

Habituation into Virtue and the Alleged Paradox of Moral Education

forthcoming in [*Social Theory and Practice*](#)

Denise Vigani

Some philosophers have argued that Aristotle's view of habituation gives rise to a 'paradox of moral education.' The inculcation of habit, they contend, seems antithetical to the cultivation of virtue. I argue that this alleged paradox arises from significant misunderstandings of Aristotle's view. Habit formation need not be at odds with the development of the kinds of intelligent, reflective capacities required for virtue. Indeed, Aristotle seems right to insist on an important role for habit in the cultivation of virtue. I suggest that habit formation is part of the story of how the virtuous come to see the world aright.

Keywords: habituation, manners, paradox of moral education, perceptual–cognitive expertise, virtue

Virtue is acquired, not innate; individuals, therefore, must learn to be virtuous.¹ It has long been widely accepted that cultivating virtue of character is largely a matter of learning by doing. Both Plato and Aristotle draw analogies between acquiring virtue and learning practical skills or crafts; for example, Aristotle explains, “we become builders, for instance, by building, and we become harpists by playing the harp. Similarly, then, we become just by doing just actions, temperate by doing temperate actions, brave by doing brave actions” (1103a34–1103b2).² As familiar and widely accepted as this picture of character development is in the moral education literature, significant questions remain regarding how this learning-by-doing is supposed to work.

Despite being the central historical figure for character development, Aristotle does not say in his extant works nearly as much as one might hope about the actual process of virtue acquisition. He tells us that practical wisdom is a virtue of thought, learned primarily through teaching, while the virtues of character—courage, temperance, generosity, and so on—are the result of the kind of learning-by-doing described above, a process known as *habituation* (1103a15–18). This difference in methods of acquisition reflects Aristotle's presentation of virtues of thought and virtues of character

¹ This is the standard Aristotelian view (see 1103a24–26). I am concerned here with full virtue, not the notion of natural virtue that Aristotle distinguishes as lacking practical wisdom (see 1144b3).

² All passages from the *Nicomachean Ethics* are from Irwin (1999).

as excellences of different parts of the soul: virtues of thought are excellences of the part of the soul that has reason, while virtues of character are excellences of the non-rational part of the soul. These distinctions between parts of the soul, kinds of virtues, and their methods of acquisition have all fed into the considerable debate concerning the cultivation of virtue.

For one, that virtues of character are the result of the habituation of the non-rational part of the soul has motivated many to conceive of habituation as non-cognitive (for discussion, see Sherman 1989: 162). On such a view, habituation becomes a kind of mindless, mechanical conditioning³ through which children are molded into “walking bundles of habit.”⁴ Moreover, Aristotle’s distinction between teaching and habituation has led some to argue that habituation must not include any instruction at all. For example, Howard Curzer argues that actively identifying virtuous actions for the learner to recognize cannot be a part of habituation, as such labelling constitutes a kind of instruction and thus teaching; he objects that both Myles Burnyeat and Nancy Sherman elide Aristotle’s distinction between habituation and teaching by attempting to smuggle some form of instruction into their accounts of the process of habituation (2002: 146; see Burnyeat 1999; and Sherman 1989: Ch5). Yet without *any* argumentation or teaching, it is hard to see how habituation can support the kind of intellectual engagement and critical reflection necessary for full virtue.

And so arises what Kristján Kristjánsson (2007: Ch3), following R.S. Peters (1981/2015), calls “the paradox of moral education.” On the one hand, we have an understanding of habituation as a process that involves no instruction whatsoever, a mechanical, non-cognitive training of the non-rational part of the soul that is externally imposed upon the learner. On the other, we have the

³ As an example of this kind of language being explicitly used in the literature, Kristján Kristjánsson portrays (inaccurately, in my opinion) Howard Curzer’s view of habituation in non-cognitive terms: “we should accept the fact that, for Aristotle, habituation is simply a matter of mechanical, mindless inhibition” (Kristjánsson 2007: 34). See also footnote 5 below.

⁴ Kristjánsson uses this phrase which, to the best of my knowledge, originates with William James. See James (1890: 127).

fully virtuous person—someone who is intelligently responsive to the world, critically reflective, and internally motivated to act in accordance with virtue. It seems unreasonable to think that the former could possibly give rise to the latter. Indeed, this kind of habituation would seem to undermine the very capacities for critical reflection needed for full virtue (Kristjánsson 2007: 32). According to the paradox of moral education, the inculcation of habit and the cultivation of (full) virtue are fundamentally at odds.

The Aristotelian has, in one sense, an easy reply to this alleged paradox: habituation into virtue is *not* a matter of inculcating mindless, “ready-made” habits.⁵ In *Intelligent Virtue*, for example, Julia Annas offers such a response, arguing that “virtue is not a matter of being habituated to routine” (2011: 4). Particularly in the more recent literature, however, this response tends to move the discussion away from habit itself and toward the well-known analogy between virtue and skill. For example, Daniel Russell prefers to drop altogether the terms ‘habit’ and ‘habituation’ in favor of ‘attribute,’ ‘practice,’ and ‘training,’ thereby emphasizing the ways in which character development is like acquiring a practical skill (2015). I do not mean to criticize Annas’ and Russell’s emphasis on the virtue-skill analogy—I, too, will make use of the analogy later in this paper. But it is important to recognize that shifting the discussion in this way will not, on its own, settle any of the above debates. It does not, for instance, tell us whether Aristotelian habituation must, indeed, be non-cognitive, or whether it must exclude all teaching and instruction.

Nor does it answer the question of the role of habit in the cultivation of virtue. Contra Russell, we cannot simply drop the notions of habit and habituation from the Aristotelian view, as this would seem to belie Aristotle’s emphasis on repeated activities and *ethos* [habit]. “[A] state [of character],” Aristotle insists, “results from [the repetition of] similar activities. That is why we must

⁵ Richard Sorabji, for instance, defends Aristotle against a view of habituation as mindless in his (1974). And Rosalind Hursthouse criticizes Troels Engberg-Pedersen’s account of habituation as “the account of a *mechanism*, a mindless process” (1988: 211).

perform the right activities, since differences in these imply corresponding differences in the states. It is not unimportant, then, to acquire one sort of habit or another, right from our youth. On the contrary, it is very important, indeed all-important” (1103b21–25). Moreover, habit formation is a crucial part of the acquisition of all sorts of skills, so shifting the conversation to the virtue-skill analogy fails to render irrelevant the concerns about habit formation raised by the paradox.⁶ Defenders of Aristotelian character education must, therefore, consider the role of habit in the cultivation of virtue.

In this paper, I contend that there is no paradox of moral education. Rather, the central assumptions underlying the paradox seem to arise from significant misunderstandings of Aristotle’s view of habituation into virtue. Moreover, habit formation need not be fundamentally at odds with the development of the kinds of intelligent, reflective capacities required for virtue. Indeed, Aristotle seems right to insist that there *is* an important role for habit in the cultivation of virtue. I suggest that habit formation is part of the story of how the virtuous come to see the world aright.

I begin by arguing that Aristotle’s distinctions do not support the view of habituation presented in the paradox. I then turn my attention to habit, and to the specific habit of saying ‘please’ and ‘thank you.’ There is a vast literature on Aristotelian character education, but almost all of it is either abstract and theoretical or focused on the classroom environment. Attending to a specific habit thus constitutes a relatively unique approach and, I contend, allows us to see some of the issues more clearly. Moreover, saying ‘please’ and ‘thank you’ seems to be just the right kind of habit to examine. For one, it is a relatively straightforward habit and one that has been defended as integral to the virtue of respect (see, e.g., Buss 1999; McPherson 2018). It is also something that an

⁶ For example, Will Small criticizes a view of skill development that looks strikingly analogous to the paradox of moral education, holding “that drilling inculcates unintelligent, non-rational habits, which are either transformed into intelligent, rational skills through subsequent training or figure as a self-standing foundation for the acquisition of skills proper” (2020: 390). Small notes: “Even if these suggestions are intelligible (and there is good reason to think they are not), neither could possibly be the whole truth. This can be seen from the simple fact that high-level athletes and musicians spend plenty of time on what it seems right to call drills” (2020: 390).

individual does routinely in a variety of contexts, and something that many people habituate their children to do, and well before those children are old enough to start formal schooling. If any virtuous habit is a candidate for being unreflective and “ready-made,” it would be this one. An examination of how parents and caregivers typically go about the inculcation of this habit, however, reveals how habituation can occur without—and so maintain Aristotle’s distinction from—explicit teaching while nevertheless fostering the kind of critical reflection required for virtue.

Finally, I turn to the virtue-skill analogy—in particular, to the context of skill development in sport—to uncover further insights into the process of habituation. Research on the perceptual-cognitive expertise of professional athletes can help us understand how to foster discernment through habituation and to improve our habituation practices in ways that foster critical reflection. Moreover, I suggest that the kind of feedback that proves successful in skill development can help us see how habituation and teaching can operate together as, I contend, Aristotle holds they do.

Questioning the Assumptions

The first thing we ought to do is question the extent to which Aristotle’s distinctions between parts of the soul, kinds of virtues, and their methods of acquisition really *do* support the view of habituation presented in the paradox. I argue that there is good reason to think that they do not. For one, Aristotle is wary with regard to specifying parts of the soul, emphasizing that such specification will always be done in light of a particular inquiry, and that the number of parts delineated will be tailored to that inquiry.⁷ In the *Nicomachean Ethics*, Aristotle notes that, in drawing distinctions there between parts of the soul, he is only going as far as the discussion requires, and he sets aside the question of exactly how these parts are distinct (1102a27–33; 1102b25). Moreover, to insist that virtue of character is a non-rational excellence does not entail that it is thereby non-

⁷ See Nancy Sherman’s discussion of *De Anima* 432a22–30 (1989; 163).

cognitive.⁸ The non-rational part of the soul of which the virtues of character are excellences nevertheless *shares in reason*—that is, it is capable of listening to, being persuaded by, and obeying reason (1102b26–1103a4)—and throughout the *Nicomachean Ethics*, Aristotle repeatedly resists drawing a sharp distinction between the intellectual and desiderative parts of an individual’s character (e.g., 1139b4–6). Aristotle’s distinctions between parts of the soul and between virtues of thought and virtues of character provide no reason, then, to conceive of habituation as non-cognitive. Given how the non-rational part of the soul shares in reason, it also seems unlikely that habituation is a wholly non-rational process.⁹

Nor is it obvious that Aristotle’s distinction between teaching and habituation is as stark as Curzer suggests. Citing Aristotle’s comment that “[a]rguments and teaching surely do not prevail on everyone, but the soul of the student needs to have been prepared by habits for enjoying and hating finely, like ground that is to nourish seed” (1179b24–26), Curzer argues, “habituation must precede ‘argument and teaching.’ Farmers prepare the earth before they sow. The two activities are not mingled” (2002: 146). Curzer is surely right that Aristotle is skeptical regarding the extent to which argument and teaching can be effective on those who lack proper habituation. It does not follow, however, that the activities of habituation and teaching are not (ever) mingled. For one, such a view would be hard to square with Aristotle’s claim that habituation is an ongoing process that should continue through adulthood (1180a1–4; see also Lockwood 2013: 21; and Vasiliou 2007: 74). If habituation is ongoing, then any teaching that occurs would have to take place alongside it. It would also be difficult to explain why Aristotle thinks we need teachers for habituation if the two activities are entirely distinct (1103b12–13). If Aristotelian habituation was a mindless, mechanical process involving no teaching whatsoever, then mere enforcers would be sufficient. We should be wary,

⁸ For example, Jessica Moss emphasizes that “the process of habituation has a very important cognitive aspect,” involving “practical (pleasurable, evaluative) cognition” (2012: 219).

⁹ See, e.g., Iakovos Vasiliou’s criticism of Moss’ view (2014: 370, n.7).

therefore, of attempts to distinguish habituation and teaching too sharply, a point to which I will return below.

Moreover, Curzer himself seems to acknowledge that the process of habituation will not be completed prior to the start of teaching. What prepares a learner for teaching, he contends, is the internalization of certain values and standards of behavior; this internalization reflects a commitment to living a life of virtue—however vague one’s conception of that life might be at this point in one’s ethical development—and is evidenced by a susceptibility to shame [*aidōs*] (2002). Curzer repeatedly notes, however, that such learners yet lack the habits of choice, action, and feeling of the virtuous (2002: 156, 161). There must remain, then, a significant amount of habituation to be done.

In the *Politics*, Aristotle claims that “[i]n educating children we must use the instrument of habits before we use that of reason” (1338b3).¹⁰ It is not obvious, however, that this entails the view of habituation presented by the paradox, or that it entails anything particularly implausible about character education. Aristotle follows Plato in holding that character education begins at birth (1104b11–13; cf. *Rep.* 402a and *Laws* 653a–b). “The next stage of the child’s life, which lasts to the age of five,” Aristotle explains, “is one which cannot be set any lessons, or put to any compulsory tasks, for fear of hindering its growth. But it is a stage which needs some practice in movement [...] and this should be provided by games, as well as in other ways” (1336a22–24). These other ways include storytelling and imitation. This strikes me as remarkably consistent with our contemporary endorsement of play-based early education. And suppose that Curzer is right that susceptibility to shame is key to being receptive to teaching. Children are capable of experiencing shame by around three years of age (Denham 2007: 13; Stipek 1995). To say that one is not ready for teaching or argumentation before then hardly seems controversial. Moreover, Aristotle seems to think that teaching will not begin much after that age anyway: “children should then spend the next two years,

¹⁰ All passages from the *Politics* are from Barker (1958).

down to the age of seven, in watching others at work on the lessons which they will afterwards have to learn themselves” (1336b35).

We should not, then, conceive of habituation as non-cognitive, or as occurring utterly divorced from rationality. Nor does it look as though habituation will be completed prior to the initiation of teaching, which itself could start at a fairly young age. This is a far cry from the paradox’s depiction of habituation as “the forming of young students into walking bundles of habit” (Kristjánsson 2007: 32) before the education of their intellectual capacities even begins. We have little reason to think, then, that habits will be at this point so firmly entrenched that they undermine one’s capacity for critical reflection. On the contrary, we have a picture of character development that reinforces the widespread view within Aristotelian scholarship that Aristotle takes the rational and non-rational parts of the soul to develop together (see, e.g., Vasiliou 1996: 780; McDowell 1998: 38–40).

Even if one is convinced that the paradox itself is unwarranted, we still lack a clear sense of how such habituation would work, how it differs from explicit teaching, and what role habits themselves play in the cultivation of virtue. In particular, one might yet desire a more satisfactory answer to the question: How can the inculcation of habit not undermine, but actually foster the kind of critical reflection required for virtue? I contend that we can make at least some headway on these issues by examining the inculcation of a specific habit, namely the habit of saying ‘please’ and ‘thank you.’ But first, I turn to address the question of habits more generally.

Virtue and Habit

“To sum it up in a single account,” Aristotle says, “a state [of character] results from [the repetition of] similar activities” (1103b21–22). Here Aristotle makes clear that a virtue of character is a state [*hexis*]; it results from, but is not merely, the repetition of similar activities. As Terence Irwin explains, *hexis* literally means ‘having, possession’—it is something that is settled and stable (1999:

349). It involves much more than one's outward behavior, which is one of the reasons why translating *hexis* as 'disposition' is problematic (Irwin 1999: 349; see also Hursthouse 1999: 11).¹¹ For instance, Aristotle famously distinguishes between the fully virtuous and the continent: whereas the virtuous person's desires are in harmony with their judgment about what they ought to do such that they perform that action willingly, the continent must overcome contrary desires in order to get themselves to act in accordance with virtue. Yet both the virtuous and the continent act in accordance with virtue. The same outward behavior, then, can arise from different states. And since virtue is a state, that means that it is not, itself, a habit.

Yet as we have seen, Aristotle explicitly draws a tight link between the state that is a virtue of character and habit. "Virtue of character [i.e., of *ethos*]," he says, "results from habit [*ethos*]; hence its name 'ethical', slightly varied from 'ethos'" (1103a17–18). How, then, might we understand habit? Psychologist Wendy Wood defines habit as a "*mental association between a context cue and a response that develops as we repeat an action in that context for a reward*" (2019: 43). This contemporary definition echoes Aristotle's emphasis on repeated activities. And while habit is often associated with a certain kind of automaticity, it is not the kind of mindless automaticity associated with, say, reflex or Pavlovian conditioning (Wood 2019: 44). Rather, habits are the kinds of things that get encoded in our procedural—as opposed to episodic—memory; this makes our habits, as Wood puts it, "sticky," protected from change and more resistant to atrophy (2019: 46). We can start to see, then, why habits might be important to the formation of stable, settled states of character and why the paradox of moral education is mistaken in depicting habit formation as mindless and mechanical.

As mentioned earlier, on Aristotle's view, a virtuous person is internally, as opposed to externally, motivated. One might worry, then, that the role of reward in habit is a problem for the

¹¹ Indeed, the translation of *hexis* remains a point of contention for Aristotle scholars and translators. Thanks to an anonymous reviewer for raising this point and to Robert Mayhew for discussion of these translation issues.

Aristotelian. I will explore this question in more detail below, but for now let me make a couple of comments. For one, Aristotle acknowledges that the experience of pleasure and pain is important to the development of one's character: "For pleasure causes us to do base actions," he says, "and pain causes us to abstain from fine ones. That is why we need to have had the appropriate upbringing—right from early youth, as Plato says—to make us find enjoyment or pain in the right things; for this is the correct education" (1104b10–13). Finding pleasure in the activity itself seems consistent with the way contemporary psychology understands the rewards relevant to habit formation. As Wood explains, "[T]he most effective habit-building rewards are often *intrinsic* to a behavior, or a part of the action itself. This could be the feeling of pleasure you get when you read an engaging story to your kids and see their enjoyment; or maybe the warm glow of generosity you experience when doing a good deed, like volunteering at the soup kitchen" (2019: 118–119). It is also worth noting that once a habit is established, it can continue to operate without the associated rewards.

"Rewards," Wood says, "are extremely efficient in this way: they continue to operate on our habits well past the time we got them. A well-chosen reward is like a really solid, steady investment" (2019: 126). Once again, we can see why habit formation might be important for the development of a stable, settled state of character.

It will be easier to get a clearer sense of the role of habit in the cultivation of virtue, however, if we attend to a specific habit. Let me turn now, then, to the habit of saying 'please' and 'thank you.'

The Habit of Saying 'Please' and 'Thank You'

As I argued in the introduction, saying 'please' and 'thank you' seems like just the right kind of habit to examine. Manners and etiquette, to be sure, have attracted a degree of controversy in the philosophical literature. Some rules of etiquette, such as "that an invitation in the third person should be answered in the third person" have been considered "nonsense" (Foot 2002: 160).

Others, such as which fork to use with which course in a meal, are considered more pernicious, accused of maintaining elitism and contributing to social inequality (for discussion, see McPherson 2018). The habit of saying ‘please’ and ‘thank you,’ however, does not seem to be controversial in these ways. On the contrary, it has been defended as integral to the virtue of respect (see, e.g., Buss 1999; McPherson 2018) and would seem integral to gratitude as well. This is not to say, of course, that, for example, *a* habit of saying ‘thank you’ could not reveal an excessive submissiveness, and thus a *lack* of virtue. The claim is just that there *is* a habit of saying ‘please’ and ‘thank you’ that is plausibly virtuous. And it is on that habit that I wish to focus.

In thinking about how we tend to approach inculcating the habit of saying ‘please’ and ‘thank you,’ we can get a sense of a developmental arc: an expectation is established, typically first via modelling of desired behavior and then through explicit correction. Once the expectation has been firmly established, explicit correction often gives way to prompts, which can become increasingly subtle. Expectations are further reinforced, and desired behavior supported, by appropriate responsiveness to the learner’s requests and acknowledgements (or lack thereof). None of this, I contend, requires teaching, although teaching can occur alongside it. Moreover, I argue that this process of inculcation can foster critical reflection and shape how the learner comes to see the world. I will unpack this process in more detail below, but let me first note a couple of points.

I am not claiming that all or even most caregivers actually do these things or do them with the kind of consistency required for (successful) habituation. But if one reads parenting magazines and blogs or observes the kinds of things caregivers tend to do in attempting to get their children to habitually say ‘please’ and ‘thank you,’ one is likely to see something along these lines. That this is the kind of process we tend to see folks attempt—however successfully—strikes me as itself significant. I have specified the habit in terms of its outward behavior: *saying* ‘please’ and ‘thank you.’ As we have seen, however, the same outward behavior can arise from different states. As I will

discuss in more detail as we go, this particular process of inculcating the habit of saying ‘please’ and ‘thank you’ strongly suggests that the aim of this inculcation involves something more than the mere production of specific words. We inculcate this habit as part of our efforts to have our children grow up to *be* a certain way.

We begin by modelling the behavior we want to see ourselves; caregivers will often start doing this before the child can even speak. This can sometimes lead to spontaneous mimicry, which is unlikely to be consistent. This modelling fosters a burgeoning recognition by the child that saying ‘please’ and ‘thank you’ are things to be done. Once the child starts speaking, we often explicitly correct their requests by, for instance, repeating the request *with* the word ‘please’ and then having the child follow suit. Neither the modelling nor explicit correction would seem to ‘count’ as instruction—there need be no labeling of this as the right thing to do, for instance, nor discussion about why it is something to be done (such discussion is not likely to interest an 18-month-old anyway). Just as one might correct a grammatical or pronunciation mistake without launching into a grammar or phonics lesson, one can correct the omission of a ‘please’ or ‘thank you’ without launching into a discussion of ethics.

Once the expectation that ‘please’ and ‘thank you’ are to be employed appropriately is established, we move to offering straightforward prompts along the lines of, ‘What do you say?’ when the child forgets a ‘please’ or ‘thank you.’ Over time, these prompts can become more subtle—a clearing of the throat, a tap on the shoulder, a raised eyebrow. Perhaps one acts as though one has not heard a request that omits ‘please’ or remains standing there expectantly when a ‘thank you’ is not promptly forthcoming. With consistency, a learner can (will, hopefully) start to pre-empt these prompts by including the ‘please’ or ‘thank you’ in their initial requests or acknowledgements; eventually doing so becomes a habit.

Notice that these kinds of prompts are not explicit instruction, either. Rather, they function to create space for personal reflection and *self*-revision of behavior. Indeed, such prompts would seem to be a clear example of how Curzer thinks habituation can be accomplished without teaching.

He comments:

“...there are various ways to keep learners on track without either giving them the *that* (i.e., teaching learners ‘this is the right thing to do in this situation’) or reducing habituation to mere mindless repetition (e.g., making learners stand fast in battle again and again no matter what the risk and likelihood of success). For example, one might merely prevent learners from acting wrongly, allowing them to discover the right acts for themselves.” (2002: 145)

By prompting reflection and self-revision, we go a long way toward avoiding mindless repetition by allowing learners to discover for themselves what they have missed and what they ought to do. We can also see why the paradox of moral education is mistaken to characterize habituation as non-cognitive or as stultifying learners’ capacities for critical reflection.

Another significant issue over which there is considerable discussion and debate in relation to the paradox of moral education is the role of pleasure in habituation. Burnyeat argues that habituation is primarily a matter of getting the child’s sense of pleasure to align with the fine and noble (1999: 217). Curzer disagrees, arguing that habituation is “motivated by punishment and threat of punishment,” including, eventually, the self-sanctions of actual and prospective shame (2002: 158). Curzer contends that Aristotle’s account of character development gives significant roles to punishment and pain, while not granting comparable roles to their positive counterparts of pleasure and pride (2002: 162).

I do not think that Curzer’s claims here are quite right: Curzer seems to run together the motives of punishment and shame where Aristotle takes them to be importantly different sources of motivation. Punishment motivates ‘the many,’ according to Aristotle—that is, those “who find their pleasure and pains in extrinsic features of virtuous and vicious action” (Moss 2012: 208). They therefore require external motivation in order to act as they should. Habituation, on the other hand,

does not operate via punishment, but rather through the cultivation of a proper sense of shame.

This distinction can be seen in Aristotle's comments describing how the habituated and 'the many' respond differently to laws:

That is why legislators must, in some people's view, urge people toward virtue and exhort them to aim at the fine—on the assumption that anyone whose good habits have prepared him decently will listen to them—but must impose corrective treatments and penalties on anyone who disobeys or lacks the right nature, and must completely expel an incurable. (1180a6–10; see also Moss' discussion of 1179b11–13 in 2012: 208)

Habituation aims to instill internal motivation; threat of punishment operates as an external motivator.

Curzer's attention to punishment and shame, however, does raise some important questions. As he highlights, even for the fully virtuous, virtuous acts are not always pleasant—an issue that we see Aristotle famously grapple with in the context of courage (see 1117b8–17)—and so will not always be pleasant for the learner, either (2002: 151). Yet there can be little doubt that a central aim of habituation is that one learns to "delight in noble actions" (McDowell 1998: 42). Whence, then, does the pleasure that is taken to be so important to habituation arise? And how can the inculcation of habit—a process that is very much externally imposed upon the learner and, as we have seen, one that fundamentally involves rewards—give rise to *internal* motivation to act in accordance with virtue? Thinking this through in the context of the specific habit of saying 'please' and 'thank you' is, once again, helpful.

Let us return to the developmental arc that I introduced earlier: an expectation is established via modelling of desired behavior and then reinforced through explicit correction, which eventually gives way to prompts. Expectations are further reinforced, and desired behavior supported, by appropriate responsiveness to the learner's requests and acknowledgements (or lack thereof). That the expectation is often established via the modelling of behavior by trusted caregivers is

significant.¹² As Randall Curren notes, “children are quite ready to imitate those who are praised and admired, and quite inclined to adopt the standards and way of life of those who take care of them” (1999: 75). Young children’s inclination to imitation—something that we have already seen Aristotle take note of, and which is surely at least part of the reason why he thinks it is so crucial that habituation begin at a young age—means that the kind of fear-based motivation that Curzer emphasizes with the threat of punishment is largely unnecessary.

Moreover, when we establish early the expectation via modeling of behavior that ‘please’ and ‘thank you’ are things to be said, the child comes to see that this is an expectation that applies to them as members of a community who share a way of life. The claim is not that the small child can articulate the experience in this way, of course, but rather that the process is one of initiation into a way of being in the world. This sets the stage for a very different kind of motivation than does the threat of punishment—namely, identity-based motivation. In short, individuals generally desire to act in ways that they see as consistent with their identity, their sense of self; this desire for self-consistency becomes an internal source of motivation.¹³

One can see, then, why Aristotle grants a robust role for (prospective) shame: a learner may come to experience shame at having to be reminded to supply a ‘thank you,’ say, because they recognize that they have failed to do what is expected of them—first by those they love and trust and then, eventually, by themselves. Although Curzer is right that inculcating habit includes a significant role for shame and thus pain, or at least discomfort, here is the bit that he does not

¹² Thanks to Carl Auerbach for encouraging me to emphasize this point.

¹³ There is a large literature on identity-based motivation. I will just note here the work of Augusto Blasi (e.g., 1983; 1984), who has been influential in drawing attention to identity-based motivation as a form of *moral* motivation. With regard to empirical evidence from the moral domain supporting the notion of identity-based motivation, see for example, the study in Colby and Damon (1992) where moral contents figured much more centrally in the self-identity of adult moral exemplars than those contents did for average adults. See also the studies of adolescent moral exemplars that found that the exemplars described themselves using moral traits more often than their peers did (Hart and Fegley 1995; Reimer 2003).

adequately acknowledge: In fostering identity-based motivation, this process also creates conditions for the learner to find pleasure through taking pride in their own behavior.

Curzer is right that Aristotle does not explicitly give pride a role with corresponding prominence to shame in the process of habituation. Jessica Moss, however, suggests that this is primarily the result of linguistic limitations: “he does not have a word for pride as a *pathos*, presumably because all the words at his disposal have connotations of excess” (2012: 216). She does note Aristotle’s discussion of greatness of soul (*megalopsuchia*) in the *Eudemian Ethics* (1221a31), where he situates ‘valuing oneself’ between the deficiency of self-belittling and the excess of vanity, contending that Aristotle describes ‘valuing oneself’ as a passion-like pleasure (Moss 2012: 216, n.30). Thus, Moss concludes, “one pleasurable passion always accompanies virtuous activity, namely pride” (2012: 216).

This looks to be exactly the kind of pleasure that we hope our children gain from learning to habitually say ‘please’ and ‘thank you.’ Notably absent from the developmental arc I have outlined are any external rewards. Consider, by contrast, how external rewards, including sticker charts and the like, are frequently recommended for the process of potty training. But this is how it should be: inculcating the habit of saying ‘please’ and ‘thank you’ should not involve external rewards if the aim is to foster internal motivation. Indeed, empirical research suggests that external rewards are likely not only to undermine the learner’s internal motivation, but even their performance of the behavior (see, e.g., Batson et al. 1978; Fabes et al. 1989; Warneken and Tomasello 2008). Moreover, the contrast in the typical reward systems for saying ‘please’ and ‘thank you’ and potty training further supports my contention that, unlike with potty training, when it comes to saying ‘please’ and ‘thank you,’ we care about more than the mere production of behavior.

One might note, however, that we do tend to praise our children when they successfully navigate a social situation by correctly employing ‘please’ and ‘thank you.’ Would this praise not

count as an external reward, similar to Aristotle's remark that honor serves as external motivation for citizen soldiers (1116a19–20)? I suppose that if one's praise were overly performative and public, this could be an issue, but I do not think that caregiver praise, particularly in the context of the habit of saying 'please' and 'thank you,' tends to operate in that way and, of course, given how honor is—problematically, for the development of virtue—an external motivator, we can say that praise ought not, in this case, to be delivered in a performative and public way. Rather, such praise may be quite quick and/or subtle: a wink or a nod, not meant to garner attention from anyone other than the learner themselves. Or one may wait to offer praise until one is no longer in the situation—after one has returned home from an outing, say, one remarks to the child, 'Really nice manners today!' Significantly, the empirical research suggests that praise seems unlikely to serve as external motivation: praise conveys information regarding the learner's positive competence and is not seen as controlling or instrumental in the way that external rewards are, and so does not negatively impact motivation (Warneken and Tomasello 2008: 1786). But in conveying positive competence, we can see how praise can help the learner come to experience their behavior as a source of pride, which is just the kind of intrinsic reward that, as discussed above, Wood tells us is most effective for habit formation.

Our practice of inculcating the habit of saying 'please' and 'thank you,' then, suggests that, consistent with the Aristotelian picture, although pain (discomfort) might have the more active and prominent role in the actual process of habituation via shame and prospective shame, the process nevertheless cultivates and shapes the learner's sources of pleasure and pride. We can also see how this habituation occurs without explicit teaching, and how the process encourages critical reflection and self-revision of behavior. As the learner matures, all sorts of explicit teaching can occur in parallel to the ongoing habituation of saying 'please' and 'thank you'—discussions and arguments about empathy, respect, entitlement, gratitude, and so on. This sets the stage for the learner to be

not only internally motivated to say ‘please’ and ‘thank you,’ but to do so *because* it is the virtuous thing to do—or, to use Aristotle’s language, *for its own sake*.

To reiterate, what we have here is a *particular* way of inculcating this habit. One could certainly establish this kind of consistent outward behavior via other methods—through coercion or manipulation, say, and yes, mindless conditioning as well. Such methods obviously will not be conducive to virtue. But in unpacking *this* way of inculcating the habit of saying ‘please’ and ‘thank you,’ we can see that there is—contra the paradox of moral education—a role for habit in the cultivation of virtue.

The Virtue-Skill Analogy: Insights from Sport

We model the behavior, we correct, we prompt, we fail to acknowledge requests that omit ‘please,’ we wait expectantly for a belated ‘thank you,’ and then we come to realize that getting a child to habitually say ‘please’ and ‘thank you’ is often hard. It requires a demanding level of consistency on the part of the caregiver(s), and it takes a long time for the habit to become established. Fortunately, psychology and cognitive science provide us with resources for exploring habit formation that were unavailable to Aristotle.

We have seen renewed attention in recent years to the virtue-skill analogy—in which the development of virtue is likened to the acquisition of a practical skill—with many philosophers drawing on contemporary work in psychology and cognitive science to inform our understanding of the development and moral psychology of virtue (see, e.g., Annas 2011; Fridland 2017; Stichter 2018; Vigani 2021). In these discussions, the virtuous person is often understood as a kind of ethical expert, akin to an expert practitioner of such skilled activities as playing chess, musical instruments, or sports. I want to focus on a couple of aspects of skill development in the context of sport that, I suggest, provide some useful insights regarding how we might foster discernment and critical reflection through the process of habituation into virtue. In particular, I will discuss how athletes

foster discernment by cultivating what is known as perceptual-cognitive expertise, as well as how the use of feedback in sports skill development can help us understand how, in the context of virtue, habituation and teaching can work together to foster critical reflection and virtue more generally.

There is one function of habituation into virtue about which, it seems, most everyone agrees: habituation fosters discernment (Kristjánsson 2007: 36; Sherman 1989: 171–172). This is frequently glossed as learning to identify virtuous (and vicious, one supposes) actions (Burnyeat 1999: 209–210; Curzer 2002: 146; Vasiliou 1996: 784), but we need to be a bit careful about what this means. The learner, by definition, does not yet possess practical wisdom and so ‘identifying’ here must be recognitional, not a matter of decision. The learner can come to recognize *that* this supplied example—from literature, say—or this course of action, as proposed by a teacher or caregiver, is a virtuous (or vicious) one. Eventually, the learner becomes able to select their own examples or instances—again, from daily life or from literature, for instance—of virtuous and vicious responses. The learner need not yet, however, be able to figure out on their own what would constitute a virtuous response to a situation that, say, they are currently facing.

The importance of discernment to virtue is particularly prominent in the work of John McDowell, who, in a well-known series of papers, draws an analogy between virtue and perception (McDowell 1998). The virtuous person, McDowell argues, sees situations in a distinctive way, a way that explains their virtuous behavior. This idea is strikingly similar to what researchers in the cognitive science of sport call “perceptual-cognitive expertise,” and—further supporting the link between virtue and expertise elaborated by proponents of the virtue-skill analogy—it is one of the most significant differences between professional athletes and novices (see MacMahon and McPherson 2009; Roca et al. 2013).

Central to perceptual-cognitive expertise is the ability for anticipatory information pick-up: in short, expert athletes are better than novices at ignoring irrelevant features of the situation and

attending to the relevant features, allowing them to earlier and more accurately predict what is about to transpire, thus giving themselves more time and resources to respond to what is happening (see Yarrow, Brown, and Krakauer 2009; Sutton and McIlwain 2015: 101–102; Sutton 2007: 770). For example, unlike novices, expert cricket batters glean considerable information from the bowler's delivery stride and ball release; this means that, before the ball has even left the bowler's hand, the expert batter already has a pretty good idea of what the bowl will look like and where the ball is likely to bounce (Drew 2021: S5; Sutton 2007: 770). As sports behavioral scientists Bruce Abernethy and David Russell conclude, “only expert players appear to have the necessary awareness [...] to be able to utilize advance information received from the movement of the opposing player's arm although this basic information is equally accessible to the novice” (1987: 315). Studies have established similar patterns of attention across a variety of sports, including tennis and baseball (see Drew 2021; for additional examples and discussion, see Fridland 2017).

Perceptual-cognitive expertise is, crucially, a matter of discernment: “Experts' perceptual skills are informed by what they know, as certain combinations of sensory stimuli, and not others, appear salient” (Sutton and McIlwain 2015: 97). In short, as Lawrence Shapiro and Shannon Spaulding note, “The athletes see or conceive of the world [...] differently than do non-athletes” (2019: 16). Moreover, this idea of perceptual-cognitive expertise reveals how the cultivation of discernment involves establishing habits of attention. Indeed, sports scientists are currently pursuing and testing different avenues to more effectively cultivate such habits of attention in athletes, including dynamic vision-training sessions involving strobe lights and virtual reality simulations (Drew 2021: S5–S6). For example, Duke University baseball players train by watching pitches in virtual reality; players have to call whether the pitch is a ball or strike and after each correct response, the simulation stops earlier in the pitching sequence, thereby training the players to pick up relevant cues as early as possible (Drew 2021: S4).

Perceptual-cognitive expertise brings to the fore two important points about habituation. First, training discernment is already imparting views about value—about what is informative, what is irrelevant, what is important, what is not. This not only (yet again) allows us to see how habituation into virtue is not the process of mere mechanical conditioning depicted by the paradox of moral education, but also how habituation can be a critically reflective practice. The learner can for themselves see the interplay between the features of the situation to which they attend, their understanding of those features (and of the situation), their responses to the situation, and the consequences of those responses. If things do not play out as they expect (or even if they do), the learner is in a position to critically examine, perhaps with some assistance from caregivers or teachers, all of those things. With regard to the habit of saying ‘please,’ and ‘thank you,’ one might, for example, ask the learner, ‘Did you see how pleased Grandma was when you thanked her for handing you your toy?’

The second point is that when we think about the process of habituation into virtue, we need to think about training the underlying habits of attention in addition to overt behavior. In this, I am sympathetic to Ellen Fridland’s contention: “moral education and moral virtue requires that agents not only do the right thing, if one notices that that thing is required, but to pay attention properly: to become aware of one’s own surroundings, to notice others, to be properly engaged with the world” (2017: 163). One can see that, in inculcating the habit of saying ‘please’ and ‘thank you’ as discussed above, we are, to some extent, training habits of attention in this way. Consider, for example, how when we stand expectantly awaiting a ‘thank you’ we are redirecting the learner’s attention back toward the person who has facilitated the request. We are training them not to divert their attention away so quickly, because that person warrants their attention and acknowledgement.

The research on perceptual-cognitive expertise in the context of sport, however, suggests that we would also do well to think more explicitly about anticipatory information pick-up in the

context of character education. One might, for example, briefly take a child aside and supportively remind them to ‘find their manners’ before entering a store or a restaurant, thus readying the child to go into the situation attentive to the relevant social cues. Indeed, ‘find your manners’ would seem to be an example of the kinds of “instructional nudges” that expert athletes use—short phrases or words that are used to convey detailed practical guidance succinctly (see Sutton 2007: 773–774).

Finally, thinking about learning-by-doing in the context of sport highlights the important role that feedback plays in the learning process and helps us to see why the boundary between habituation and teaching will be vague at best. With character as with sports, one is unlikely to improve without effective feedback. This is why Aristotle insists on the need for teachers in habituation—otherwise the repetition of activity may make one worse rather than better (1103b8–13). Effective feedback will need to involve specific articulations of relevant features of what transpired, in order to reinforce the exercise of discernment and, in the case of saying ‘please’ and ‘thank you,’ cultivate the expression of, say, empathy, respect, and gratitude. Moreover, we can see how feedback and teaching would go hand in hand. An after-the-fact analysis of situations—analogueous to how athletes watch tapes after competition—might be among the first kinds of explicit teaching we introduce to learners (certainly before ethics lectures!). The imitation that Aristotle includes in the earliest stages of habituation would be preparatory for such analysis, further supporting the idea that (some) habituation would have to precede even this kind of instruction.

Yet the feedback that one provides learners can be delivered in many different ways. Consider, for example, the teaching style known as ‘guided discovery,’ one of eleven teaching styles for physical education elaborated by Muska Mosston and Sara Ashworth in their framework, *The Spectrum of Teaching Styles* (2002). Guided discovery is a process whereby the teacher brings students, through a series of questions, to discover for themselves some pre-determined concept/answer/solution. For example, a ski instructor might ask a group of learners facing a

traverse across an icy hill: ‘Which might be better—standing on both feet or standing on your downhill foot? Let’s all try it and then tell me what you think.’ Guided discovery, of course, requires language skills, and so would not begin as early in the developmental process as, say, modelling behavior. But guided discovery need not involve any of the kind of explicit instruction that seems to worry Curzer and, indeed, would seem to be a particularly apt way for learners “to discover the right acts for themselves” (Curzer 2002: 145). It would also seem to itself constitute practice at the very kind of critical engagement that proponents of the paradox of moral education worry—mistakenly, as I have been arguing—habituation cannot deliver. Moreover, one can engage a learner in guided discovery without making explicit that one is teaching in that way, or teaching at all, for that matter. Guided discovery also seems to be an activity with the potential to foster internal motivation. In discovering for themselves, rather than doing what is expected of them or what they have been told to do, the learner comes to see that this is the thing to be done, for reasons that are *theirs*.

It may be hard, in the end, to decide on which side of the teaching-habituation divide student-centered, discovery-based teaching styles like guided discovery should fall. This suggests that the boundary between teaching and habituation is unlikely to be hard and fast. But a vague boundary between habituation and teaching is *exactly* what one would expect given the close relationship between the virtues of character and practical wisdom. Like practical wisdom and the virtues of character, habituation and teaching go together, even though habituation must commence before teaching. Contra the paradox of moral education, one does not try to teach practical wisdom to “walking bundles of habit” (Kristjánsson 2007: 32) whose capacities for critical reflection have been stultified by a mindless, mechanical process of behavior formation.

Small Habit, Big Implications

In all of this discussion about the inculcation of the habit of saying ‘please’ and ‘thank you,’ we should not lose sight of the fact that this is just one small habit. Saying ‘please’ and ‘thank you’

may be a habit constitutive of at least the virtue of respect, but the habit is not itself a virtue, nor is it, on its own, sufficient for virtue. Saying ‘please’ and ‘thank you’ is also, of course, culturally specific. Yet it seems plausible that at least some of what one learns through the inculcation of this habit is not. As Sarah Buss notes, “To learn that human beings are the sort of animal to whom one must say ‘please,’ ‘thank you,’ ‘excuse me,’ and ‘good morning’ [...] is to learn that human beings deserve to be treated with respect, that they are respectable...” (1999: 800–801). David McPherson adds to this point, “these manners are *revelatory*; they enable a *transfigured* or *regealted* vision whereby the equal inherent respect-worthiness of all human beings (*qua* human) can come into view. This is a revelation that depends upon *enactment* of this respect-worthiness through manners in that we only come to grasp fully the significance at issue through living it out” (2018: 143). Thinking about the habit of saying ‘please’ and ‘thank you’ can also help us see why Aristotle would insist that the inculcation of habit is so crucial to virtue, and why he emphasizes the importance of repeated activities: When one is living among other people, saying ‘please’ and ‘thank you’ will be something one does quite often. As such, it (along with other manners) serves “as a *constant* reminder that persons are worthy of respect” (Buss 1999: 808). This small habit has big implications: it shapes how one sees and understands others. It is a means through which one comes to see—correctly—human beings as worthy of respect.

Many questions remain unanswered. It would be interesting to think about what other virtuous habits one might inculcate, how that inculcation might work, and the extent to which the process of inculcation mirrors or departs from that of the habit of saying ‘please’ and ‘thank you.’ It would also be interesting to think about what the continuation of this habituation into adulthood might look like, and how—together with teaching—habituation brings the individual to perform virtuous actions for their own sake. What is clear, however, is that the inculcation of habit need not be antithetical to the kinds of intelligent, critical reflection necessary for full virtue. Rather, Aristotle

seems right to insist that habits are crucial to the development of the settled, stable state that is virtue of character. There is, therefore, no paradox of moral education.

Seton Hall University
denise.vigani@shu.edu

Thanks to Iakovos Vasiliou, Christian Miller, Jessica Moss, Benjamin Miller, Katie Tullmann, Travis Timmerman, my fellow members of the Virtue and Moral Psychology working group, and the anonymous reviewers from this journal for comments on earlier drafts of this paper. Thanks to Jim Vigani for introducing me to guided discovery. This research was supported by a summer stipend from the Seton Hall University Research Council.

References

- Abernethy, Bruce, and David G. Russell. 1987. "The Relationship Between Expertise and Visual Search Strategy in a Racquet Sport," *Human Movement Sciences* 6:283–319.
- Annas, Julia. 2011. *Intelligent Virtue*. New York: Oxford University Press.
- Barker, Ernest. 1958. *The Politics of Aristotle*. New York: Oxford University Press.
- Batson, C. Daniel, Jay S. Coke, M. L. Jasnosi, and Michael Hanson. 1978. "Buying Kindness: Effect of Extrinsic Incentive for Helping on Perceived Altruism," *Personality and Social Psychology Bulletin* 4 (1):86–91.
- Blasi, Augusto. 1983. "Moral Cognition and Moral Action: A Theoretical Perspective," *Developmental Review* 3:178–210.
- Blasi, Augusto. 1984. "Moral Identity: Its Role in Moral Functioning," in *Morality, Moral Behavior, and Moral Development*, edited by William M. Kurtines and Jacob L. Gewirtz, 128–139. New York: John Wiley.
- Burnyeat, M.F. 1999. "Aristotle on Learning to be Good," in *Aristotle's Ethics: Critical Essays*, edited by Nancy Sherman, 205–230. Lanham, MD: Rowman & Littlefield.
- Buss, Sarah. 1999. "Appearing Respectful: The Moral Significance of Manners," *Ethics* 109 (4):795–826.
- Colby, Anne, and William Damon. 1992. *Some Do Care: Contemporary Lives of Moral Commitment*. New York: Free Press.
- Curren, Randall. 1999. "Cultivating the Intellectual and Moral Virtues," in *Virtue Ethics and Moral Education*, edited by David Carr and Jan Steutel, 67–81. London: Routledge.
- Curzer, Howard. 2002. "Aristotle's Painful Path to Virtue," *Journal of the History of Philosophy* 40 (2):141–162.
- Denham, Susanne A. 2007. "Dealing with Feelings: How Children Negotiate the Worlds of Emotions and Social Relationships," *Cognition, Brain, Behavior* 11 (1):1–48.
- Drew, Liam. 2021. "Training for the Impossible," *Nature* 592 (7852):S4–S6.
- Fabes, Richard A., Jim Fultz, Nancy Eisenberg, Traci May-Plumlee, and F. Scott Christopher. 1989. "Effects of Rewards on Children's Prosocial Motivation: A Socialization Study," *Developmental Psychology* 25 (4):509–515.
- Foot, Philippa. 2002. "Virtues and Vices," in *Virtues and Vices and Other Essays in Moral Philosophy*, 1–18. Oxford: Clarendon Press.
- Fridland, Ellen. 2017. "Motor Skill and Moral Virtue," *Royal Institute of Philosophy Supplement* 80:139–170.
- Hart, Daniel, and Suzanne Fegley. 1995. "Prosocial Behavior and Caring in Adolescence: Relations to Self-Understanding and Social Judgment," *Child Development* 66:1346–1359.
- Hursthouse, Rosalind. 1988. "Moral Habituation," *Oxford Studies in Ancient Philosophy* 6:201–219.
- Hursthouse, Rosalind. 1999. *On Virtue Ethics*. Oxford: Oxford University Press.
- Irwin, Terence. 1999. *Aristotle's Nicomachean Ethics*. Second ed. Indianapolis: Hackett Publishing Company.
- James, William. 1890. *The Principles of Psychology*. Vol. 1. New York: Henry Holt.
- Kristjánsson, Kristján. 2007. *Aristotle, Emotions, and Education*. Hampshire, England: Ashgate.
- Lockwood, Thornton C. 2013. "Habituation, Habit, and Character in Aristotle's *Nicomachean Ethics*," in *A History of Habit: From Aristotle to Bourdieu*, edited by Tom Sparrow and Adam Hutchinson, 19–36. Lanham, MD: Lexington Books.
- MacMahon, C., and S. L. McPherson. 2009. "Knowledge base as a mechanism for perceptual-cognitive tasks: Skill is in the details!" *International Journal of Sport Psychology* 40:565–579.
- McDowell, John. 1998. *Mind, Value, and Reality*. Cambridge, MA: Harvard University Press.

- McPherson, David. 2018. "Manners and the Moral Life," in *The Theory and Practice of Virtue Education*, edited by Tom Harrison and David Walker, 140–152. Oxfordshire: Routledge.
- Moss, Jessica. 2012. *Aristotle on the Apparent Good: Perception, Phantasia, Thought & Desire*. Oxford: Oxford University Press.
- Mosston, Muska, and Sara Ashworth. 2002. *Teaching Physical Education*. 5th ed. San Francisco: Benjamin-Cummings Pub Co.
- Peters, R. S. 2015. "Reason and Habit: The Paradox of Moral Education," in *Moral Development and Moral Education*, 45–60. New York: Routledge. Original edition, 1981, Allen & Unwin.
- Reimer, Kevin. 2003. "Committed to Caring: Transformation in Adolescent Moral Identity," *Applied Developmental Science* 7 (3):129–137.
- Roca, A., P. R. Ford, A. P. McRobert, and A. M. Williams. 2013. "Perceptual-cognitive skills and their interaction as a function of task constraints in soccer," *Journal of Sport & Exercise Psychology* 35:144–155.
- Russell, Daniel C. 2015. "Aristotle on Cultivating Virtue," in *Cultivating Virtue: Perspectives from Philosophy, Theology, and Psychology*, edited by Nancy E. Snow, 17–48. New York: Oxford University Press.
- Shapiro, Lawrence, and Shannon Spaulding. 2019. "Embodied Cognition and Sport," in *Handbook of Embodied Cognition and Sport Psychology*, edited by Massimiliano Cappuccio, 3–22. Cambridge, MA: MIT Press.
- Sherman, Nancy. 1989. *The Fabric of Character: Aristotle's Theory of Virtue*. Oxford: Oxford University Press.
- Small, Will. 2020. "Practical Knowledge and Habits of Mind," *Journal of Philosophy of Education* 54 (2):377–397.
- Sorabji, Richard. 1974. "Aristotle on the Role of Intellect in Virtue," *Proceedings of the Aristotelian Society* 74:107–129.
- Stichter, Matt. 2018. *The Skillfulness of Virtue*. New York: Cambridge University Press.
- Stipek, Deborah. 1995. "The Development of Pride and Shame in Toddlers," in *Self-Conscious Emotions*, edited by Judith Tangney and Kurt Fischer, 237–252. New York: Guilford.
- Sutton, John. 2007. "Batting, habit, and memory: The embodied mind and the nature of skill," *Sport in Society* 10 (5):763–786.
- Sutton, John, and Doris McIlwain. 2015. "Breadth and Depth of Knowledge in Expert versus Novice Athletes," in *The Routledge Handbook of Sport Expertise*, edited by Damian Farrow and Joe Baker, 95–105. London: Routledge.
- Vasiliou, Iakovos. 1996. "The Role of Good Upbringing in Aristotle's Ethics," *Philosophy and Phenomenological Research* 56 (4):771–797.
- Vasiliou, Iakovos. 2007. "Virtue and Argument in Aristotle's Ethics," in *Moral Psychology (Poznan Studies in the Philosophy of the Sciences and Humanities, vol. 94)*, edited by Sergio Tenenbaum, 37–78. Amsterdam/New York: Rodopi.
- Vasiliou, Iakovos. 2014. "Apparent Goods: A Discussion of Jessica Moss, Aristotle on the Apparent Good," *Oxford Studies in Ancient Philosophy* 46:353–381.
- Vigani, Denise. 2021. "Virtue and Embodied Skill: Refining the Virtue-Skill Analogy," *Journal of Value Inquiry* 55 (2):251–268.
- Warneken, Felix, and Michael Tomasello. 2008. "Extrinsic Rewards Undermine Altruistic Tendencies in 20-Month-Olds," *Developmental Psychology* 44 (6):1785–1788.
- Wood, Wendy. 2019. *Good Habits, Bad Habits: The Science of Making Positive Changes That Stick*. London: Macmillan.

Yarrow, Kielan, Peter Brown, and John W. Krakauer. 2009. "Inside the Brain of an Elite Athlete: The neural processes that support high achievement in sports," *Nature Reviews Neuroscience* 10:585–596.