoning, wisdom science, reflection

1. Introduction

Despite increased philosophical and psychological work on practical wisdom (*phronesis*; hereafter simply 'wisdom'), contemporary research provides few specifics about how to develop wisdom.[1] Kristjan Kristjánsson finds the guidance generated by interdisciplinary wisdom research lacking in both practical usefulness and theoretical justification:

> ... when an attempt is made to collate what we actually know about *phronesis* development and education, what emerges is at best a long series of received wisdoms, assumptions and hypotheses, mostly yet-to-be-confirmed empirically. (Kristjánsson 2022, 290)

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[1] This is a pre-print that does not include revisions from the peer review process. The Version of Record of this article is published in *Topoi*, and is available online at https://doi.org/10.1007/s11245-023-10000-z. Please refer to the published version in citations.

The reason for interdisciplinary interest in wisdom also explains why it is so challenging to give a satisfying account of what wisdom is and how we can get it. Because wisdom is a prescriptive ideal, giving an account of it requires the tools of moral philosophy. The methods of empirical psychology are sufficient for examining constructs (such as introversion) that merely describe how we *are*, but philosophical argument is required to examine the nature of ideals, such as wisdom, that are supposed to tell us how we *ought* to be (Swartwood and Tiberius 2019). At the same time, prescriptive ideals will only generate useful guidance for us when combined with empirically-plausible accounts of what we're like and how we function (Swartwood and Tiberius 2019). For wisdom research to bear mature and satisfying fruit, then, we must take on the challenge of figuring out how to combine appropriately the tools of philosophy and empirical psychology.

Skill models of wisdom are one promising approach to this challenge. According to these accounts, wisdom is analogous in important ways to more familiar complex expert decision-making skills, such as skill at diagnosing illnesses, fighting fires, piano performance, teaching, or chess (Annas 2011; De Caro, Vaccarezza, and Niccoli 2018; Swartwood 2013b; 2013a; Tsai 2023). If philosophical argument can show that wisdom is similar in the right ways to these more familiar skills, then the detailed empirical research on how those skills are developed could be adapted to provide guidance for wisdom development. Skill models of wisdom could thus provide us with a philosophically plausible, empirically adequate, and practically useful account of what wisdom is and how we can develop it.

Despite this promise, philosophers have raised various objections to skill models of wisdom, focusing especially on identifying differences between wisdom and ordinary expert skills that imply the former cannot plausibly be modeled on the latter (Hacker-Wright 2015; Kristjánsson 2015; Stichter 2015; 2016; 2018).

I'll argue that we can vindicate the promise of skill models by attending to a reflective process, which I call Case-Based Critical Reflection (hereafter simply 'Critical Reflection'), whose importance has not been appreciated in interdisciplinary wisdom research. A proper accounting of the role of Critical Reflection in wisdom development provides the basis for answering prominent objections to skill models of wisdom while also helping us begin to specify practically-useful strategies for wisdom development.

I begin in section 2 by demonstrating the process of Critical Reflection as it arose in a notable example from everyday life, illustrating how the process can be usefully applied to a case study of interest to wisdom scientists, and explaining its philosophical pedigree. In section 3, I identify key features of Critical Reflection that make it relevant to wisdom development. In section 4, I argue that Critical Reflection provides the resources to address prominent objections to skill models of wisdom.

2. Illustrating Critical Reflection

Critical Reflection, as I'm conceiving it, is a reasoning process for improving the consistency and justification of our beliefs about how we ought to live. To demonstrate the process, consider first an example of Critical Reflection in action.

2.1 Critical Reflection in everyday life: Gandhi and the application of ahimsa

Mohandas K. Gandhi is famous for applying the value of ahimsa (nonviolence) to the task of resisting British colonial power in India. But in a number of cases both admirers and critics challenged his understanding and application of ahimsa in particular cases.

From 1917 – 1930, Gandhi lived and worked at the Sabarmati Ashram, where he was focused on experimenting with farming and animal husbandry practices that were compatible with a life of truth-seeking, nonviolence, and the promotion of Indian independence. In several cases, Gandhi faced tough choices about how to treat animals on the Ashram. For example:

> *The downed calf*: In his essay "When Killing May Be Ahimsa," Gandhi describes a situation in which "a calf having been maimed lay in agony in the Ashram. Whatever treatment and nursing possible was given to it. The surgeon whose advice was sought in the matter declared the case to be past help and past hope. The suffering of the animal was so great that it could not even turn [on] its side without excruciating pain" (2019, 272). After some deliberation with the managing committee and community at the Ashram, the calf was euthanized painlessly with an injection. A neighbor and some in the community expressed outrage, confusion, and disapproval of the killing, which they saw as contradicting the philosophy of nonviolence that all parties were working to advance (2019, 278–79).
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> *The nuisance monkeys*: In one controversy, Gandhi struggled to figure out how to deal with monkeys who were threatening to destroy the fruit and vegetable trees grown the Ashram. "In spite of all our efforts," Gandhi wrote, "we have not yet been able to find an efficacious and at the same time nonviolent remedy for the evil" (2019, 276). Spurious rumors that the monkeys had been killed or shot with arrows prompted outraged letters. Gandhi emphasized that no such actions had yet been taken. Nevertheless, he declared that finding a solution was "not so simple or easy" as the case of the downed calf, and "[t]he idea of wounding monkeys to frighten them away seems to me unbearable though I am seriously considering the question of killing them in case it should become unavoidable" (ibid). This prompted further outrage and confusion about how he could endorse such actions. How could someone committed to ahimsa even contemplate harming or killing the monkeys just to protect some produce?

When addressing the controversial nature of his decisions in these cases, Gandhi emphasized the importance of developing and applying one's own moral beliefs rather than simply following the dictates of some authority or other (2019, 273). Far from being a weakness, Gandhi argues that testing one's views against other alternatives (including, in his case, Western moral standards) is an essential part of seeking truth and understanding about how to live (2019, 279). But merely being open-minded, curious, and intellectually humble is not sufficient to provide well-reasoned guidance in the tough cases Gandhi faced.[2]

Fortunately, we can glean from Gandhi's discussion of the nuisance monkeys and downed calf cases several case-based reasoning strategies for developing and testing judgments about how to conduct oneself. These case-based reasoning strategies, when applied with the goal of testing and developing one's own moral beliefs and judgments against alternative perspectives, constitute a valuable kind of Critical Reflection.

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[2] The kind of reflection Gandhi is recommending thus aims at developing and testing one's own existing moral beliefs and judgments by taking seriously alternative views in order to yield guidance about the concrete circumstances of one's own life. So far, then, the process resembles what psychologist Igor Grossmann and colleagues call Perspectival Metacognition (Grossmann et al. 2020, 109). Perspectival Metacognition (PMC) refers to "aspects of metacognition" that "afford greater understanding of and balance between potentially divergent interests on the issue at hand," including epistemic humility, consideration of diverse perspectives, and balance of viewpoints (ibid). Nevertheless, this process is not sufficient to provide specific and plausible guidance for concrete situations (Kristjánsson et al. 2021; Swartwood 2020), such as the nuisance monkeys. Metacognitive processes such as epistemic humility and consideration of diverse perspectives are parts of good decision-making about what one ought to do precisely because they are necessary for most intellectual or decision-making challenges humans face. Doctors wouldn't succeed at diagnosing illnesses if they didn't attend to the limits of their knowledge or identify and examine competing explanations of clinical data. Yet medical schools surely need to supplement these laudable intellectual habits with discipline-specific reasoning skills if they're going to produce accomplished diagnosticians.

In using these examples, I am not assuming that Gandhi or his decisions are wise. Instead, I hope to demonstrate that the reflective process I'm describing, despite being intellectually challenging philosophical reasoning, is useful not only in stuffy lecture halls but in lives of action and purpose.

2.1.1 Case-based reasoning strategy: testing, developing, and applying moral principles

The first strategy Gandhi utilizes seeks to test, specify, and apply a person's general values and moral principles to particular cases.

Gandhi's response to his critics suggests we should distinguish between general values and judgments about what those values require in particular circumstances:

> ... if we will fully realize ahimsa, we may not fight shy of discovering fresh implications of the doctrine of ahimsa. We cannot improve upon the celebrated maxim "Ahimsa is the highest or supreme duty," but we are bound, if we would retain our spiritual inheritance, to explore the implications of this great and universal doctrine. (2019, 286)

Ahimsa (nonviolence) is a general value that Gandhi and many of his critics hold in common. To say it is a *general value* means it is something they judge matters in some circumstances in some way or other. But they nevertheless disagree about when and how nonviolence matters and what it requires in specific circumstances.[3]

Some of Gandhi's critics assume that adhering to the general value of ahimsa requires accepting a specific *moral principle* (a general rule about what matters or what ought to be done in a range of cases). For instance, the neighbor who criticized Gandhi's order to euthanize the downed calf relied upon the idea that "one has no right to take away life" (2019, 272). Call this *the absolutist himsa principle*, since it says that it is always wrong to take life or commit himsa. If the neighbor is right that adhering to this principle is part of the general value of ahimsa, then that would imply that Gandhi erred in his judgment about the calf and abandoned his commitment to nonviolence.

In reply to this reasoning, Gandhi suggests that reflection on our judgments about particular cases shows that his critic's principle is flawed:

> Taking life may be a duty. ... Thus for food we take life, vegetable and other, and for health we destroy mosquitos and the like by the use of disinfectants, etc. ... Suppose a man runs amok and goes furiously about, sword in hand, and killing anyone that comes his way, and no one dares to capture him alive. Anyone who dispatches this lunatic will earn the gratitude of the community and be regarded as a benevolent man. (2019, 301)
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> ... I know that in the act of respiration I destroy innumerable invisible germs floating in the air. But I do not stop breathing. The consumption of vegetables involves himsa, but I find that I cannot give them up. Again, there is himsa in the use of antiseptics, yet I cannot bring myself to discard the use of disinfectants like kerosene, etc., to rid myself of the mosquito pest and the like. (2019, 282)

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[3] Cp. Grossman et al. (2020, 109): "On their own, moral aspirations such as fairness, justice, loyalty, or purity are abstract concepts, void of pragmatic nuances necessary to implement moral concerns in a person's life."

Gandhi tries to show that the critic's principle is implausible by demonstrating that it gives guidance in specific cases that we have good reason to reject. The absolutist principle implies it's wrong to use antiseptics, pick cabbage growing in the garden, and kill the murderous sword-wielder when that's necessary to prevent them from killing innocents. Since it is hard to believe, on reflection, that those things are actually wrong, that means the principle must be rejected. The absolutist principle does not give a good specification of how the general value of nonviolence applies to particular situations.

Another critic offers a different principle that relies upon a subtler distinction. There is a difference, according to the critic, between *direct* himsa (such as directly, but not necessarily intentionally, killing insects and animals while doing agricultural work) and *indirect* himsa (benefitting from or supporting killing that one did not do themselves, such as eating agricultural produce harvested by others in ways that unintentionally kill insects and small animals) (2019, 286). Gandhi's critic suggests a Jainist principle based upon this distinction: we should engage in as few activities as possible so as to avoid all himsa, and indirect is always preferable to direct when we can't avoid both (2019, 286). Call this *the indirect himsa principle*.

Gandhi argues that this principle is also incompatible with our judgments about particular cases:

> The most terrible consequence of this principle to me seems to be this: that if we accept it, then a votary of ahimsa must renounce agriculture although he knows that he cannot renounce the fruits of agriculture and that agriculture is an indispensable condition for the existence of mankind. The very idea that millions of the sons of the soil should remain steeped in himsa in order that a handful of men who live on the toil of these people might be able to practice ahimsa seems to me to be unworthy of and inconsistent with the supreme duty of ahimsa. I feel this betrays a lack of perception of the inwardness of ahimsa. Let us see, for instance, to what it leads to if pushed to its logical conclusion. You may not kill a snake, but if necessary, according to this principle, you may get it killed by somebody else. You may not yourself forcibly drive away a thief, but you may employ another person to do it for you. If you want to protect the life of a child entrusted to your care from the fury of a tyrant, somebody else must bear the brunt of the tyrant's fury for you. (2019, 288)

On reflection, this principle fares no better than the last one. The indirect himsa principle implies implausible guidance in particular cases: it implies killing a snake is worse than paying someone to kill it, that fighting off a thief is wrong but paying someone to fight them off is not, and that farming yourself is wrong but paying someone else to do it is not. In this way, reflecting on our judgments about particular cases can help us test which general principles are worth adhering to and which are not. By doing so, it helps us specify when and how general values, such as ahimsa, apply in the complex circumstances of our lives.

By testing principles by reference to judgments about particular cases, we can see if those principles provide good guidance for tricky particular situations like the nuisance monkeys. But if all the proffered principles fail to survive scrutiny, we can also use our judgments about those clearer cases to develop or specify a principle that could apply to the trickier cases.

Gandhi has already identified a number of particular cases we can make reasonably confident judgments about. Gandhi suspects you'll agree that it's clearly right to use antiseptic and mosquito repellant to protect oneself from disease and to kill a would-be-murderer in the rare situation when this is reasonably viewed as necessary to prevent them from killing others. On the other hand, it is clearly wrong to engage in angry honor killing in response to a perceived slight.

Why is harm and killing permissible in some of these cases but not others? Gandhi offers an explanation:

> 1. It is impossible to sustain one's body without the destruction of other bodies to some extent.
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> 2. All have to destroy some life
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> > (a) for sustaining their own bodies;
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> > (b) for protecting those under their care; or
> >
> > (c) sometimes for the sake of those whose life is taken.
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> 3. (a) and (b) in (2) mean himsa to a greater or less extent. (c) means no himsa, and is therefore ahimsa. Himsa in (a) and (b) is unavoidable.
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> 4. A progressive ahimsaist will, therefore, commit the himsa contained in (a) and (b) as little as possible, only when it is unavoidable, and after full and mature deliberation and having exhausted all remedies to avoid it. (2019, 303)

We can state this in the form of a moral principle:

> Killing or causing pain is right if it is done selflessly and it is necessary for either protecting those under your care or sustaining one's own body.

This principle avoids the problems faced by the principles offered by Gandhi's interlocutors while providing guidance on what to do in the cases of the nuisance monkeys. If attempts to find non-harmful alternatives to stopping the monkeys from thieving fruit fail, and if that fruit is necessary for sustaining the Ashram's inhabitants, then it would be right to use the least harmful effective method for shooing them away.

This is, of course, only a brief demonstration of the process of testing, developing, and applying moral principles via judgments about particular cases. Several complexities are worth noting.

First, the strategy helps to reform and refine a person's *moral beliefs* (beliefs about what ought to be done), but successfully deriving specific guidance from those beliefs will often require developing or refining one's *descriptive beliefs* (beliefs about how the world is and works). Gandhi's ahimsa principle, even if plausible, will only yield justifiable guidance about whether a particular harmful action is justified if we also know facts about the world: whether there are non-harmful alternatives likely to succeed in protecting others or sustaining one's own life, for instance. Second, given human limitations, the process needs to be iterative and any step in its application is open to challenge. Are there reasons to doubt Gandhi's judgments about the cases he bases his principle on? Are there other principles that explain one's judgments about those cases while yielding different guidance about how to approach the nuisance monkeys? Do we need to specify the principle further to grapple with other tough cases? (How bad does the potential harm to one's charges need to be in order to justify committing harm oneself?)

Nevertheless, the strategy of testing, developing, and applying moral principles via judgments about particular cases can improve a person's moral beliefs by helping them integrate multiple values and specify what those values require in particular circumstances.

2.1.2 Case-based reasoning strategy: identifying and testing analogies

Another strategy for refining our understanding of how we ought to live is to reason by analogy: to test and develop our judgments about tough cases by comparing them to our judgments about other specific cases we're clearer about.

Consider the Downed Calf case. To show why euthanizing the calf was the right thing to do, Gandhi tries to show it is similar in the ways that matter to a clearer case:

> Just as a surgeon does not commit himsa but practices the purest ahimsa when he wields his knife on his patient's body for the latter's benefit, similarly one may find it necessary under certain imperative circumstances to go a step further and sever life from the body in the interest of the sufferer. (2019, 273)

On the other side, Gandhi's critics offer an analogy of their own. Clearly it wouldn't be right to euthanize a human being just because they're ill. Since there's no morally significant difference between that and euthanizing the calf, we should also condemn the latter (2019, 273). Both Gandhi and his critics attempt to justify a course of action in the controversial target case of the maimed calf by suggesting potentially analogous cases that we can be more confident about.

Determining whether either of these competing analogies provides justifiable guidance requires examining whether either of the purportedly analogous cases is the same, in the ways that matter, as the target case.

For example, Gandhi anticipates the objection that his surgeon case is importantly different from the maimed calf:

> It may be objected that whereas the surgeon performs his operation to save the life of the patient, in the other case we do just the reverse. But on a deeper analysis it will be found that the ultimate object sought to be served in both cases is the same, viz., to relieve the suffering soul within from pain. (2019, 273–74)

By examining whether Gandhi has successfully shown that the difference the objector points to is morally irrelevant, we can determine whether he is right that we should treat the maimed calf case the same as the surgical one.

Gandhi also raises an objection to the analogy between euthanizing a human just because they are sick and euthanizing the maimed calf. If we assume that the human is sick and suffering but not unbearably or terminally so, it is certainly clear we shouldn't euthanize them. Killing someone so they can avoid a painful but temporary and treatable condition is not justifiable. However, this is importantly different from the calf, whose condition is unbearably painful and terminal. We'll see that this difference matters, Gandhi contends, if we examine how it affects our judgments about the human euthanasia case. "[I]n the case of an ailing friend I am unable to render any aid whatever and recovery is out of the question and the patient is lying in an unconscious state in the throes of fearful agony," Gandhi says, "I would not see any himsa in putting an end to his suffering and death" (2019, 273). By examining whether Gandhi has successfully identified a relevant difference between the original human euthanasia case and the maimed calf case, we can determine whether he is right that they ought to be treated differently. We can also specify whether the general value of ahimsa requires an absolute prohibition on killing or whether killing is in fact sometimes a form of ahimsa.

2.2 Critical Reflection applied to a case of interest to wisdom scientists

Even for those of us not living lives of world-historical importance, Gandhi's use of Critical Reflection illustrates how the process enables us to develop the understanding required to make well-reasoned decisions about how to live and conduct ourselves in particular cases.

Importantly, this usefulness translates directly to the kinds of decision-making challenges that contemporary wisdom scientists see as part-and-parcel of wisdom. Consider this case psychologist Igor Grossman and colleagues use to illustrate the challenges of wise decision-making:

> You are the best man at your brother's wedding. You are bringing the wedding rings. The wedding is taking place in another city and your only chance to get to the wedding on time is to board the next train. Upon arriving at the train station, you notice that your wallet and your cell phone are missing. There is no time to talk to the police and other people at the station refuse your requests to use their phone or lend you money to call your brother. Desperate, you sit down on a bench in the main hall. You notice that the well-off person sitting next to you takes a phone call, stands up and walks around the corner to talk in private. Left on the bench is the man's expensive jacket. You suddenly notice a ticket for your train half sticking out of this jacket. You could easily take this ticket without anybody noticing. It also appears this man could buy a replacement without any problems, as the train is half-empty. What should you do? (Grossmann et al. 2020, 109)

Various general values seem potentially relevant but conflicting. Do loyalty to your brother and the value of promise-keeping justify stealing the ticket? Does respect for the well-off man require finding a larceny-free alternative? For someone who was unsure, a good way to start would be opposing analogies: a case of a clearly right action that is arguably similar in the ways that matter to stealing the train ticket, and another that is clearly wrong and potentially similar in the relevant ways.

On the one hand, there do seem to be potentially similar cases where stealing is justified. Suppose you're babysitting a child who has a bee allergy and they get stung while you're visiting the zoo. You've forgotten the child's potentially life-saving epinephrine injection at home, but, fortuitously, you see that someone else nearby has left one exposed and visible in their bag on a nearby bench. If you can't find the person to ask their permission, it's hard to see why it would be wrong to steal the epi pen to save the child, as long as you explain and compensate the person afterwards. And, if stealing for the good of significant others is justified in this case, should we say the same in the train ticket case?

Is the epi pen case similar in the ways that matter to the train ticket case, or are there morally relevant differences? There does seem to be an important difference. While stealing the epi pen is necessary to prevent the child's death, stealing the train ticket is not preventing any bad that's nearly as serious or permanent. If, instead of stealing an epi-pen to save your young charge's life, you were stealing allergy medicine to save them from some mildly-annoying sniffles, I suspect you'll agree that the thievery is no longer justified. Examining this analogy thus shows it fails to give plausible guidance in the train ticket case. In the process it helps us begin to specify the limits of what the general value of loyalty justifies.

On the other hand, we can think of other cases of stealing that are clearly wrongful and potentially similar to the train ticket case. Suppose you promised to take your mother to the new *Star Trek* movie on opening night. While stepping out to your car, you find its starter is dead. Without your ride, your mother's thirst for science fiction will be unquenched. You see your neighbor's car is parked in the driveway, and you know they are in the habit of leaving it unlocked with the keys hidden under the seat. Should you steal your neighbor's car if that's the only way to get mom to the movie on time? Obviously not. And, if stealing in this case is wrong, shouldn't we say the same of stealing the train ticket?

As with the previous analogy, we need to determine if there are relevant differences. Someone might object that your mother can see the *Star Trek* movie at a later date, while the brother's wedding only happens once. However, it's unclear that this difference matters. If stealing your neighbor's car was necessary to fulfill a promise to get your mother to a more singular event – her friend's wedding, perhaps – I suspect you'll agree this is insufficient to justify the theft. Someone might instead object that stealing the train ticket is justified, because the ticket, unlike the car, isn't worth much. It's hard to see why this difference matters. If you returned your neighbor's car after stealing it, so that all she lost out on was the gas, it's still not clear why the theft would be justified. So far, we haven't identified a relevant difference between the two cases. Is there any other difference that would suggest that it's a mistake to treat the train ticket case the same as the car theft case? By examining that further, we can work towards a more well-founded decision about the morality of stealing the train ticket while also giving shape to our understanding of when and how general values such as loyalty and respect matter.

This isn't a complete examination of these arguments, and these certainly are not the only analogies worth considering. Nevertheless, these examples illustrate the ways examining analogies can help us specify how general values apply in particular circumstances, can help us adjudicate apparent conflicts between general values, and can refine our understanding of how we should and shouldn't conduct ourselves in challenging situations.

2.3 Critical Reflection in Philosophy

The method of Critical Reflection I've described draws on two specific moral reasoning strategies: examining analogies (Stoner and Swartwood 2021, chaps. 8–10); and developing, testing, and applying moral principles (Stoner and Swartwood 2021, chaps. 5–7, 11–13). The process of applying these strategies has features that will be familiar to philosophers.

Critical Reflection is a *coherence-seeking process*, in the sense that it is an explicit reasoning process that tests the consistency and justification our moral beliefs (understood to include general values, moral principles, and judgments about cases), relative both to each other and in light of challenges from outside the system (including dialogue with others, consideration of opposing perspectives, new experiences, and background information about the nature of our attitudes, to name a few). In this way, it is similar to the process of Wide Reflective Equilibrium, which philosophers have used to justify logical systems (Norman Daniels 2016) and to develop and test theories of right conduct and justice (Norman Daniels 2016; N. Daniels 1979).

Critical Reflection is also *a case-based reasoning process* in the sense that a person's moral judgments about what ought to be done in particular cases play a central role. The specific case-based reasoning strategies I've described are often utilized in philosophical practical ethics (Stoner and Swartwood 2021), but they are also similar in some ways to methods of casuistry that have been used in bioethics and related disciplines (Arras 1991; Jonsen, Toulmin, and Toulmin 1988).

Here I have demonstrated one reflective process, Critical Reflection, that utilizes two specific moral reasoning strategies. More work would be required to comparatively evaluate Critical Reflection's merits relative to alternative processes. But the demonstration above provides sufficient resources to make an initial case for the value of Critical Reflection for wisdom development.

3. Key Functions of Critical Reflection

As I've described it so far, Critical Reflection is an explicit reflective process that enables a person to refine their understanding of how they ought to live and conduct themselves in particular cases. The process is better understood as a prospective and retrospective reflective process, not primarily a tool for making decisions in the heat of the moment.[4] Furthermore, the strategies I've described are not sufficient for well-reasoned decisions about how one ought to conduct oneself, all things considered.[5] Nevertheless, the usefulness of the process in the cases I've discussed demonstrates why it is worthy of more attention in interdisciplinary wisdom research.

Further evidences comes when we recognize several key functions of Critical Reflection. The examples I've discussed demonstrate that Critical Reflection helps refine our beliefs about how we ought to live in three ways.

The process serves a *specificatory function*: it helps us specify what a general value requires in particular circumstances. Applying the two case-based reasoning strategies enabled Gandhi to examine what the general value of ahimsa required in the cases of the maimed calf and nuisance monkeys.

The process also serves an *integrative function*:[6] it helps us determine how multiple general values should be integrated in our conduct. Applying the two case-based reasoning strategies helps us decide how general values such as respect, fairness, and loyalty fit together and what they imply in the case of the lost train ticket.

The process also serves a *critical function*: it helps us evaluate when our existing moral judgments (from general values to judgments about particular cases) are worth revising or abandoning.

The process can help us critically evaluate general values we hold. If the process had revealed to Gandhi that there was no plausible way to specify his general value of ahimsa, that would have given him reason to abandon it. As another example, consider patriotic partiality to country. Examining analogies can help us examine this general value further. Should we reject patriotic partiality for the same reason we should reject partiality to one's own racial group (Gomberg 1990), or is loyalty to country permissible for the same reasons loyalty to family is (Nathanson 1989)? Examining principles is another tool. Is there a defensible principle explaining when partiality is warranted and when it is not? What does that principle imply about patriotism (or family loyalty)? Critical Reflection gives us a way to critically examine whether our general values are well-founded or not.

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[4] Critical Reflection thus falls into what Stichter (2021, 105) calls the "goal setting" and "reflecting after acting" phases of action, which he argues are the domain of wisdom.

[5] For example, the process requires the addition of strategies for identifying plausible descriptive beliefs about how the world is and works, strategies for obtaining self-knowledge, strategies for reflecting on what is conducive to one's own well-being (Tiberius 2023), strategies for understanding one's own and others' behavior and mental states (Hursthouse 2006), and so on.

[6] Compare what Kristjánsson et al (2021, 246–47) call the "integrative function" and the "blueprint function" of phronesis.

Critical Reflection can also help us critically examine beliefs about our projects and goals. Many people assume procreating is part of a well-lived life. But given that having a child (as opposed to adopting an existing one) will significantly increase carbon emissions, is procreating analogous to enjoying family time by throwing a hugely wasteful party instead of a more sustainable gathering (Young 2001)? As another example, consider someone who is deciding whether to continue working at the family butcher shop. If you reflect on cases where it is clearly wrong to contribute to others' suffering, will this yield a principle that implies you should make the hard choice to find a new line of work?

Engaging in Critical Reflection thus allows a person to specify, integrate, and critically evaluate their moral values and judgments. Importantly, the process also allows a person to grapple directly with the ways their own power or oppression should inform their moral beliefs (Stichter 2018).

Prominent defenders of interdisciplinary views of wisdom, despite their differences, explicitly acknowledge the need for a reflective process that fulfills the three functions Critical Reflection serves (specificatory, integrative, and critical). In a representative example, Kristjánsson and colleagues argue that "the overall function of phronesis can be summarized as enabling the individual to 'deliberate finely' about the relative weight of competing values, actions, and emotions in the context of 'what promotes living well in general.'" (2021, 7).[7] This deliberation about how one ought to conduct oneself needs to integrate different virtues and values together into "a general understanding of how to live well" while also specifying that understanding so that it gives guidance that is "appropriate to the given circumstances" (2021, 7). Developing wisdom thus requires determining how multiple values should be integrated into conduct, determining what general values require in specific circumstances, and critically evaluating one's own moral judgments (including general values and judgments about more concrete circumstances).

Importantly, Kristjánsson and colleagues do not specify precisely what specific reasoning or reflective practices can achieve these goals, and they lament the dearth of such guidance in the existing literature (2021, 15). One promising suggestion comes from Claudia Navarini and colleagues, who argue that practical wisdom requires not only the top-down specification of moral principles to particular cases but also a kind of bottom-up "moral abduction" that develops and justifies general principles by reference to judgments about more concrete cases (2021, 119). The Critical Reflective process defended here includes a strategy that utilizes a kind of moral abduction – the first strategy of testing, applying, and developing moral principles can be called "moral inference to the best explanation" (Stoner and Swartwood 2021, chaps. 11–13). But Critical Reflection also includes an additional specific strategy of identifying and testing analogies that is neither a top-down application of moral principles nor a bottom-up method for developing and refining them (Stoner and Swartwood 2021, chaps. 8–10).[8]

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[7] See also Wright, Warren, and Snow (2020, 24), who endorse Russell's point that "practical wisdom employs the same global understanding of the human good that is relevant to every virtue,"; Kamtekar (2004, 460): practical wisdom organizes a person's "desires, beliefs about the world, and ultimate goals and values" and does so in such a way that a person's "motivations are organized so that they do not conflict, but support one another"; and Stichter (2018, 378): "The role of practical wisdom is to make value judgments regarding what it is to live well, what constitutive ends make up living well, and what other ends we could pursue consistent with that overall conception of living well." Stichter argues elsewhere that "wisdom ... requires reflection on our values, goals, and practices, not on how to balance existing goals in particular situations (which is going to be the work of other virtuous skills)" (2021, 105). This suggests that Stichter sees only what I have called the critical function as essential to wisdom, while the integrative and specificatory functions are the domain of the character virtues. I find other ways of conceptualizing the relationship between wisdom and the virtues more compelling (De Caro, Vaccarezza, and Niccoli 2018), but that is not essential for my argument here.

4. Implication: Defending the Expert Skill Model

If Critical Reflection is conducive to wisdom, then this already generates useful guidance for wisdom seekers. We should engage in Critical Reflection as a regular part of our reflective practices, because it helps us refine our judgments about what we ought to do in particular cases and also our understanding of how we ought to live.

Importantly, acknowledging the role of Critical Reflection in wisdom development provides the resources to answers objections to attempts to model wisdom on expert skills.

4.1 Skill Models of Wisdom: Two Claims

Wisdom is the understanding required to make reliably good all-things-considered decisions about how one ought to live. But how does this understanding manifest in real people, and how can it be developed? Will a wise person use intuition or explicit reasoning to make decisions? Will they be able to explain and justify their decisions to others? What kind of experience or reflection helps us develop wisdom?

According to skill models of wisdom (Annas 2011; De Caro, Vaccarezza, and Niccoli 2018; Swartwood 2013a; 2013b; Tsai 2023), we can make progress answering questions such as these by modeling wisdom on more common forms of expertise, such as expert skill at piano performance, medical diagnosis, firefighting, or teaching. By combining philosophical argument establishing that wisdom is the same in the ways that matter to certain expert skills with an empirically-plausible account of the nature of those skills and how they're developed, skill models can yield a rationally defensible and practically useful account of what wisdom is and how we can get it (Swartwood and Tiberius 2019).

Although they differ on the expert skills they focus on and the aspects of wisdom they're intended to illuminate, skill models aim to show that one or both of the following claims is true:[9]

Definitional Claim: wisdom is an instance of expert skills of type S.

Analogical Claim: wisdom has some specific feature, X, that is shared by expert skills of type S.

The Definitional Claim states that wisdom is an expert skill. Skill models can argue for different interpretations of the Definitional Claim by specifying what type of expert skill wisdom purportedly belongs to. For instance, Annas (2011) argues that wisdom is a practical skill, like expertise at piano playing or tennis, characterized by the "need to learn and the drive to aspire." Swartwood (2013b) argues that wisdom, like expert skill at firefighting or teaching, is an expert decision-making skill in a domain of complex choice and challenging performance. De Caro and colleagues (2018) argue that wisdom is moral expertise.

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[8] Importantly, the process of Critical Reflection can be given more principled or more particularist interpretations, depending on which of the two case-based reasoning strategies are emphasized. If we emphasized the strategy of testing analogies, Critical Reflection could be a process that focuses heavily on the context and details of specific situations. If we emphasized the strategy of developing principles, Critical Reflection could be a process that focuses heavily on general principles that apply across a range of situations. For my purposes here, I will assume only that Critical Reflection needs to include some mix of the two strategies.

[9] Compare what Tsai (2023, chap. 1.1) calls the Species Thesis ("wisdom is a species of skill") and The Analogy Thesis ("wisdom is analogous to skill"). Tsai argues that "[t]he Analogy Thesis is too modest because it does not provide or imply any ontological status for wisdom" (ibid). Depending on what the analogy is supposed to show, however, Tsai may be underselling the power of the Analogy Thesis to tell us important things about wisdom.

The Analogical Claim isolates a feature (or set of features) X that a specific type of expert skill S has and claims that wisdom shares those features. For instance, Swartwood (2013b; 2013a) argues that wisdom includes a set of five abilities (intuitive ability, deliberative ability, meta-cognitive ability, self-regulative ability, and self-cultivation ability) that are characteristic of more common expert decision-making skills in areas of complex choice and challenging performance. The argument for this Analogical Claim rests on two crucial premises: that skills S have feature X because they have some other relevant feature(s) R, and that wisdom has feature(s) R.[10] For example, Swartwood argues that the five abilities are part of a plausible account of wisdom because wisdom requires decision-making in an area of complex choice and challenging performance, and expert skills (like firefighting, teaching, military decision-making, etc.) include those five abilities precisely because they require decision making in that kind of area.

While defenders of skill models typically argue for both the Definitional and Analogical Claims, they need not do so. If the Definitional Claim is true, then it is likely that some version of the Analogical Claim follows. If wisdom just is an expert skill of a particular sort, then it is likely that wisdom shares *some* interesting features with other expert skills of that type (such as the need for deliberate practice to develop it). The inference does not hold the other way, however. Even if the Analogical Claim is true, the Definitional Claim need not be. It could be that wisdom shares some important features with expert skills despite not itself being an expert skill, much in the way that good college teaching shares important features of good parenting but is not itself an instance of parenting.

Philosophers have raised objections to both the Definitional Claim and the Analogical Claim. Appreciating the necessary role of Critical Reflection in wisdom development gives us the resources to defuse these objections and vindicate skill models of wisdom.

4.2 Addressing Objections to the Definitional Claim

Matt Stichter raises a number of objections to skill models of wisdom, such as those defended by Swartwood (Swartwood 2013b). Several are plausibly understood as objections to the Definitional Claim.

4.2.1 The inadequate feedback objection

One objection Stichter raises is that wisdom cannot be an expert skill, because skills require the possibility of practice and feedback, and effective feedback is not possible for all-things-considered decisions about how one ought to live.

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[10] For similar accounts of the logical structure of analogical reasoning in philosophy of religion and philosophy of science, see Ratzsch and Koperski (2023), and Waters (1986).

> ... there is a further problem with conceptualizing wisdom as the singular skill of getting it right in the moral domain. This runs into the problem that skills require feedback for improvement, and so there needs to be some identifiable goal to the exercise of your skill ... (2018, 133)
>
> The specific problem is that the target of living well in that sense [a grasp of how one ought to live all-things-considered] is very broad and vague, which will make it difficult to determine whether you are acting in such a way as to achieve success. (2018, 133)

In support of his suspicion that it's not possible to get effective feedback on all-things-considered decisions about how one ought to live, Stichter elaborates:

> ... having the target of wisdom being knowing how to live well is still fairly abstract, and it won't necessarily be easy to get feedback as to whether your reflections on living well have led you to change in ways that actually get you closer to your goal. Feedback from changing your priorities in life may be a long time in coming. Just as we need to think in terms of moral virtues as constitutive ends of living well, so too we may need to think in terms of there being a set of intellectual virtues that are constitutive of expressing wisdom. This is, I take it, at the very least a concern we need to take seriously when thinking of skillfulness in expressing wisdom. (2021, 107)

Wisdom is a skill, Stichter (2021, 104) contends, only if there are possible mechanisms for acquiring relatively clear and immediate feedback on our understanding of how to live. We need feedback not only on how well the actions we're taking achieve the goals we happen to have ("goal striving") but also feedback on whether those goals themselves need to be revised or abandoned ("goal setting"). If we view successful wise reflection on these things as constituted in part by the exercise of a set of intellectual virtues (open-mindedness, rigor, intellectual humility, curiosity, etc.), then feedback on the wisdom of our decisions requires applying a conception of that set of virtues. We could be forgiven for feeling that the prospects for delineating such a complex and comprehensive reflective process are bleak.

Still, appreciating the role of Critical Reflection in wisdom shifts the burden onto the critics of skill models of wisdom.[11] First, as demonstrated previously, the process of Critical Reflection can in many cases provide effective feedback on what our general values require in particular circumstances (the specificatory function), on how those general values fit together in our lives (the integrative function), and on whether our general values, projects, and goals are worth endorsing in the first place (the critical function).

Second, attending to the role of Critical Reflection in wisdom shows how advocates of skill models could accommodate Stichter's suggestion that wisdom is in part constituted by the exercise of intellectual virtues. Asking whether our moral beliefs survive a suitably detailed process of Critical Reflection is a way of asking whether we are being open-minded, intellectually humble, or intellectually rigorous.[12] I have not attempted to argue here that the process of Critical Reflection I describe is comprehensive or complete enough to be sufficient for, and constitutive of, wise reflection. I have not specified, for instance, what strategies a person can use to ensure they're taking other perspectives seriously or appropriately acknowledging the limits of their own knowledge. But there is no reason I can see that such an account is not, in principle, possible.

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[11] Tsai offers a different reply, arguing that the presence of expertise in low-validity environments casts doubt on the strict necessity of feedback for expertise (2023, chap. 5.3), and the fact that the goal of living well can be analyzed into a hierarchy of sub-goals shows that it is possible to get adequate feedback on wisdom (2023, chap. 5.3-5.5). My goal is to show that this reply is more compelling if it is illustrated using a specific reflective process, like Critical Reflection, that can provide specificatory, integrative, and critical feedback on our judgments about how to live well.

[12] De Caro, Vaccarezza, and Niccoli (2018) make a similar point about wisdom and the character virtues.

Of course, I am not claiming that applying these strategies is easy or that there will never be doubt about what they show. While clear and immediate feedback is necessary for initial skill-building, learning from more delayed and ambiguous feedback is often necessary for developing expertise in complex skills (Tsai 2023, chap. 5.3). To become experts, teachers often need to grapple with delayed and ambiguous information on student performance. The same goes for medical diagnosis. This does not mean that teaching and medical diagnosis are not skills; it just means that they are complex skills that require increasingly complex and subtle reflection to develop. Nevertheless, engaging in Critical Reflection can provide feedback on particular all-things-considered decisions and also the background moral beliefs we use to navigate them.

4.2.2 The End-Setting Objection

Stichter raises an additional objection to Swartwood's expert skill model of wisdom:

> ... what is unique about practical wisdom [as opposed to skills] is that it involves identifying which ends constitute living well, rather than what constitutes achieving those now fixed ends in specific situations. (2018, 132)
>
> [Expert skill at tasks like firefighting] does not involve a reexamination of one's goal commitments, as it is still a question of how best to achieve one's existing goals in the moment. In other words, in specifying the particular goal to pursue in a situation qua the practice of firefighting, the firefighter is not wondering 'do firefighters really need to save lives' or 'do I really want to be a firefighter?'
>
> Wisdom, by contrast requires reflection on our values, goals, and practices, not on how to balance existing goals in particular situations (which is going to be the work of other virtuous skills) (2021, 105)

Stichter's point here echoes objections that have been made by other critics of skill models of wisdom (Hacker-Wright 2015, 986; Kristjánsson 2015, 98, 101). The objectors point to what they claim is an important difference between wisdom and the more ordinary skills focused on by advocates of skill models: unlike expert skills, wisdom requires critically scrutinizing the given ultimate ends and goals of the domain. According to Stichter, skills such as skill at firefighting consist in "goal striving:" adopting given ends (the goal of saving lives, protecting property, etc.) and then learning how to effectively promote those ends (2021, 105). The skill here does not require evaluating whether those ends are worthwhile or ought to be pursued. With wisdom, however, a distinctive part of the challenge is "goal setting": figuring out which ultimate ends are worth pursuing. Wisdom, according to Stichter, requires setting and evaluating ends, while expert decision-making skills do not.

This objection could be understood as targeting the Definitional Claim. If skills necessarily cannot require end setting, and wisdom does require end setting, then wisdom is not a skill.

The objection fails to undermine the Definitional Claim. Consider skill at teaching. Good teachers need to critically evaluate and set ends as part of expert performance in their domain. Novice teachers may not reflect much on whether they should conceptualize their goal as helping students pass standardized tests, helping students develop skills (which skills?), helping students develop academic habits, or helping students develop intellectual virtues or character traits (which ones)? But expert teachers will need to have figured that out, and this requires critically examining the received views of teaching that they're given. Figuring this out requires end setting and end evaluation and is part of a practice (teaching) that is plausibly described as a skill. Thus, the objection fails to identify a genuine difference between wisdom and other skills (Tsai 2020; 2023).

Stichter could reply that if we conceive of teaching as requiring end-setting and evaluation, then we can no longer conceive of it as a skill. He could draw again on the connection between skills and the possibility of practice and feedback. Perhaps we should only call teaching a skill insofar as it is the practice of successfully achieving the ends you happen to be given or adopt, whether that's helping students pass standardized tests or something else. There are straightforward ways to get practice and feedback on how well you're achieving given goals like these. The thought might be, however, that it's unclear how we could get feedback on our end-setting decisions. How can we get practice and feedback on deciding which ultimate ends we should aim at as a teacher? If practice and feedback is not possible, then perhaps this is a reason to consider the more expansive definition of teaching mastery (which includes end setting) as including but not consisting in a skill.

Attending to the critical function of Critical Reflection reveals why this objection fails. The objection assumes that a practice that involves end-setting cannot be amenable to practice and feedback and therefore cannot itself be a skill. But Critical Reflection is amenable to practice and feedback, and it can be a process for setting and evaluating ends. Furthermore, as illustrated in section 3, the feedback provided by Critical Reflection helps us critically evaluate our own moral beliefs at all levels, which shows that it is hasty to conclude, as Jacobson (2005, 400) does, that any feedback we could acquire is too parochial to be conducive to genuinely wise understanding. Therefore, we have no reason to assume that the end-setting that is part of wisdom disqualifies it from being a skill.

4.3 Addressing an objection to the Analogical Claim

It is therefore unclear why we should think the need to set and evaluate ends excludes wisdom from counting as a skill. But the objection could be revised to target the Analogical Claim instead of the Definitional Claim. The objector could content themselves with trying to show that even if end setting does not disqualify wisdom from being a skill, it does undermine the inferences advocates of the skill model make about the nature of wisdom. To show that wisdom likely has feature(s) X, an advocate of the skill model relies on the premises that (i) wisdom has feature R, and (ii) skill(s) S have feature X because they have feature R. By identifying end setting as a difference between wisdom and other skills, the objector may hope to undermine the inference from those premises.

For example, perhaps we can accept Swartwood's claim that wisdom is an expert decision-making skill in a domain of complex choice and challenging performance, but by pointing out that end-setting plays a role in wisdom that is absent from other skills we can undermine his claim that wisdom includes the five skills of intuitive ability, deliberative ability, metacognitive ability, self-regulative ability, and self-cultivation ability. If the presence or absence of end setting can be expected to impact whether a skill includes those five component skills, then pointing to this difference could undermine Swartwood's claim that wisdom includes those five skills.

Nevertheless, this objection faces two difficulties, each of which is sufficient to defuse it. First, as explained above, it is unclear why the presence or absence of end setting provides a genuine difference between wisdom and other skills. Second, even if it did, a defender of the skill model can argue that the difference is not relevant to the inference being made. Note that a defender of the skill analogy doesn't claim that wisdom is *identical* to other skills. Wisdom is certainly distinctive in various ways. The argument for the Analogical Claim instead asserts that the differences aren't relevant to the inference that wisdom shares specific features with those other skills.

Consider a comparison. Suppose a zoologist discovers a new breed of canine and wants to know if it will be affected by rat poison in the same way as known canine species. She argues that the new species is likely affected similarly, because the new species has the same physiological processes that are responsible for known species succumbing to the poison. It wouldn't undermine this inference to point out that the new species has a hair type not found in any other species, though it would certainly be relevant if we were making a different inference (for example, about the ease with which the coat can be kept free of mats).

Swartwood could point out that the presence or absence of end-setting is similarly irrelevant to whether a complex skill includes the five component skills. Even if it were true that wisdom requires end setting but other skills do not, it is unclear why this would mean wisdom does not include those five skills. The fact that decision making in a domain requires navigating complex choices with challenging performance is what necessitates that humans, being as they are, develop those five skills. It is unclear why adding on the additional task of end setting would make any of those component skills unnecessary. At best, it shows that the form the skills take in the domain of wisdom will be distinctive – wise deliberative skill will have to include, for instance, Critical Reflection. But that in no way undermines the specific inferences Swartwood or other defenders of skill models of wisdom make using the comparison to other skills.

Of course, we must evaluate the argument for each version of the Analogical Claim separately. The End-Setting Objection might undermine the argument for some versions of the Analogical Claim but not others. Still, merely pointing to a genuine difference between wisdom and other skills is often not sufficient to undermine the claims advocates of skill models of wisdom are trying to make.

5. Conclusion

I have taken pains to demonstrate in detail a process of case-based Critical Reflection in order to achieve two goals. First, I have argued that Critical Reflection is a plausible addition to existing accounts of wisdom development. Second, I have shown how appreciating the role of Critical Reflection in wisdom development provides the resources to defuse objections against skill models of wisdom. In pursuing both of these goals I hope to contribute to a continued interdisciplinary focus on identifying philosophically sensible, empirically plausible, and practically useful strategies for developing wisdom.[13]

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[13] An earlier version of this argument was presented in an invited webinar hosted by the Aretai Center on Virtues on 14 April 2023. I thank Maria Silvia Vaccarezza for the invitation and Prof. Vaccarezza and the other participants for their thoughtful and generous feedback on my argument. Thanks go to Ian Stoner for characteristically incisive feedback on an earlier draft of the paper and to Avani Shah for helpful discussion of additional cases where applying the general value of ahimsa can be challenging.

References:

Annas, Julia. 2011. *Intelligent Virtue*. Oxford, UK: Oxford University Press.

Arras, John D. 1991. “Getting down to Cases: The Revival of Casuistry in Bioethics.” *The Journal of Medicine and Philosophy* 16 (1): 29–51.

Baehr, Jason. 2022. *Deep in Thought: A Practical Guide to Teaching for Intellectual Virtues*. Harvard Education Press. https://books.google.com/books?hl=en&lr=&id=OmewEAAAQBAJ&oi=fnd&pg=PT6&dq=jason+baehr+intellectual+virtue+education&ots=zAfESOPvJc&sig=2CD4W3PkAwgVgj6GNXO8H3q3KR4.

Daniels, N. 1979. “Wide Reflective Equilibrium and Theory Acceptance in Ethics.” *The Journal of Philosophy* 76 (5): 256–82.

Daniels, Norman. 2016. “Reflective Equilibrium.” In *Stanford Encyclopedia of Philosophy*, Winter 2016. https://plato.stanford.edu/archives/win2016/entries/reflective-equilibrium/.

De Caro, Mario, Maria Silvia Vaccarezza, and Ariele Niccoli. 2018. “Phronesis as Ethical Expertise: Naturalism of Second Nature and the Unity of Virtue.” *The Journal of Value Inquiry* 52: 287–305.

Gandhi, M. K. 2019. *The Power of Nonviolent Resistance: Selected Writings*. Penguin.

Gomberg, Paul. 1990. “Patriotism Is like Racism.” *Ethics* 101 (1): 144–50.

Grossmann, Igor, Nic M. Weststrate, Monika Ardelt, Justin P. Brienza, Mengxi Dong, Michel Ferrari, Marc A. Fournier, Chao S. Hu, Howard C. Nusbaum, and John Vervaeke. 2020. “The Science of Wisdom in a Polarized World: Knowns and Unknowns.” *Psychological Inquiry* 31 (2): 103–33.

Hacker-Wright, John. 2015. “Skill, Practical Wisdom, and Ethical Naturalism.” *Ethical Theory and Moral Practice* 18 (5): 983–93.

Hursthouse, Rosalind. 2006. “Practical Wisdom: A Mundane Account.” *Proceedings of the Aristotelian Society* 106 (1): 285–309.

Jacobson, Daniel. 2005. “Seeing by Feeling: Virtues, Skills, and Moral Perception.” *Ethical Theory and Moral Practice* 8 (4): 387–409.

Jonsen, Albert R., Stephen Toulmin, and Stephen Edelston Toulmin. 1988. *The Abuse of Casuistry: A History of Moral Reasoning*. Univ of California Press.

Kamtekar, Rachana. 2004. “Situationism and Virtue Ethics on the Content of Our Character.” *Ethics* 114 (3): 458–91.

Kotzee, Ben, J. Adam Carter, and Harvey Siegel. 2021. “Educating for Intellectual Virtue: A Critique from Action Guidance.” *Episteme* 18 (2): 177–99.

Kristjánsson, Kristján. 2015. *Aristotelian Character Education*. Routledge.

———. 2022. “Teaching Phronesis to Aspiring Police Officers: Some Preliminary Philosophical, Developmental and Pedagogical Reflections.” *International Journal of Ethics Education* 7 (2): 289–305.

Kristjánsson, Kristján, Blaine Fowers, Catherine Darnell, and David Pollard. 2021. “Phronesis (Practical Wisdom) as a Type of Contextual Integrative Thinking.” *Review of General Psychology* 25 (3): 239–57.

Nathanson, Stephen. 1989. “In Defense of" Moderate Patriotism".” *Ethics* 99 (3): 535–52.

Navarini, Claudia, Allegra Indraccolo, and Riccardo Brunetti. 2021. “Practical Wisdom and Generalization: A Theoretical and Empirical Investigation on the Effects of Limited Information.” In *Practical Wisdom*, 114–37. Routledge.

Ratzsch, Del, and Jeffrey Koperski. 2023. “Teleological Arguments for God’s Existence.” In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta and Uri Nodelman, Summer 2023. Metaphysics Research Lab, Stanford University. https://plato.stanford.edu/archives/sum2023/entrieseleological-arguments/.

Siegel, Harvey. 2018. “Justice and Justification.” *Theory and Research in Education* 16 (3): 308–29. https://doi.org/10.1177/1477878518801753.

Stichter, Matthew. 2015. “Practical Skills and Practical Wisdom in Virtue.” *Australasian Journal of Philosophy* 94 (3): 435–48.

———. 2016. “The Role of Motivation and Wisdom in Virtues as Skills.” In *Developing the Virtues: Integrating Perspectives*. New York, NY: Oxford University Press.

———. 2018. *The Skillfulness of Virtue: Improving Our Moral and Epistemic Lives*. Cambridge University Press.

———. 2021. “Differentiating the Skills of Practical Wisdom.” In *Practical Wisdom*, 96–113. Routledge.

Stoner, Ian, and Jason Swartwood. 2021. *Doing Practical Ethics*. New York: Oxford University Press.

Swartwood, Jason. 2013a. “Cultivating Practical Wisdom.” Ph.D. Dissertation, Minneapolis, MN: University of Minnesota. http://conservancy.umn.edu/bitstream/154543/1/Swartwood_umn_0130E_13707.pdf.

———. 2013b. “Wisdom as an Expert Skill.” *Ethical Theory and Moral Practice* 16 (3): 511–28. https://doi.org/10.1007/s10677-012-9367-2.

———. 2020. “Can We Measure Practical Wisdom?” *Journal of Moral Education* 49 (1): 71–97.

Swartwood, Jason, and Valerie Tiberius. 2019. “Philosophical Foundations of Wisdom.” In *The Cambridge Handbook of Wisdom*, edited by Robert J. Sternberg and Judith Glück, 10–39. Cambridge, UK: Cambridge University Press.

Tiberius, Valerie. 2023. “What Do You Want Out of Life?” In *What Do You Want Out of Life?* Princeton University Press.

Tsai, Cheng-hung. 2020. “Phronesis and Techne: The Skill Model of Wisdom Defended.” *Australasian Journal of Philosophy* 98 (2): 234–47.

———. 2023. *Wisdom: A Skill Theory*. Cambridge University Press.

Waters, C. K. 1986. “Taking Analogical Inference Seriously: Darwin’s Argument from Artificial Selection.” *Proceedings of the Biennial Meeting of the Philosophy of Science Association* 1986: 502–13.

Wright, Jennifer Cole, Michael T. Warren, and Nancy E. Snow. 2020. *Understanding Virtue: Theory and Measurement*. Oxford University Press.

Young, Thomas. 2001. “Overconsumption and Procreation: Are They Morally Equivalent?” *Journal of Applied Philosophy*, 183–92.