

## Practical Knowledge and Habits of Mind Will Small

We are habituated to the *representation* of habit; nevertheless to determine the  
*concept* of habit is difficult.  
—Hegel, *Philosophy of Mind*,  
§410Z.

### ABSTRACT

*Education aims not only at transmitting knowledge of facts, but also at the inculcation of abilities and propensities. We hope that students acquire not merely the ability to, e.g., think critically, but the propensity or habit of doing so—that critical thinking will be something they do do, not something they merely can do; that they will become, not merely capable of inquiry, but inquisitive; and so on. If education aims at more than the transmission of propositional knowledge, are these other aims non-cognitive, or non-epistemic? This essay aims to make progress on this question by critically examining Rylean conceptions of skill and habit, thereby making room for a neglected category, intelligent habit.*

### KNOWLEDGE AND THE AIMS OF EDUCATION

Education aims at more than supplying learners with information, or knowledge of facts. Even when the transmission of information *is* at stake, abilities relevant to using that information are among the things that teachers aim, or ought to aim, to inculcate. We may think that abilities for critical reflection on knowledge, and critical thinking more generally, are central to what teachers should cultivate in their students. Moreover, we may hope that students acquire not merely the ability to, e.g., think critically, but the *propensity* or *habit* of doing so. We hope that critical thinking will be something they *do* do, not something they merely *can* do; that they will become, not merely capable of inquiry, but inquisitive; and so on. If education aims at more than the inculcation of propositional knowledge, are these other aims non-cognitive, or non-epistemic? The answer to this question depends on whether knowledge is exhausted by propositional knowledge. For if it is not, then it is possible that developing skills, and abilities (and the associated habits)—including those to use and reflect critically on information—may itself constitute the acquisition of knowledge.

Gilbert Ryle (1946; 1949, ch.2) argued that skills—and ‘intelligent capacities’ more generally—consist (in part or whole) in a kind of knowledge *how* that is not reducible to knowledge *that*. And in a later essay on the topic of education, Ryle observed that, although a ‘familiar and indispensable part or sort of teaching consists in teaching by rote lists of truths or facts’, nevertheless:

every teacher knows that only a vanishingly small fraction of his teaching-day really consists in simply reciting lists of such snippets of information to pupils, but very unfortunately, it happens to be the solitary part which unschooled parents, sergeant-majors, and some silly publicists and some educationalists always think of when they think of teaching and learning. (1967, p. 466)

Ryle urged epistemologists and philosophers of education to give up the ‘shibboleth’ that ‘all lessons are strings of memorisable propositions’ and switch their attention to ‘the development of abilities and competences’ (1967, 467). But given his conception of the connection between intelligent capacities, abilities, and competences with knowledge-how, this was not a recommendation to focus on developmental processes that are non-cognitive or non-epistemic: the acquisition of an intelligent capacity, insofar as it the acquisition of know-how, is a cognitive achievement.

In recent years, however, Ryle’s distinction between knowledge-how and knowledge-that has come under attack. According to *intellectualism*, knowing how to do something simply is knowing that something is the case.<sup>1</sup> Intellectualists typically hold that someone may know how to  $\phi$  despite lacking the ability to  $\phi$  (where this is distinct from merely not being able to exercise one’s ability to  $\phi$  due to lack of means or opportunity, interference, etc.).<sup>2</sup> It is therefore natural for intellectualists to conceive of skills—and intelligent capacities or abilities more generally—as hybrid states, factoring into some state(s) of propositional knowledge concerning how to do something, and some non-cognitive abilities, the manifestation of which may be ‘guided’ by that propositional knowledge.<sup>3</sup> This would suggest that teaching a skill factors into cognitive and non-cognitive components: the transmission of propositional knowledge and the inculcation of non-cognitive abilities or mechanisms that facilitate putting that knowledge into practice.<sup>4</sup>

Intellectualism can be motivated in different ways. Some intellectualists are inspired by putative counterexamples to the view, commonly though incorrectly attributed to Ryle, that one knows how to  $\phi$  just in case one has the ability to  $\phi$ .<sup>5</sup> Another motivation comes from accounts of the syntax and semantics of sentences that ascribe know-how (together with commitments about the accounts’ metaphysical significance).<sup>6</sup> Perhaps the deepest motivation is the idea that if ‘know-how’ is really a kind of *knowledge*, then a unified account of knowledge is needed. Intellectualism unifies know-how with other cases of knowledge by construing it, as it does the others, as propositional knowledge.

Alternative unified accounts are possible, however. Ryle (according to Kremer, 2017a) held that knowledge—whether knowledge-how or knowledge-that—is a ‘capacity to get things right’. But from an intellectualist viewpoint, appealing to capacities, abilities, competences, or other kinds of dispositional states—whether to explain skill, know-how, or knowledge *tout*

*court*—must be a non-starter. For if the target is a genuinely cognitive state, it must be something ‘over and above purely physical dispositions’ (Stanley 2011, 10). Accounting for know-how in terms of ‘mere abilities or dispositions to behavior, which can be enjoyed even by mindless entities or automata, such as simple machines and plants’ might explain the sense in which know-how ‘seems to be *practical*’, but not how it is ‘a genuinely *cognitive*, even if not a ratiocinative or discursive, achievement’ (Bengson and Moffett, 2011, p. 161).<sup>7</sup>

It is thus crucial to the Rylean account that the capacities, abilities and competences that constitute skill and know-how have a distinctive form: they are ‘intelligent’ capacities, which are to be distinguished from the sorts of capacities that non-rational animals (etc.) have (Ryle, 1946, p. 234, 1949, pp. 30–34; Bäckström and Gustafsson, 2017; Small, 2017). Ryle sharply distinguishes intelligent capacities from habits, warning that

competences and skills...are certainly second natures or acquired dispositions, but it does not follow from this that they are mere habits. Habits are one sort, but not the only sort, of second nature, and ... the common assumption that all second natures are mere habits obliterates distinctions which are of cardinal importance... (Ryle, 1949, p. 30)

Though Ryle acknowledges that habits are tendencies and tendencies are not capacities (1949, 114ff.), the capacity–tendency distinction does not underlie the ‘vs.’ in his section heading ‘Intelligent Capacities vs. Habits’; rather, it is the idea that habits (and their manifestations) are *unintelligent*: the key contrast is between intelligent and unintelligent dispositions (‘disposition’ being Ryle’s term for the supercategory under which capacities and tendencies fall). Evidently Ryle expects his readers to assume that habits are unintelligent dispositions, as this is not an assumption he challenges. Indeed, it is crucial to his project—of providing an alternative to intellectualism’s account of know-how as (i) a genuine instance of knowledge and (ii) what explains the intelligence of intelligent actions—that skills (and other intelligent capacities) not be conflated with habits, as many philosophers before and since have done.

I will refer to this strategy for elucidating the concept of distinctively rational and intelligent capacities—viz., by distinguishing them from non-rational, unintelligent habit—as the Rylean Strategy. But it is hardly unique to Ryle. Annas (2011a, chs. 2–3) aims to show that skills and virtues are intelligent by contrasting them with habits, and Kern (2017, ch. 6) articulates the concept of a rational capacity by contrasting it with habit.<sup>8</sup> But though I believe Ryleans are right to distinguish skill and habit, I will argue that the Rylean Strategy should be abandoned: it encourages serious misconceptions about both skills (and other rational capacities) and habits, and about the acquisition of both.

To return to education: if educators aim not only at the transmission of information and the inculcation of abilities, but at learners' acquisition of habits of mind as well, then the Rylean account of skill and know-how *also* suggests a hybrid picture (albeit one that draws the line between the cognitive and the non-cognitive in a different place from intellectualism): between the transfer of information and intelligent abilities (knowing-that and knowing-how) on the one hand, and the inculcation of habits on the other. Now, the position that seems available but unoccupied in contemporary philosophy is one that attempts to make sense of the idea of a habit as an intelligent, cognitive state. Indeed, perhaps good habits are cases of *knowing*, not (merely) *that* such-and-such is the case, or (merely) *how to* do such-and-such, but *to* do such-and-such (or *not to*). On such a view, all the aims of education broached above might be conceived as epistemic or cognitive aims. In what follows, I shall not so much argue for this view, as clear some of the ground necessary for it to get a hearing. In the next two sections, I outline the Rylean conception of skill as a rational capacity and the Rylean Strategy for elucidating it. Thereafter I identify three misconceptions about habit encouraged by the Strategy—the last of which compromises its conception of skill.

## SKILL AS A RATIONAL CAPACITY

Contemporary discussions of skill and know-how usually distinguish two positions, intellectualism and anti-intellectualism, which are typically treated as not merely exclusive but exhaustive. The term 'anti-intellectualism' can be used simply to designate the denial of the claim that knowledge-how always consists solely in propositional knowledge; but then it is barely a position on skill and know-how at all—for saying what they are not is very far from saying what they are. There are many possible positive views of the nature of skill and know-how that reject intellectualism, and 'anti-intellectualism' is an apt name for some but not others. Despite the fact that Ryle is typically labeled an anti-intellectualist, careful attention to his writings (Small, 2017) and their historical context (Kremer, 2017b) shows that he sought a middle path between two positive views: intellectualism on the one hand, and on the other, an alternative that deserves—substantively and historically—the name 'anti-intellectualism' (a term Ryle did not use).

Ryle argues that intellectualism cannot account for the intelligence of intelligent actions. According to intellectualism, the intelligence of an action is derivative: it derives from the intrinsic intelligence of the propositional knowledge that figures among the action's causes. What explains the difference between two pieces of behaviour—one intelligent, the other unintelligent—that might otherwise appear qualitatively indistinguishable (e.g. a clown's tumbling vs. a clumsy person's) is whether the behaviour is guided by an intellectual apprehension of truths concerning how to act. Ryle notes that both (i) the *selection* of the propositional knowledge on which to act from among the agent's stock of such knowledge and

(ii) its *execution* or *application* are themselves things that can be evaluated for their intelligence (or lack thereof); but a vicious regress ensues if the intellectualist account is applied to the selection and application of propositional knowledge concerning how to do things.<sup>9</sup> Ryle thus rejects a causal theory of the intelligence of intelligent action, denying that actions inherit the qualities of mind we ascribe to them from mental states or events that cause them.

In place of a causal account, Ryle offers a dispositional one:

The cleverness of the clown may be exhibited in his tripping and tumbling. ... It is his visible performance that [the spectators] admire, but they admire it not for being an effect of any hidden internal causes but for being an exercise of a skill. ... To recognise that a performance is an exercise of a skill is indeed to appreciate it in the light of a factor which could not be separately recorded by a camera. But the reason why the skill exercised in a performance cannot be separately recorded by a camera is not that it is an occult or ghostly happening [i.e. a 'mental event'], but that it is not a happening at all. It is a disposition, or complex of dispositions, and a disposition is a factor of the wrong logical type to be seen or unseen, recorded or unrecorded. (Ryle, 1949, pp. 21–22)

But though Ryle allowed that '[i]n discussing dispositions it is initially helpful to fasten on the simplest models, such as the brittleness of glass', he warned that doing so, 'though initially helpful, leads at a later stage to erroneous assumptions' (1949, pp. 31–32). He certainly did not want to equate the sorts of dispositions that figure in his account of human mindedness and agency with anything like fragility or solubility, or even the complex and goal-oriented dispositions of machines, plants, and animals:

The well-regulated clock keeps good time and the well-drilled circus seal performs its tricks flawlessly, yet we do not call them 'intelligent'. ... To be intelligent is not merely to satisfy criteria, but to apply them; to regulate one's actions and not merely to be well-regulated. (Ryle 1949, 17)

Whereas a genuine anti-intellectualist would insist that there is at best a difference of degree between the proficient performances of rational and non-rational animals, Ryle clearly concurs with the intellectualist that there is a difference in *kind*—while rejecting intellectualism's account of the difference.

Annas's conceptual framework is strikingly similar. In *Intelligent Virtue* (2011a), she addresses the worry that if virtues are dispositions, they and their manifestations are unintelligent. Neither the fragility of glass, nor a glass's manifesting that disposition by breaking, is intelligent, and a glass deserves no praise or blame for breaking. It would be an 'objection...to

the project of making virtue central to an ethical theory' (Annas, 2011a, p. 3) if a philosophical account of virtue represented virtuous activity as 'the outcome of a blind, non-rational habit or instinct, like the courageous behaviour—so called only by courtesy—of a lioness defending her cubs' (McDowell, 1979, p. 51) and saw the virtuous person 'as a sort of Good Dog, whose desires and inclinations have been so perfectly trained that he always does what he ought to do spontaneously and with tail-wagging cheerfulness and enthusiasm' (Korsgaard, 2009, p. 3). Annas identifies a number of features that distinguish virtues from 'scientific' dispositions such as fragility, but the core of her account is the claim that virtues are *intelligent*. The intelligence of virtue, Annas thinks, can be elucidated by analogy to skill: 'central' to her conception of virtue is 'the idea that the practical reasoning of the virtuous person is analogous...to the practical reasoning of someone who is exercising a practical skill' (2011a, p. 3), where a practical skill is a distinctive kind of capacity or disposition: a rational and intelligent one.

The concept of a rational capacity doesn't fit easily into the contemporary debate about know-how. Of course, it is acknowledged by all parties that there are rational capacities— if what that means is that people have capacities to think and act rationally. But the rationality of those thoughts and actions is thought to derive from propositional attitudes. Intellectualists think that know-how is a propositional attitude, and that it is what explains the intelligence and rationality of skillful action, whereas genuine anti-intellectualists—Hubert Dreyfus (e.g. 2007) is a prominent example—think that, because (in their view) propositional attitudes cannot account for skillful action, skills are *not* rational capacities. By contrast, the idea of a rational capacity that, properly articulated, would provide an alternative to both intellectualism and anti-intellectualism must be the idea—not merely of a capacity the manifestations of which are credited with rationality, but rather—of a capacity that has a distinctively rational *form*.<sup>10</sup> This is exactly Kern's idea (2017, ch. 6), which has its precedent in Aristotle (*Metaphysics* Θ.2, 5).

Kern argues that many of the problems that beset contemporary epistemology's treatments of propositional knowledge can be avoided by conceiving of S's knowing that p as a *perfect exercise of S's rational capacity for knowledge* (2017, p. 135). Like Ryle, on whose account she aims to build, Kern elucidates her conception of a rational capacity by (among other things) distinguishing it from habit. And though Annas does not discuss Ryle, she clearly thinks that the 'assumption that all second natures are mere habits obliterates distinctions which are of cardinal importance for the inquiries' into *virtue* in which *she* is engaged. The 'natural...worry whether habituation is just habit, and whether a virtuous disposition is just one built up by force of habit...[whether] it amounts to anything more than habit and even mere routine' (Annas, 2011a, pp. 12–13) is a recurrent theme, one Annas proposes to address by distinguishing skills and virtues from habits: '[t]he analogy with practical skill...enables us to see how virtue can be a disposition requiring habituation without becoming mere routine' (2011a, p. 15).

## THE RYLEAN STRATEGY

To carve out space for the concept of a rational capacity or intelligent disposition, Ryle, Annas, and Kern each insist that skills (and other intelligent capacities) are not mere habits. This is important, because skills and habits are often conflated. We find a clear example in William James, who writes in his *Principles of Psychology* that ‘actions originally prompted by conscious intelligence may grow so automatic by dint of habit as to be apparently unconsciously performed. Standing, walking, buttoning and unbuttoning, piano-playing, talking, even saying one’s prayers, may be done when the mind is absorbed in other things’ (James, 1890, 1:5), and that while ‘a simple habit...—the habit of snuffling, for example, or of putting one’s hands into one’s pockets, or of biting one’s nails—is, mechanically, nothing but a reflex discharge’ so ‘[t]he most complex habits...are...nothing but *concatenated* discharges in the nerve-centres, due to the presence there of systems of reflex paths’ (1: 107–8):

If an act require for its execution a chain, A, B, C, D, E, F, G, etc., of successive nervous events, then in the first performance of the action the conscious will must choose each of these events from a number of wrong alternatives that tend to present themselves; but habit soon brings it about that each event calls up its own appropriate successor without any alternative offering itself, and *without any reference to the conscious will*, until at last the whole chain, A, B, C, D, E, F, G, rattles itself off as soon as A occurs, just as if A and the rest of the chain were fused into a continuous stream. When we are learning to walk, to ride, to swim, skate, fence, write, play, or sing, we interrupt ourselves at every step by unnecessary movements and false notes. When we are proficient, on the contrary, the results not only follow with the very minimum of muscular action requisite to bring them forth, they also follow from a single instantaneous ‘cue’. The marksman sees the bird, and, before he knows it, he has aimed and shot. A gleam in his adversary’s eye, a momentary pressure from his rapier, and the fencer finds that he has instantly made the right parry and return. A glance at the musical hieroglyphics, and the pianist’s fingers have rippled through a cataract of notes. And not only is it the right thing at the right time that we *thus involuntarily do*, but the wrong thing also, if it be an habitual thing. ... Very absent-minded persons in going to their bedroom to dress for dinner have been known to take off one garment after another and finally to get into bed, merely because that was the habitual issue of the first few movements when performed at a later hour. ... We all of us have a definite routine manner of performing certain daily offices connected with the toilet, with the opening and shutting of familiar cupboards, and the like. *Our lower centres know the order of these movements*, and show their knowledge by their ‘surprise’ if the objects are altered so as to oblige the

movement to be made in a different way. *But our higher thought-centres know hardly anything about the matter.* (James, 1890, 1:114–5, my emphases)

James treats skilled actions (such as piano-playing and fencing) and habitual actions (such as biting one's nails and performing one's toilet) together, claiming that both are automatic, unthinking, unconscious, and involuntary. The source of these qualities is 'habit'—a disposition acquired from experience and repetition. The type of action repeatedly performed is the type of action in which the habit, once developed, issues.<sup>11</sup>

There are important differences, ignored by James, between his cases. The definite and repeated order of movements that might characterise the way in which someone habitually goes about brushing her teeth (wetting the brush, then turning off the tap before applying the toothpaste, then turning on the tap to wet the toothpaste, etc.) might characterise some skilled actions (think of the regular, repeated, and often recognisable motions that constitute, say, Serena Williams's serve or Muttiah Muralitharan's bowling action), but a moment's reflection (on jazz, for instance), shows that it doesn't characterise skill in general. Indeed, James characterises the proficient fencer as one who, on cue, instantly makes the *right* parry and return: making the *same* parry and return on each occasion would be hopeless. It is often and correctly said that skills confer reliability on their possessor's performances, but what is reliable is that the agent does the *right* or *appropriate* thing.

Ryle is sensitive to this fact: acquiring an intelligent capacity, he says, 'is becoming capable of doing some correct or suitable thing in *any* situations of certain general sorts. It is becoming prepared for *variable* calls within certain ranges'; thus a man 'who can cope only with the same nursery-climbs over which he was taught, in conditions just like those in which he was taught, and then only by going through the very motions which he had been then made to perform' is not a skilled rock-climber (1949, p. 129). Ryle moreover denies that exercises of skills are automatic, unthinking, unconscious and involuntary. He claims that someone who is exercising an intelligent capacity is 'thinking what he is doing', where this thinking is not an episode distinct from, though alongside, the doing of which it is a thinking, but rather a constitutive aspect of the doing itself: 'When I do something intelligently, i.e. thinking what I am doing, I am doing one thing and not two' (1949, p. 20). Similarly, Kern argues that a rational capacity is a 'self-conscious capacity': 'a capacity whose acts, in the paradigmatic sense, would not occur if the subject were not conscious of them as exercises of that very capacity' (2017, p. 177), where this consciousness is not distinct from the act of which it is a consciousness, but is rather 'constitutive for the performance of such acts in the first place' (p. 179).

But though the Ryleans insist that James and his ilk badly misrepresent skill, they seem content to leave something like his account of habit in place. In an effort to make his case that in exercising a skill, an agent is *thinking what he is doing*, Ryle contrasts skill and habit, contending



that '[w]hen we describe someone as doing something by pure or blind habit, we mean that he does it automatically and without having to mind what he is doing' and that '[a]n action done from pure habit is one that is not done on purpose' (1949, pp. 30, 115). Annas holds that '[t]he expert pianist plays in a way not dependent on conscious input, but the result is not mindless routine but rather playing infused with and expressing the pianist's thoughts about the piece'; this is 'practical mastery [that] is at the service of conscious thought, not at odds with it'—as when James finds himself in bed having intended to dress for dinner, or Annas finds herself at the university parking garage when she intended to go somewhere else en route (2011a, pp. 13–14). On Kern's picture, '[h]abits explain habitual behaviors. Rational capacities explain rational acts' (2017, p. 177); and as it is the rationality of rational capacities that accounts for their being self-conscious capacities, it seems reasonable to conclude that habits are not, in her view, self-conscious—and thus that an agent manifesting a habit is not, as such, thinking what she is doing.

The Ryleans also emphasise a distinction between the ways in which skills and habits are *acquired*. Annas advances a 'developmental' account of the intelligence of virtue and skill, arguing that they are acquired through a form of habituation that deserves to be called education—one that, in addition to repetition and practice, essentially involves 'the giving and receiving of reasons, in contrast with the non-rational picking up of a knack' (2011a, p. 20). In drawing a distinction 'between habituation that results in mere habit and routine and habituation that results in a dynamic trait that expresses itself in intelligent and selective response' (2011b, p. 102), Annas follows Ryle, who holds that habits are acquired through 'drill' or 'habituation', which 'dispenses with intelligence', whereas skills are acquired through 'training' or 'education', which 'enlarges it' (1946, p. 234). Ryle does not envisage drill as a rational process, for he writes that '[a] circus seal can be drilled or "conditioned" into the performance of complicated tricks, much as the recruit is drilled to march and slope arms' (1946, p. 234): non-rational animals can have habits drilled into them, but they are not subjects of education and cannot acquire intelligent capacities. Kern holds that 'there is an intrinsic relation between a rational capacity and [a specific] manner of acquisition' (2017, p. 262); namely, a special kind of *learning*—by doing, from others. It is, then, an essential aspect of the Rylean third way between intellectualism and anti-intellectualism that there is a form of teaching and learning that consists neither in the transmission of propositional information or knowledge of facts solely, *nor* in the repetition, drilling, and learning by rote of performance routines. It is partly definitive of a skill, or intelligent/rational capacity, that it is *acquired* through teaching and learning of this form.<sup>12</sup>

The Rylean Strategy is a strategy for elucidating a conception of skill as a rational capacity. Insofar as a conception of habit emerges from the Strategy, it figures largely instrumentally: features of habit are identified primarily to note that skills (and rational capacities more generally) are *not like that*. Whereas the satisfactory execution of the Strategy ought to produce a comprehensive and unified account of the kind of rational capacity that skills are, it needn't yield a comparable account of habit: the goal of the Strategy might well be achieved by a

piecemeal and incomplete account of habit. It would be unfair to evaluate the conception(s) of habit that emerge(s) from the Strategy as if the Strategy sought to understand habit. However, to the extent that habit remains a topic largely neglected by contemporary philosophy,<sup>13</sup> such remarks as figure in the Strategy—especially insofar as they mesh with the conception of habit maintained by those who conflate it with skill—suggest a status quo that is worth interrogating. Moreover, failing to get clear on habit is, I will argue, actually detrimental to the accounts of skills and rational capacities that are the Ryleans’ quarry.

## SKILLS, HABITS AND COMPETENCES

In rejecting ‘the common assumption that all second natures are mere habits’, Ryle wants to elevate skills, but in his subsequent treatment of habits he neglects the differences among those second natures—those acquired dispositions—that do not satisfy his conception of skill. This results in Ryle holding ‘an unjustifiably denigrating view of habit as rote behavior’ (Douskos, 2017a, p. 507) based on a ‘dichotomy...in which the automation of habits is taken to displace the intelligence of the response’ (Brett, 1981, p. 360).

Though Ryle acknowledges the fundamental point that ‘[t]endencies are different from capacities and liabilities’ (1949, p. 114), and identifies habit as a kind of tendency and skill as a kind of capacity, many of his examples flout this official taxonomy. For instance, sloping arms and smoking are both said to be manifestations of habits. But the soldier’s ‘disposition’ to slope arms is an ability, whereas the smoker’s ‘disposition’ to smoke is a tendency. To ascribe an ability or capacity to someone is to say what she *can* (in a specific sense) do, whereas to ascribe a tendency or disposition is to say what she *does* (in a specific sense) do.<sup>14</sup> A habitual smoker smokes: she has a cigarette habit. Her habit is a disposition of her will. But to say, as perhaps one might, that a soldier slopes arms habitually is not to say that she has an arms-sloping habit, but that when she wants to slope arms or is called upon to do so, she performs the action as routine, without the thoughtfulness and attention that characterise her marksmanship and map-reading. It is *how* she slopes arms, not *whether* she slopes arms, that is ‘habitual’ (cf. Douskos 2017b, p. 1136). But that *ought* to be to say, for Ryle at least, that even if the well-drilled recruit slopes arms automatically, without thinking what she is doing, she does *not* do so from mere habit: Ryle’s considered view ought to be that she has acquired a *capacity* (albeit not an intelligent capacity) to slope arms, not a *tendency* to do so.<sup>15</sup>

Similarly, Annas contrasts skills such as playing the piano and speaking Italian with ‘activities that really are routine, like driving a familiar route, getting dressed and undressed, or tying shoelaces’ (2011b, p. 106). She acknowledges that ‘we are sometimes prepared to count as a skill something like tying our shoelaces, which does not answer to’ her account of skill (2011a, p. 27) because it is ‘not a matter of sufficient complexity that we need to understand what is crucial in it’ (2011b, p. 104). The distinction seems to be between those practical capacities that

have a sufficiently rich intellectual structure to count as skills proper and those that do not—for the *capacity* to tie one’s shoelaces, which may be mundane and, when exercised, a matter of mere ‘unthinking routine’, is not as such a *tendency* to tie one’s shoelaces: some competent shoelace-tyers mostly wear slip-ons.<sup>16</sup>

Ryle’s and Annas’s distinction between skills and mere habits is really one *within* the category of capacities—not between a kind of capacity and a kind of tendency. The distinction is between—as we might put it—*genuine skills* and *mere competences* or ‘unintellectual knacks’ (Annas 2001, p. 244).<sup>17</sup> In their view, mere competences are unintelligent: they lack the intellectual structure that characterises genuine skills, and, after their inculcation through rote repetition or drill, they are exercised automatically and unthinkingly, without care or attention.<sup>18</sup> As a result, they amount to ‘the kind of “know-how” that is mere routinized habit and brings with it no ability to explain and teach what is being done’ (Annas 2011b, p. 111).

The distinction between capacity and tendency (and therefore between skill and habit) marks a difference in *kind*. What about the distinction between genuine skills and mere competences? Ryle’s contentions that the soldier’s ability to slop arms is the upshot of drill and that drill, unlike training, ‘results in the production of automatisms, i.e. performances which can be done perfectly without exercising intelligence’ (1946, p. 234) and is thus something that both rational and non-rational animals can undergo, suggest that he might view the difference between genuine skills and mere competences as one in kind, too. But there is surely some plausibility in thinking that there is but a difference in *degree* between them—and thus that the merest of competences are the limit cases of intelligent capacities. Indeed, elsewhere Ryle maintains—in my view correctly—that there is a ‘perfectly general notion of thought, as what is partly constitutive of all specifically human actions and reactions’ (1962, p. 437). Given his insistence that a human’s swimming may be a case of intelligent action while a dog’s swimming is not (Ryle 1949, p. 112), why should Ryle deny that sloping arms—and smoking, for that matter—are ‘specifically human actions’?<sup>19</sup> However this question ought to be answered, it is not settled by representing the contrast between, e.g., playing the piano and sloping arms as exemplifying the distinction—one that registers a difference in kind—between skill and habit. Doing so seems to encourage the idea that the skill/habit distinction merely marks a difference of degree—in which case James’s conflation of skill and habit is largely reasserted.

That *mere competences* are not intelligent capacities (whether because they are comparatively or completely unintelligent) clearly does not imply that *habits* are not intelligent dispositions. Indeed, Ryle typically contrasts skill with *mere* or *pure* or *sheer* habit—leaving open the possibility of habits that are not ‘mere’ habits, including the possibility of *intelligent* habits.<sup>20</sup> Once we recognise (i) that the contrast between playing the piano and speaking Italian (on the one hand) and sloping arms and smoking (on the other) is a contrast between intelligent and unintelligent *dispositions* (in Ryle’s sense as the supercategory that comprises capacities and tendencies), and (ii) that the contrast between playing the piano and sloping arms is a contrast

between intelligent and unintelligent capacities, we may wonder whether there are any intelligent, rational habits that might be contrasted with the unintelligent, nonrational habit of smoking (cf. Brett, 1981, p. 357). On the face of it, the habit of putting on one's right sock before one's left is about as (un)intelligent as competence at tying one's shoelaces. Yet just as it would be a mistake to base a conception of skill on mere competences, so it must be a mistake to restrict one's thought about habit to *mere* habits—at least, if there are any intelligent habits. Are there?

## HABIT, VIRTUE, AND ETHICAL KNOWLEDGE

The Ryleans construe the distinction between skill and habit as (*inter alia*) one between a kind of knowledge and something that isn't knowledge (cf. Douskos, 2017a, pp. 518–19). On the face of it, however, there are habits that are cases of knowledge. One may know *to do* such-and-such, or know *not to do* such-and-such. Someone who knows to do such-and-such (in such-and-such circumstances) does not merely know what she ought to do in such circumstances, where possessing this knowledge leaves it open whether, given the opportunity, she will (try to) do it. Rather, someone who knows to do such-and-such *does* such-and-such—characteristically. She need not deliberate about *whether* to do such-and-such because she already knows to do it (cf. Wiggins, 2012, p. 113; Small, forthcoming, §6).

In my view, ethical knowledge—much of it, anyway—takes this form. Indeed, though Ryle, albeit with some qualms, assigned moral knowledge to know-how (and thus to capacities) in *The Concept of Mind* (1949, p. 289), he later held that there is ethical knowledge that consists in habit. In an essay on 'knowing the difference between right and wrong', he argues that this knowledge is neither knowledge-that nor knowledge-how (see Ryle, 1958, p. 396). Rather:

To have been taught the difference [between right and wrong—and thus to *know* the difference] is to have been brought to appreciate the difference, [but] this appreciation is not just a competence to label correctly or just a capacity to do things efficiently. It includes an *inculcated caring, a habit of taking certain sorts of things seriously*. (Ryle, 1958, p. 401, my emphasis)

And in a subsequent essay, Ryle suggests that taking seriously the Socratic idea that virtue is knowledge, and thus that virtue can be learned, seems to require 'postulating a kind of learning by which [a person] acquire[s] not information and not proficiencies, but the caring for some sorts of things more than for others' (1972, p. 440). There may be much to learn about virtue from an analogy with skill, but Ryle is right that virtues are not proficiencies (capacities). The key reason is captured by Anthony Kenny: 'To be generous it is not enough to be able to put others first: it is necessary actually to do so. To know French it is not necessary to write one's

French verbs correctly; it is enough to be able to do so' (1989, p. 84). Virtues are habits: one needn't be in the process of putting others first *right now* in order to count as being a generous person; but whether or not a generous person *is putting* others first, she not only *can* put others first, she *does* put others first.

There is promise in the idea that virtues are intelligent habits, constituted (at least in part) by knowledge—not merely *that* or *how*, but—*to*. (This is not to say all habits are cases of knowledge *to*: presumably only *good* habits would be candidates for this title.) This fits nicely with Ryle's view of knowing the difference between right and wrong.<sup>21</sup> But whether or not this position can ultimately be maintained—and it must be acknowledged that it seems Ryle came to think not<sup>22</sup>—its very possibility is unjustly concealed by the conception of habit that figures in the Strategy, which generates the appearance of a choice between modeling virtue on intelligent capacities (skills) or unintelligent tendencies ('habits').<sup>23</sup>

## THE ROLE OF HABIT IN SKILL

A more immediate challenge to the Rylean Strategy is the idea that 'an inculcated caring, a habit of taking certain things seriously' is *internal to* the possession of a genuine skill:

the explorer ... roves and scans [the countryside] methodically, and [his] methods are learned methods of finding out the lie of the land, whatever land it may be. ... [E]xploration is, as such, subject to canons of procedure. It has a discipline, a gradually developing discipline of its own. There are correct versus incorrect, economical versus uneconomical ways of making surveys, of describing territorial features, of recording observations, and of checking estimates and measurements. The explorer, to be an explorer, must have learned from others or found out for himself some of these procedures if he is today to be putting them into practice. He can reproach himself or be reproached by others for carelessness, precipitancy, inaccuracy or muddle-headedness, as distinct from inexpertness, only if he fails to work in ways in which he already knows how to work.

If he is an explorer at all, then, though he may be surprised to hear it, he already has something of an explorer's conscience, that is, some contempt for shoddy work and some self-recrimination for mistakes and omissions. Even without the prospects of fame or remuneration he has at least a slight inclination to do the job properly. ...At least a corner of his heart is in it. (Ryle, 1962, pp. 442–443)

In this passage, Ryle claims that certain habitual patterns of care and motivation partially constitute an expert's possession of a skill. The claim is plausible. These habits—the expert's

‘conscience’ *qua* expert—are at least useful, and perhaps necessary, for the acquisition of expertise beyond mere competence. For surely improvement will depend on *caring about* whether one’s attempts are successful and/or in accord with the proper form or method of the activity. What are the chances that an agent who does not *tend to*, e.g., notice and correct mistakes will progress beyond mere competence? How likely is an expert who stops caring about these things to sustain her expertise? The agent’s skill depends, for its acquisition and maintenance, on motivational habits of this sort.<sup>24</sup> The relevant motivational tendencies are not necessarily tendencies to exercise, or care about exercising, the skill (though in practice such experts often have such tendencies); rather, they are tendencies, *when* exercising the skill, to exercise it properly. The explorer’s conscience need not tell him *whether* to go exploring, but if he is exploring it will tell him *how* to do so—with the proper care and attention to the activity and its standards.

Moreover, an individual’s actual possession of a skill seems often to be partially constituted not only by habits of *motivation*, but habits of *execution*, too. Indeed, Ryle, while warning that ‘the disciplines and the self-disciplines which develop [intelligent capacities] are more than mere rote-exercises’, notes that such abilities are ‘at the start’ taught ‘by simple habituation’ or ‘sheer drill’ (1967, p. 468); and that, though ‘drill’ and ‘training’ are ‘two widely disparate processes’ (1946, p. 234), the training through which a skill is imparted ‘embodies plenty of sheer drill’ even though it ‘does not *consist* of drill’ (1949, p. 31, my emphases). He seems to have in mind that instruction in a skill often begins with repetition of certain technical aspects or components, such as playing scales on the piano. But it is difficult to see how to unpack these claims—and Ryle’s striking remark that ‘naturally skills contain habits’ (1946, p. 234)—and even more difficult to square them with the general character of the Strategy, which is to elevate skills *above* habits. I argued above that, under the heading of a distinction between skill and habit, the Strategy oscillates between a distinction between a kind of capacity and a kind of tendency (a difference of kind) and a distinction between two kinds of capacity (genuine skill and mere competence—arguably a difference of degree). But neither of these distinctions seems able to support the idea that ‘naturally skills contain habits’. If anything, it ought to be the other way around: “‘tends to’ implies ‘can’, but is not implied by it’ (Ryle, 1949, p. 114).

One solution for the Rylean would be to argue that in the acquisition of a skill, first one is drilled and then one is trained. It is the *recruit* who is ‘drilled to march and slope arms. ... When [he] *reaches the stage* of learning to shoot and read maps, he is not drilled but taught. He is taught to perform in the right way, i.e., to shoot and to use maps with “his head”’ (Ryle, 1946, p. 234, my emphasis); ‘Tommy’s control of his bicycle [is not] merely a rote-performance, though he cannot begin to control his bicycle until he has got some movements by rote’ (Ryle, 1967, 468). Such remarks suggest that drilling inculcates unintelligent, nonrational 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.

Even if these suggestions are intelligible (and there is good reason to think they are not),<sup>25</sup> 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. Consider these entries from a diary kept by the concert pianist Steven Osborne:

**January 2009.** ...I've got to tackle a piece I've long avoided, [Ravel's] Gaspard de la Nuit. Among pianists, Gaspard has a fearsome reputation, one of the contenders for the title of Most Difficult Piano Piece Ever Written, but I've learned a lot of very difficult pieces in the past, including virtually everything else by Ravel, and I'm quietly confident I can rise to the challenge. ... I start to work on Ondine [the first movement]. Hmm, the first bar is very difficult, a fast, oscillating pattern for the right hand which has to be played very quietly. It's supposed to sound like a magical shimmer, but it's tricky to control. Never mind, I'll come back to it. ... **March 2009.** This bloody opening! I feel I've tried every possible fingering and nothing works. In desperation, I divide the notes of the first bar between my two hands rather than playing them with just one, and suddenly I see a way forward. But now I need a third hand for the melody. After much experimentation, I realise I can make these pages work with a complex and unpredictable redistribution of notes between the hands. I'm elated. Then my heart sinks as I realise I've just given myself an extra month's work. (Steven Osborne, 'Wrestling with Ravel', *The Guardian*, 29 September 2011)

In devising a fingering that worked for him through experimentation and reflection, Osborne was no doubt exercising intelligent capacities and thinking what he was doing. But the extra month's work would consist largely in repetition of the pattern thus fingered, again and again. If that is not drill, I don't know what is (though whether it is ultimately to be construed as unintelligent is a further question). Yet it was intelligently integrated into Osborne's plan of practice; and his performance of the opening of Ondine—the water nymph's magical shimmer—indisputably displays qualities of mind.

Drill and repetition permeate the development and maintenance of genuine skills, not only at the early stages, but at the highest levels of performance. Why? In his *Philosophy of Mind*, Hegel suggests that habits acquired through repetition are constitutive of the concrete reality of a practical intelligent capacity in an individual agent:

if I want to actualize my aims, then I must make my physical body capable of carrying over this subjectivity into external objectivity. ... For this service my body must first be trained. Whereas in animals the body, in obedience to their instinct, immediately accomplishes everything made necessary by the Idea of the

animal, man, by contrast, has first to make himself master of his body by his own activity. At the beginning, the human soul pervades its body only in a quite *indeterminately universal* way. For this pervasion to become a *determinate* pervasion, *training* is required. (Hegel, 1830, §410Z)

The *determinate* dexterity acquired through the repetition of bodily activities is a case of habit, and as such, in Hegel's view, it makes us both free and unfree: free to immediately realise the activity and focus on that for the sake of which we are realising it, though unfree insofar as the determination of the way of acting settles it that we will act in that determinate way rather than another (cf. James, 1890, 1: pp. 121–2; Brett, 1981, p. 368). As Hegel points out, this unfreedom 'really arises only in the case of *bad* habits, or in so far as a habit is opposed by another purpose' (1830, §410R). Nevertheless, even though it can seem as if the way the words I write look is quasi-heteronomously determined by the bad handwriting with which I've saddled myself—I may feel that *it*, not *I*, determines their appearance—I can *rely* on my handwriting and am thus *free* to concentrate on what to write and how to express it. Of course, the unfreedom is not total: with effort and attention I might prettify my script on occasion, though I may experience my hand and pen as things I must manipulate rather than as the (more or less) transparent medium of my will. Those who write by hand have handwriting styles, and those who walk have their personal gaits. The capacities to write and walk are *in* the individuals in individual ways. The source of these individual differences is not in the capacity, but in the particular acts of habituation and the matter on which it acts. Yet despite being determinate possibilities for particular agents through the existence of habit, writing and walking are intelligent activities, and the respective capacities are intelligent ones. Those who have achieved sufficient competence at such an activity will be able to engage in it in manners other than the one made default through repetition—but this is made possible by the potential for bodily control that the habituation actualises in a determinate way.

An individual pianist's possession of her skill will not be constituted by the habit of *playing the piano*, or the habit of *playing the piano after breakfast*, etc. Rather, it will be constituted by such habits of posture at the piano, of fingering, rotation, touch, and weight. Her good habits will be cases of knowledge: she *knows to* hold her hands thus and so, and *does* so hold them. (If, through desuetude or bad practice, these devolve into bad habits, the shape and level of her possession of the skill will be compromised.) These technical habits, or habits of dexterity, will be supplemented by habits of expression and interpretation in making up the individual pianist's style—which characterises not merely how she *can* play the piano, but how she *does* play it. And both kinds of habit of execution are joined by motivational habits—the pianist's conscience *qua* pianist. Thus habit does not play a merely propaedeutic role. It is the actuality of the skill in the individual agent.



Hegel does not restrict the role of habit to that of ‘transform[ing] the body more and more...into [the mind’s] serviceable instrument’ (§410Z). Even ‘[t]hinking...requires habit and familiarity...by which it is the unimpeded, pervaded possession of my *individual* self. Only through this habit do I *exist* for myself as thinking’ (§410R). Here we encounter the idea that habits of mind make determinate, individual minds possible. Mental or intellectual capacities or abilities are possessed by individual thinkers by being possessed in a determinate way—and that way may be constituted by good habits of thinking or bad ones. One individual may be dogmatically capable of inquiry, another inquisitively, and so on.

More might be said about Hegel, and more should be said about the way in which skills depend on habits for their actuality. In particular, the question whether the habits constitutive of skill are intelligent must be resolved.<sup>26</sup> My primary aim here has been to open space in which to think about these issues. The opposition of skill and habit that figures in the Rylean Strategy makes this difficult. By insisting, quite correctly, on a clear distinction between skill and habit while (i) conflating, under the heading ‘habit’, habits proper (tendencies such as the habit of smoking, of exercising before breakfast, etc.) with mere competences (such as the ability to tie one’s shoelaces, to slope arms, etc.) and (ii) disparaging habit (and its inculcation) as unintelligent, the Strategy threatens to render the idea that ‘skills naturally contain habits’ unintelligible. Consequently, the conception of skill that results from the Strategy is incomplete, and the pursuit of an account of a kind of intelligent, distinctively rational habit (tendency)—indeed, as a distinctive kind of practical knowledge—is unjustly foreclosed. It is crucial to point out, however, that the Rylean Strategy is inessential. Neither the idea that there are intelligent, rational capacities that differ in *form* from nonrational capacities, nor the claim that skills are rational capacities in this sense—both of which I am friendly to—depends on it. The Rylean Strategy should be dispensed with—all the better to articulate the third way between intellectualism and anti-intellectualism that Ryle sought.

## CONCLUSION

Understanding practical knowledge is crucial for thinking about education. Teachers make use of, and aim for students to acquire, practical as well as theoretical knowledge. Intellectualists often foist a choice upon us: either practical knowledge is simply propositional knowledge, or it is a non-rational, unintelligent phenomenon that doesn’t deserve the name ‘knowledge’. But the unacceptability—happily conceded—of the latter position does not speak in favour of intellectualism, for the choice is bogus. Practical know-how may be a capacity of a distinctively rational form. If we accept this, we needn’t view the teaching of skills and abilities as factoring into two components, one epistemic or cognitive (the transmission of information and rules), the other not (the inculcation of abilities to deploy that information and implement those rules).

The Rylean Strategy to elucidate the idea of skill as a rational capacity involves distinguishing skills from habits. Because habits and skills both exhibit a characteristic *immediacy* in action (i.e. they are not mediated by deliberation about whether and how to act) many philosophers have conflated them. But the opposition that the Strategy sets up between skill and habit is misbegotten. In order to insist upon the rationality, intelligence, and self-consciousness of skill, proponents of the Strategy characterise habit as nonrational, unintelligent, (at best) incompletely integrated with practical thought—as capable merely of generating reliable but inflexible stereotyped responses. But this characterization of habit does not stand up.

There is a genuine distinction between skill and habit: the former is a kind of capacity (S *can*  $\phi$ ), the latter a kind of tendency or propensity (S *does*  $\phi$ ). This distinction registers a difference in kind, not a difference of degree. But under the head of a distinction between skill and habit, Ryle and Annas have also distinguished between genuine skills and (what I have called) mere competences. A mere competence is a capacity, not a tendency, but because it lacks the rational complexity (either in the form of the activity itself, or in an individual agent's possession of the capacity) characteristic of skills proper it does not deserve the title. Ryle and Annas associate two disparate types of habituation ('drill' and 'training') with these two different 'kinds' of capacity. But the distinction between genuine skills and mere competences may in fact be a difference of degree; and if we have a continuum of intelligent capacities (with the merest of competences the limit cases of intelligent capacities) then we should conclude that drill and training lie on a continuum, too—regardless of the disparity that may well obtain between particular instances of each. In any event, the case for a qualitative distinction between skills and mere competences (and thus between training and drill) should garner no support from the genuinely qualitative, but orthogonal, distinction between skills and habits.

The conflation of mere competences with habits may explain why Ryleans fail to consider the possibility of intelligent habits. No doubt there are habits—biting one's nails, putting on one sock before the other, etc.—that are at best limiting cases of intelligence. But the existence of such habits, and of mere competences, cannot show that there do not exist intelligent habits alongside intelligent capacities. The Aristotelian tradition conceives of virtues as habits of just this sort. But the conceptual framework encouraged by the Rylean Strategy suggests that Aristotle, if he was not guilty of gross confusion, must have thought either that virtuous agents are unthinking automata (or 'Good Dogs') or that—despite his statements to the contrary—virtues are skills after all. And it certainly suggests that, unless they are skills, virtues cannot be knowledge. However, in the idea of an 'inculcated caring', Ryle himself has the concept of a kind of habit, as distinct from a skill, that is a kind of practical knowledge. I think it is plausible that at least some good habits—paradigmatically, though not only, the virtues—are cases of practical knowledge: not merely of knowing *that*  $p$  or knowing *how to*  $\phi$ , but of knowing *to*  $\phi$  (or *not to*  $\phi$ ). I have not sought to defend this claim here, but merely to show how the Strategy excludes it without justification.

The third misconception encapsulated (or at least encouraged) by the Strategy is the idea that skills and habits are wholly disjoint. Drawing on Hegel—and indeed Ryle—I have suggested we must recognise that the concrete reality of a rational capacity in the individual agent consists in large part in habits of thought, motivation, and dexterity. As Hegel puts it, ‘habit is the most essential feature of the *existence* of all mental life in the individual subject’ (1830, §410R). The crucial constitutive role of habit in skill is concealed by the Rylean Strategy and its elevation of skill at habit’s expense. And in this instance, the Strategy’s misconception of habit undermines its account of skill. But the conceptions of habit and skill that I contend discarding the Strategy would make available are completely consistent with the Strategy’s aim: the elucidation of the concept of skill as a rational capacity, as an alternative to both intellectualist and anti-intellectualist conceptions of practical knowledge.

It is widely acknowledged that education involves not only conveying information, but inculcating skills and abilities. It is also widely acknowledged that the acquisition of a skill is (or according to intellectualists, involves) a cognitive achievement, distinct from the particular achievements that successful exercises of that skill are. In recent years, some virtue epistemologists have drawn attention to habits of mind—such as conscientiousness, openmindedness, intellectual autonomy, and so on—that may be regarded as intellectual virtues. The status of these habits *as* intellectual virtues—and thus their epistemological significance—is typically understood in terms of the cognitive achievements that their manifestations constitute or generate (true belief, knowledge, understanding). But mightn’t the inculcation of such a habit itself be a cognitive achievement, distinct from the particular cognitive achievements in which it issues?<sup>27</sup>

## NOTES

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<sup>1</sup> Ryle argued against a version of intellectualism, but contemporary intellectualists—in my view mistakenly (Small 2017)—consider his arguments inadequate. Intellectualists disagree among themselves about how to understand knowledge-how: compare, for instance, Stanley and Williamson, 2001 with Waights Hickman, 2018.

<sup>2</sup> See e.g. Stanley and Williamson, 2001, p. 416; Snowdon, 2004, pp. 8–11; Waights Hickman, 2018, p. 2.

<sup>3</sup> See e.g. Stanley, 2011, pp. 26, 182–5; Stanley and Krakauer, 2013; though contrast Stanley and Williamson, 2017.

<sup>4</sup> For discussion and criticism, see Small, 2014.

<sup>5</sup> On why this widespread attribution is mistaken, see Hornsby, 2011, pp. 81–82; Small, 2017, §4; Waights Hickman, 2018, §§3–4.

<sup>6</sup> See Stanley and Williamson, 2001, developed in Stanley, 2011.

<sup>7</sup> These quotations reflect how intellectualists typically construe their opponents' view of dispositional states constitutive of know-how. Their reading is contentious, as we shall see.

<sup>8</sup> For discussion and criticism of Annas on skill, virtue, and habit, see Small, forthcoming.

<sup>9</sup> I develop this interpretation of Ryle's argument in Small, 2017, §3.

<sup>10</sup> On the usual view, rational capacities might be distinguished from non-rational capacities by the distinctive features of their manifestations and/or triggers or stimuli. But the basic idea of a capacity (and of the capacity–manifestation nexus) would remain the same across rational and non-rational capacities. The idea that rational capacities are capacities with a distinctively rational form denies this. Cf. Aristotle's claim in *Metaphysics* Θ.2 that non-rational capacities are one-way capacities whereas rational capacities are two-way, and Ryle's claim that intelligent capacities are 'multi-track' dispositions (1949, pp. 31–34).

<sup>11</sup> Skill and habit are still frequently conflated by contemporary philosophers and psychologists (Douskos, 2017a, 2017b, 2017c).

<sup>12</sup> It will follow that one may exercise a skill by teaching it to someone else. This piece of common sense cannot be accommodated by either intellectualism or anti-intellectualism (Small, 2014).

<sup>13</sup> Important exceptions include Brett, 1981; Douskos 2017a, 2017b, 2017c.

<sup>14</sup> Note that 'S does X' (read with 'habitual aspect', not the historical present of 'Hamilton wins the British Grand Prix') does not entail that S has the habit or disposition of X-ing, for it does not entail that S's X-ing manifests a habit of X-ing (she may often X when the opportunity arises, but on each occasion solely on the basis of deliberation about what is the thing to do).

<sup>15</sup> She may also have acquired a tendency to slope arms *on command*. But that is not to Ryle's point in contrasting sloping arms with map-reading to illustrate the idea of 'thinking what one is doing' in exercising an intelligent capacity—presumably soliders acquire tendencies to exercise intelligent capacities on command too (cf. Brett 1981, p. 367).

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<sup>16</sup> Many people who have the capacity to tie their shoelaces also have the tendency to tie their shoelaces after putting on shoes with laces. But I tend to play the piano after sitting down at it without detriment to the status of my capacity to play the piano as an *intelligent* capacity or skill.

<sup>17</sup> Annas seems to see no significant difference between ‘knack’ and ‘habit’. But the knack of smoking differs from the habit of smoking—even if both are easily acquired.

<sup>18</sup> The idea that mere competences lack the intellectual structure or complexity of skills may be understood in two ways: as a contrast between *types of activity* (playing the piano is a rationally, intellectually complex and structured activity, whereas tying one’s shoelaces, in Annas’s view, is not), or as a contrast between *levels of capacity possession* (many people are merely competent—and not trying to improve—at making coffee, engaging in it with little thought, care, or attention, even though good baristas are sensitive to a practical intellectual structure in that activity and make the fine discriminations and adjustments that are hallmarks of skill).

<sup>19</sup> McDowell (2007a, 2007b) and Boyle (2012, 2016) provide useful suggestions for how to articulate and defend the view that capacities for perception and action that are in an important sense *shared* by rational and nonrational animals nevertheless take a *distinctive form* in rational animals.

<sup>20</sup> Ryle notes that ‘there are lots of types of tendency’: “‘pure habits’, ... ‘tastes’, ‘interests’, ‘bents’, ... ‘hobbies’, ... ‘jobs’ ... ‘occupations’ ... adherences to resolutions or policies... [or] codes of religions.... Addictions, ambitions, missions, loyalties, devotions, and chronic negligences are all behaviour tendencies, but they are tendencies of very different kinds’ (1949, 115–6). But he does not curate the distinctions he collects—he attempts no philosophical taxonomy of these very different kinds of tendencies.

<sup>21</sup> Ryle writes that ‘[i]t is a pity that Aristotle’s sensible account of the formation of wise characters has been vitiated by the translator’s rendering of ἔθισμός as “habituation”. Aristotle was talking about how people learn to behave wisely, not how they are drilled into acting mechanically’ (1946, p. 234). It is clear in this passage that Ryle, so to speak, cannot hear the words ‘habit’ and ‘habituation’ in their *logical* register—in which the question of the possibility of their intelligence is left open, not foreclosed.

<sup>22</sup> See Ryle, 1972, pp. 444–445—which offers no reason to reject the view in Ryle, 1958; and, for discussion, Kremer, 2017b, p. 36.

<sup>23</sup> Virtues are not the only habits plausibly construed as intelligent. See Brett, 1981, pp. 364–366.

<sup>24</sup> Annas (2011a, ch. 3) argues that acquiring skills and virtues essentially involves ‘the drive to aspire’ to improvement, which is surely an aspect of a skilled agent’s ‘conscience’. This drive cannot be a mere *capacity* to aspire; it must be a tendency.

<sup>25</sup> See Boyle, 2016 on ‘interaction problems’.

<sup>26</sup> Hegel seems to hold, perplexingly, that such habits are both mechanical and yet the preserve of rational animals. See Haase, 2017.

<sup>27</sup> Thanks to David Bakhurst and Matthias Haase.

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