

Article

# Habit: A Rylean Conception

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**Abstract:** Tennis champion Maria Sharapova has a habit of grunting when she plays on the court. Assume that she also has a habit of hitting the ball in a certain way in a certain situation. The habit of on-court grunting might be bad, but can the habit of hitting the ball in a certain way in a certain situation be classified as intelligent? The fundamental questions here are as follows: What is habit? What is the relation between habit and skill? Is there such a thing as intelligent habit? In this paper I expound the nature of habit by developing and defending a Rylean conception of habit, according to which an acquired disposition is a habit if and only if the manifestation of the disposition is repeated, automatic, and uniform. One implication of this conception is that there is no such thing as intelligent habit. A practical application in athletic expertise is that sport coaches can help athletes go beyond repeated, automatic, and uniform dispositions in sport.

**Keywords:** repetition; automaticity; uniformity; mindfulness; expertise

## 1. Introduction

Elite athletes not only possess excellent skills, but they also have habits. For example, tennis champion Maria Sharapova has a habit of grunting when she plays on the court. Assume that she also has a habit of hitting the ball in a certain way in a certain situation. The habit of on-court grunting might be bad, but can the habit of hitting the ball in a certain way in a certain situation be classified as intelligent? The fundamental questions here are as follows: What is habit? What is the relation between habit and skill? Is there such a thing as intelligent habit? The main goal of this paper is to expound the nature of habit by developing and defending a Ryle-inspired but original (Rylean) conception of habit, according to which an acquired disposition is a habit if and only if the manifestation of the disposition is repeated, automatic, and uniform. The implication of the Rylean conception of habit is that there is no such thing as intelligent habit.

Much of the work in this paper can be understood as conceptual engineering of the concept of habit.<sup>1</sup> Conceptual engineering, according to Delia Belleri, is “a philosophical methodology that focusses on the assessment and revision of conceptual representations. The core ideas that motivate conceptual engineering are . . . two. First, our concepts are not necessarily perfect, and may sometimes use improvements. Second, these improvements cannot be achieved via descriptive tasks of conceptual analysis; philosopher should, when possible, make a concerted effort to propose and advocate new, or revised, conceptual resources” [1] (pp. 1–2). In his classic work, *The Concept of Mind*, Ryle seeks to conceptually engineer our concepts of mind, intelligence, and knowing-how. I believe Ryle’s work can be a basis for us to conceptually engineer the concept of habit and to abandon the concept of “intelligent habit”. The Rylean conception of habit can be applied in all fields of expertise because the conception exposes pseudo-intelligence. For example, a practical application in athletic expertise is that sport coaches can help athletes go beyond repeated, automatic, and uniform dispositions in competitive sports (such dispositions are not intelligent). To achieve the main goal of the paper, I begin with Gilbert Ryle’s concept of knowing-how.<sup>2</sup>

According to Ryle, knowing-how cannot be defined in terms of knowing-that but in terms of intelligence or skill.<sup>3</sup> If knowing-how is a skill, the focus of investigation can



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be shifted from knowing-how to skill (and its conceptual cognates such as competence and expertise).<sup>4</sup> Ryle's investigation of skill employs *conceptual contrast*, a tool according to which a particular target concept can be elaborated by contrasting it to a related one, both of which fall within a common higher-level conceptual category. One can capture the distinctive features of an object to which the target concept refers, and often, the distinctive features of another object to which the comparing non-target concept refers can be captured simultaneously.<sup>5</sup> For Ryle, the concept of skill is understood in contrast to the concept of habit: both concepts fall under the conceptual category of *acquired disposition*, while they are sharply distinct in terms of the objects to which they refer.<sup>6</sup> For Ryle, an acquired disposition is a skill if and only if the manifestation of the disposition is modified, mindful, and multiform, whereas an acquired disposition is a habit if and only if the manifestation of the disposition is repeated, automatic, and uniform.<sup>7</sup>

It is thus evident that although Ryle's main concern involves knowing-how, intelligence, and skill, his investigation of skill suggests a conception of habit. Such a conception shows that a habit in itself cannot be intelligent. The above provided an overview for the remainder of the paper. In Sections 2 and 3, I first construct a Rylean conception of habit and then introduce a critique that makes a case for the idea of intelligent habit. In Sections 4 and 5, I defend the Rylean conception by using both the phenomenology of habit (and skill) and the conceptual engineering of habit.

## 2. Constructing the Rylean Conception of Habit

From Ryle's or the Rylean perspective,<sup>8</sup> there are three features of habit or habitual behavior,<sup>9</sup> that is, repetition, automaticity, and uniformity. The first feature, the repetition of habit, is concerned with the diachronic or historical dimension of habit, referring to the idea that a person with a particular habit  $\phi$  has  $\phi$ -ed in a type of situation in the past (at least once and the more often, the better) and in all probability will continue to  $\phi$  in exactly the similar way in the future when encountering the same type of situation.<sup>10</sup> Ryle highlights this feature by comparing how a habit is acquired and how a skill (or capacity) is acquired: "We build up habits by drill, but we build up intelligent capacities by training. Drill . . . consists in the imposition of repetitions. . . . Training, on the other hand, . . . involves the stimulation by criticism and example of the pupil's own judgment" [23] (pp. 42–43). Although one cannot form a habit or a skill without "repetition", the essences of their repetition are different: "It is of the essence of merely habitual practices that one performance is a replica of its predecessors. It is the essence of intelligent practices that one performance is modified by its predecessors" [23] (p. 42)—"modified" in the sense that if an expert "makes a mistake, he is inclined not to repeat it, and if he finds a new trick effective he is inclined to continue to use it and to improve on it" [23] (p. 42). Ryle's contrast between drill (for habit formation) and training (for skill acquisition) is not outdated. In their recently published book, *Continuous Improvement: Intertwining Mind and Body in Athletic Expertise*, Toner, Montero, and Moran argue that "the expert group had not only practiced for more hours than their less successful counterparts, but they had also practiced differently. Specifically, these performers had spent considerably more time perfecting and refining their skills than engaging in the mindless repetition of drills" [24] (p. 69). Repeated practices in skill acquisition and in habit formation differ in kind rather than in degree.

While it seems that no one seriously challenges the idea that a habit is repeated, a relevant question is whether repetition is merely the *means* by which a habit is formed or also the *condition* under which a habit is possessed. With regard to this question, Ryle is not explicit, but Bill Pollard provides a nice response. Pollard claims that "repetition of a behavior is not merely a means to acquiring a habit . . . ; it is part of what it is to have a habit" [22] (p. 46). The reason for this claim, according to Pollard, is that "[i]f somebody said of a given piece of behavior that it is habitual, not knowing whether the agent had done nothing like it before, their competence in using the term would be called into question" [22] (p. 46). That is, a competent speaker (or competent thinker) cannot use (or understand) the term (or the concept) of habit apart from the concept of repetition.

To put it simply, the statement that habit is repeated is analytically true. In our daily understanding, a person can acquire the habit of smoking cigarettes by repetition in his youth but cannot maintain the habit if he never smokes a cigarette again in his adulthood. Therefore, repetition is not only required for habit acquisition but also for habit possession.

The second feature, the automaticity of habit, concerns the psychological or internal dimension of habit, referring to the idea that (temporarily construed) a person with a particular habit  $\varphi$ , when or after  $\varphi$ -ing, lacks a certain kind of mental state or process of her own habitual behavior. What kinds of mental states or processes do not occur in automatic behavior? With regard to this issue, philosophers and psychologists have different characterizations and even divergent opinions (see esp. [25], Section 2). According to Pollard, what is absent in automatic behavior is the “process of conscious deliberation about *whether* to  $\varphi$ ” [22] (p. 66; emphasis mine). According to Barbara Montero, “[t]he term ‘automaticity’ is far from univocal in this [psychology] literature . . . , however, the conception of automaticity most salient to the just-do-it principle is that of an action performed with neither conscious control over nor explicit attention to the action” [18] (p. 25). Ryle’s view is closer to, although not identical with, Montero in some respects. According to Ryle, “When 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. He does not exercise care, vigilance, or criticism” [23] (p. 42). Ryle indicates that care, vigilance, criticism, and minding what one is doing are aspects that are absent from habitual (automatic) behavior; elsewhere, he adds “awareness of what one has done”:

When we say that someone acts in a certain way from sheer force of habit, part of what we have in mind is this, that in similar circumstances he always acts in just this way; that he acts in this way whether or not he is attending to what he is doing; that he is not exercising care or trying to correct or improve his performance; and that he may, after the act is over, be quite unaware that he has done it. Such actions are often given the metaphorical title “automatic”. Automatic habits are often deliberately inculcated by sheer drill, and only by some counter-drill is a formed habit eradicated. [23] (p. 110)

For Ryle, the mental processes that are absent in automatic behavior (but are present in skilled action) could be care, vigilance, minding/attending to what one is doing, being aware of what one has done, and trying to criticize/correct/improve one’s own behavior. We can use “mindfulness” as an umbrella term for these mental states or processes. In addition, we can treat attending to or being aware of what one is doing as fundamental among these mental processes because it is the precondition for other mental processes in exercising mindfulness.

The second feature constructed above requires a bit more clarification.<sup>11</sup> To say that a habitual action is automatic in the sense of “in the absence of *mindfulness*” is not to say that the action is “*mindless*”. Rather, habitual actions are “*minded*” in two senses. First, habitual actions are performed by persons with a conscious mind. Gunnar Breivik distinguishes two levels of automatic behavior. The first level of automaticity is exemplified by a zombie or a somnambulist, who “is certainly able to perform bodily movements and low-skilled behavior when sleepwalking” [26] (p. 93). A habitual action in the Rylean sense is not an automatic, zombie-like behavior; rather, it belongs to the second level of automaticity, which is explained in the following example.

A next level of automatic behavior is exemplified in the driving example. As with many others, when driving to work I have experienced that I have non-consciously been driving several blocks, passed traffic lights, steered the car, and it has all worked out well, though I am not able to remember what happened. I cannot remember seeing the street, the houses, the traffic and what kind of movements I performed, and whether I shifted gears or not and how far I was behind the car in front of me. [26] (p. 93).

Breivik's phenomenological description of driving is akin to Ryle's phenomenological description of automatic habits in general. But what is the difference between the two levels of automatic behavior? A mindless-automatic behavior is performed by an entity without the conscious mind. In contrast, a minded-automatic action is performed by an entity with the conscious mind, but the focus of consciousness is not on the entity's own automatic action itself but something else. For example, as Breivik reports, "when I am driving absentmindedly, I typically think of something else such as a task, a problem or a feeling of some sort" [26] (p. 94). Second, habitual actions are "minded" in the second sense that they can be intentional. That is, like Gabriele Ferretti and Silvano Caiani, we can admit that "[h]abitual actions have a history of practice and repetition that *frees us from attending to what we are doing*" [27] (p. 623; emphasis mine; this view is consistent with the two features of habit characterized above), and at the same time, admit that such habitual actions can be intentional by reference to propositional intentions and motor representations.

The third feature, the uniformity of habit, concerns the performative (or external) dimension of habit, referring to the idea that a person with a habit  $\varphi$  responds to the stimulus or cue of  $\varphi$ -ing in a uniform way. According to Ryle, habit is a single-track disposition the manifestation of which is uniform:

In discussing dispositions it is initially helpful to fasten on the simplest models, such as . . . the smoking habit of a man. For in describing these dispositions it is easy to unpack the hypothetical proposition implicitly conveyed in the ascription of the dispositional properties. . . . [T]o be a smoker is just to be bound or likely to fill, light and draw on a pipe in such and such conditions. These are simple, single-track dispositions, the actualizations of which are nearly uniform. [23] (p. 43).

In contrast to habits, skills or "the higher-grade dispositions of people . . . are . . . not single-track dispositions, but dispositions the exercises of which are indefinitely heterogeneous" [23] (p. 44). For Ryle, "to have a blind habit is also to operate in certain ways, namely in certain stereotyped ways. What distinguishes habitual actions from actions done with method is the adaptation of the latter to differences in the problems, situations, etc." [28] (p. 243). Habits are uniform, stereotyped, and single-track, whereas skills are heterogeneous, adaptive, and multi-track.

In sum, repetition, automaticity, and uniformity capture three distinctive features of habitual behavior. The three features, respectively, represent the diachronic, psychological, and performative dimensions of a habit. Against this background, Ryle's conception of habit can be formulated into a definition as follows:

Rylean Definition of Habit (RDH): An acquired disposition  $D$  is a habit if and only if the manifestation of  $D$  is repeated, automatic, and uniform.

For the sake of comparison, Ryle's conception of skill can be formulated into a definition as follows:

Rylean Conception of Skill (RDS): An acquired disposition  $D$  is a skill if and only if the manifestation of  $D$  is modified, mindful, and multi-form.<sup>12</sup>

In the next section, I will consider a critique of the RDH. But before proceeding, I want to make an important but neglected distinction. Assume that " $\varphi$ " is an action name for a sequence of actions with an end goal; that is,  $\varphi = \langle \varphi_1, \varphi_2, \dots, \varphi_n \rangle$ . When we say that a person has a habit of  $\varphi$ -ing (say, *eating* out once a month, *swimming* twice a week, *driving* to office every day, *serving* or *hitting* a tennis ball in a certain way in a certain situation, etc.), we might use the expression "habit of  $\varphi$ -ing" in two subtly different ways due to its scope of application. The scope of application of the term "habit" is *narrow* if and only if the features of habit are applied to each and every action in the action-sequence  $\langle \varphi_1, \varphi_2, \dots, \varphi_n \rangle$ . The scope of application of the term "habit" is *wide* if and only if the features of habit are applied *outside* the action-sequence  $\langle \varphi_1, \varphi_2, \dots, \varphi_n \rangle$ . Under the wide-scope reading of habit, the features of habit are applied to an *action* that *initiates* or *triggers* the

action-sequence  $\langle \varphi_1, \varphi_2, \dots, \varphi_n \rangle$ , rather than to the actions in the action-sequence. Armed with the narrow-scope/wide-scope distinction, we can see that the term “habit” in “Smith has a habit of playing tennis twice a week” and “Smith has a habit of hitting a tennis ball in a certain way in a certain situation” is used differently to pick out different *kinds* of phenomena. The narrow-scope/wide-scope distinction is important as we shall see in Sections 4 and 5.

### 3. Criticizing the Rylean Conception of Habit

#### 3.1. The Objection from “Intelligent Habit”

One implication of the RDH is that there is no such thing as intelligent habit. However, some philosophers, such as John Dewey [29] (p. 55) and Nathan Brett [30] believe in and argue for the idea of intelligent habit. If these philosophers are correct, then the RDH is shown to be inadequate. In what follows, I focus on Brett’s argument for the idea of intelligent habit for two reasons: first, Brett’s argument is clear and straightforward, and can serve as the basis for those cases in which the idea of intelligent habit is used; and second, Brett selects Ryle as his target, which suits the purpose of the present paper.

The conception of habit against which Brett argues is the following: “Habitual behavior must in some respect be ‘automatic’, not the product of conscious decision. Because things done from habit are done automatically it has been supposed that they must be *stereotyped* responses which are neither intelligent nor purposeful” [30] (p. 357; emphases added). Brett alludes to two features of the RDH, that is, automaticity (“habitual behavior is automatic”) and uniformity (“habitual behavior is stereotyped”). Regarding such a conception of habit, Brett claims that “it is a mistake . . . to suppose that habitual action is necessarily devoid of the qualities of intelligence” [30] (p. 357).

Brett argues for the view that habit can be intelligent by conceiving of two types of cases that function as counterexamples. In the first type of case, a person exercises his habit *mindfully* instead of automatically. Consider the hand washing habit:

Must [a dentist’s individual hand washing] be done incautiously, without care or attention? Clearly, if sloppiness were one of the consequences of acquiring this habit, the dentist would have every reason to *avoid* making this a matter of habit. But we can even speak (without obvious fallacy) of making it a habit to wash with great care and attention. And this means that care and attentiveness are *necessary conditions* of the exercise of some habits. [30] (p. 365; emphasis original).

For Brett, washing hands carefully or attentively can be a habit and this indicates that some habits can be mindful. In this case, mindfulness in a habit refers to care and attention, and for Brett it can also refer to thinking what one is doing with deliberation: “a dentist who washes his hands before each appointment may do this from force of habit; but equally he might stop to think what he is doing each time and then proceed to wash up as a result of his deliberations” [30] (p. 363). One can produce more such cases because the category of mindfulness includes mental processes other than care, attention, and thinking what one is doing.

Let us now turn to Brett’s second case, in which a person exercises his habit in a variety of ways. Consider the walking habit:

Even walking on dry pavement presents such obstacles as curbs and other pedestrians. In some cases we avoid such obstacles by deciding to direct our attention to them; but in many cases this element of adaptation becomes an integral feature of the habits themselves. . . . It is important to notice that there is no sharp line of demarcation between the types of cases which Ryle exemplifies by contrasting the mountain climber with the man walking in the street. In fact, one of the elements of becoming a good mountain climber will be the development of good walking habits. Such habits are not fossilized modes of behavior which leave their possessor confined to a single behavioral track. [30] (p. 368).

For Brett, good walking habits are not fossilized, or single-track, modes of behavior; they are habits that are adaptable to different environments. Like the first type of case, one can produce more instances of the second type of case.

Here, Brett's argument can be presented as follows: (P<sub>1</sub>) If there are genuine cases in which doing something mindfully and/or multiformly itself is or constitutes a habit, then intelligent habit is possible. (P<sub>2</sub>) There are such genuine cases. (C) Intelligent habit is possible. For the sake of completeness, let us formulate the argument against the RDH as follows:

(P<sub>0</sub>) If the RDH is correct, then intelligent habit is impossible.

(P<sub>1</sub>) If there are genuine cases in which doing something mindfully and/or multiformly itself is a habit, then intelligent habit is possible.

(P<sub>2</sub>) There are such genuine cases.

(C<sub>1</sub>) Intelligent habit is possible.

(C<sub>2</sub>) The RDH is incorrect.

### 3.2. The Initial Response

Does Brett's objection to the RDH succeed? This might depend on how we interpret the Rylean claim (implied by the RDH) that "habits cannot be intelligent". If the Rylean claim is interpreted as "all habits cannot be intelligent", then Brett's objection might succeed. However, if the Rylean claim is interpreted as "some habits cannot be intelligent", then Brett's objection might fail. In fact, Ryle did use the term "pure habit" or "blind habit" to refer to habit, which suggests that Ryle might think that there are different kinds of habits. Given this, the RDH can be modified as the RDH\* as follows: An acquired disposition D is a *pure or blind* habit if and only if the manifestation of D is repeated, automatic, and uniform. The RDH\* makes room for the idea of intelligent habit and accordingly sidesteps Brett's objection.

However, even if the Rylean conception adopts the RDH\* and retreats from "all habits cannot be intelligent" to "all pure habits cannot be intelligent", Brett believes that his objection still holds. Brett notes that "a defender of the type of account given by Ryle Carlisle (2014: 27) might object that the counterexamples which I have considered are not manifestations of *pure* habit, and hence of course they exhibit traits of intelligence" [30] (p. 369). However, Brett asserts that "[t]his objection misses the point. A person may fasten his seatbelt, wash his hands, pay attention to lectures, etc. *from pure habit* without loss of attention, care, purpose, or capacity for criticism of what he is doing" [30] (p. 369; emphases original). That is, Brett thinks that "pure habits" still can be intelligent.

Thus, the initial response cannot satisfy Brett. However, I do not think the initial response is the only and best response available, nor do I think Brett's assertion is unproblematic. Before offering another response, I make two comments on Brett's retort. First, it is difficult to conceive of how a *pure* habit in the Rylean sense can be intelligent. Recall that Ryle uses "pure habit" and "blind habit" interchangeably. If "blind" here means, as it is sometimes used to mean, "unintelligent", then the notion that pure habits are unintelligent seems to be analytically true. Second, I suspect that Brett might confuse the notion of *pure/blind* habit with the notion of *simple* habit. Habits of fastening a seatbelt and washing hands are *simple* habits. If so, Brett either fails to cast doubt on the RDH\*, or needs to say more about why or in what sense fastening a seatbelt is a "pure" habit.

## 4. The Robust Response (I): Against Mindful Habit

The initial response only *sidesteps* Brett's objection, whereas the robust response *refuses* Brett's objection. In Sections 4 and 5, I argue that (P<sub>2</sub>) in the argument against the RDH is problematic by doubting the *genuineness* of the cases. I will do this by appealing to the phenomenology of habit and skill, and the conceptual engineering of habit.

#### 4.1. The Phenomenology of Habit

Ryle treats repetition, automaticity, and uniformity as the features of habit, whereas Brett argues that mindfulness and multiformity can be the features of habit. However, both Ryle and Brett address features that they identify *individually* rather than jointly. That is, they do not consider the connection between the features that they identify. Such a connection, as I shall argue, sheds light on the nature of habit. Let us first consider the connection between repetition and automaticity.

Clare Carlisle [31,32] has brought a neglected principle of habit, the *double law of habit*, to the forefront. The term “the double law of habit” was created by Felix Ravaisson [33] (p. 37), but what the law states can be traced back to Joseph Butler, who observes that “practical habits are formed and strengthened by repeated acts” and that “passive impressions grow weaker by being repeated upon us” [34] (p. 78). Taking these two observations together, Butler finds that “active habits may be gradually forming and strengthening by a course of acting upon such and such motives and excitements, whilst these motives and excitements themselves are . . . continually less and less sensibly felt even as the active habits strengthen” [34] (p. 78). Carlisle clearly sees the contribution made by Butler in exploring the nature of habit: “Butler was not the first person to point out that when we become accustomed to certain sensations we cease to notice them, or that repeated actions become easier and more assured. But he seems to have been the first philosopher to reflect on *how these two phenomena come together*” [32] (p. 27; emphasis mine).

Ravaisson’s formulation of the double law of habit is more explicit. He highlights the common element of the contrasting effects of habit on action (or movement) and mind (or sensation), i.e., the *repetition* feature of habit: “continuity or repetition dulls sensibility, whereas it excites the power of movement” [33] (p. 53). According to Ravaisson, “*Prolonged or repeated* sensation diminishes gradually and eventually fades away. *Prolonged or repeated* movement becomes gradually easier, quicker and more assured” [33] (p. 49; emphases added). Carlisle paraphrases this formulation of the double law of habit with slightly more detail: “This law gives expression to our everyday experience of habit and habituation: we find that *repeating* a certain action leads to this action becoming more dexterous, precise and efficient; we find that sense-data that are *repeatedly* or *continuously* present to us decline in intensity after some time” [31] (p. 127; emphases added). The double law of habit reveals that there is a correlation between repeated sensation and repeated movement in forming and exercising a particular habit: when a movement arising from a habit is strengthened through repetition, the sensation of the very movement is weakened and eventually fades from consciousness.<sup>13</sup>

Imagine that a subject makes a movement with attention to the sensation of the movement. The sensation of the movement might be required for the subject to make the movement at the beginning. However, imagine further that the subject regularly *repeats* the same type of movement. Now, according to the double law of habit, the repetition of the movement on the one hand makes the *movement* itself stronger and, on the other hand, makes the *sensation* of the movement increasingly weaker until it eventually fades from consciousness. This shows that mindfulness in a habit is psychologically improbable. Thus, what is the connection between repetition and automaticity? Given the double law of habit, the repetition feature brings out the automaticity feature of habit. The phenomenology of habit described in the double law of habit lends support to the Rylean conception of habit rather than the Brettian one, for it lends support to the view that a habit is automatic rather than mindful.

#### 4.2. The Conceptual Engineering of Habit

Two problems might arise.<sup>14</sup> First, what has been said above does not prove that mindful habit is *impossible*. A philosopher such as Brett might respond by saying that even if mindfulness in a habit is psychologically *improbable*, this improbability does not imply that mindfulness in a habit is psychologically impossible; therefore, mindful habit is still possible. Second, mindful habit is not only possible but also highly likely. Recall Brett’s

example in which one can have “a habit to wash with great care and attention”; this, for Brett, “means that care and attentiveness are *necessary conditions* of the exercise of some habits” [30] (p. 365).

Regarding the first problem, a reply is that such psychological possibility, when actualized, is detrimental to habit strength. Assume that there is mindfulness in an *established* (and desired) habit. Consider this question: What does such mindfulness contribute to the established habit if the constitutive aim of a habit is to repeat or reproduce the *same* performance?<sup>15</sup> None, if the habit at the performative level has worked well. On the contrary, mindfulness is detrimental to a well-established habit, as Ryle has pointed out: “the precise force of this expression ‘thinking what he was doing’ is somewhat elusive. I certainly can run upstairs two stairs at a time from force of habit and at the same time notice that I am doing so and even consider how the act is done. I can be a spectator of my habitual and of my reflex actions and even a diagnostician of them, without these actions ceasing to be automatic. *Notoriously such attention sometimes upsets the automatism*” [23] (p. 95; emphasis mine). If a performance of a habit is disturbed repeatedly, the repetition of the habit is likely to be discontinued, and the habit itself is thus very likely to be broken. Thus, even if mindfulness in a habit is logically possible, such mindfulness is more detrimental than contributive to the habit’s strength.

We now turn to the second problem, considering whether washing hands with care and attention is a genuine case of mindful habit.

*Case 1: The Wide-Scope Reading.* One can, like Brett [30] (p. 365), “speak (without obvious fallacy) of making it a habit to wash with great care and attention”; however, this way of speaking does not, as Brett thought, “[mean] that care and attentiveness are *necessary conditions* of the exercise of some habits” [30] (p. 365). An individual can form a *habit of paying attention* to what(ever) he is doing, but this practice does not imply that what the individual is doing is in itself a manifestation of a particular habit. This is because it is possible to have a *habit of paying attention* to  $\varphi$  without having  $\varphi$  (such as washing hands, solving a mathematical problem, and so on) itself as a habit. To justify this, recall our distinction made in Section 2 between the narrow-scope and the wide-scope application of the term “habit”. When the term “habit” in the statement “S has a habit of paying attention to  $\varphi$ ” is read in a wide-scope way, the features of habit are applied to the *action* that initiates or triggers the action-sequence of paying attention to  $\varphi$ , rather than to the actions in the very action-sequence. In this case, the action that initiates the action-sequence is habitual, but this does not imply that the actions in the action-sequence are therefore habitual. Thus, making it a habit to wash hands with attention does not necessarily indicate a case in which attentiveness is a *necessary condition* of a habit.

*Case 2: The Narrow-Scope Reading.* However, what if what Brett tries to show is that “S has a habit of paying attention to  $\varphi$ ” is read in a narrow-scope way? That is, the features of habit are applied to the actions in the action-sequence of paying attention to  $\varphi$  (this action-sequence can be expressed as  $\langle$ paying attention to  $\varphi_1$ , paying attention to  $\varphi_2$ , . . . , paying attention to  $\varphi_n$  $\rangle$ ). To this, I have a response. What features of habit would Brett use to characterize the actions in the action-sequence? If it is “mindfulness”, then Brett should explain, *without begging the question*, why mindfulness is a feature of habit in general. In my view, the case of “mindful habit” that one can give is often constructed by the wide-scope reading of habit. However, as argued above, there seems to be no reason that the features of habit applied to an action that triggers an action-sequence can transfer to the actions in the action-sequence. (We cannot infer from “Smith has a habit of playing tennis twice a week” that “Smith has a habit, good or bad, of playing tennis in a particular way”.) By the same token, there is also no reason that the features of *skill* applied to the actions in an action-sequence can transfer to a *habitual* action that triggers the action-sequence. (We cannot infer from “Smith is *skillful* at playing tennis” and “Smith has a *habit* of playing tennis twice a week” that “Smith has an *intelligent habit* of playing tennis”).

Thus, neither *Case 1* nor *Case 2* provides a case in which mindfulness is a necessary condition of a habit.



In sum, in this section, I have argued against the idea of mindful habit by establishing three points: first, mindfulness in a habit is psychologically improbable; second, mindfulness in a habit is detrimental to the habit itself; and third, there is still no genuine case of “mindful habit”.

## 5. The Robust Response (II): Against Multiform Habit

### 5.1. *The Phenomenology of Skill*

My argument against the idea of multiform habit can be presented and summarized as follows: first, multiformity requires mindfulness; second, a habit excludes mindfulness; thus, a habit is not multiform. Since the second premise is justified in Section 4, this section focuses on the first premise.

Does *multiformity* (specifically speaking), or *expertise* (broadly speaking), require mindfulness? Recall that the umbrella term “mindfulness” refers to a set of conscious mental processes. So, the question can be rephrased as follows: Does expertise require conscious mental processes such as attention to or the monitoring of one’s own action?

With regard to this question, Dreyfus and Dreyfus’s answer would be negative. According to their phenomenology of skillful coping (which is stated in their famous five-stage model of skill acquisition), “experts never think and are always right” [15] (p. 31). In describing chess expertise, Dreyfus and Dreyfus say, “Chess grandmasters, engrossed in a game, can lose entirely the awareness that they are manipulating pieces on a board and see themselves rather as involved participants in a world of opportunities, threats, strengths, weaknesses, hopes, and fears. When playing rapidly, they sidestep dangers in the same automatic way that a teenager, himself an expert, might avoid missiles in a familiar video game” [15] (p. 30; emphasis mine). Furthermore, in describing athletic expertise, Rouse and Dreyfus say, “Experts in many domains, but notably in sports, occasionally experience periods of peak performance, also variously called ‘flow’, ‘being in the zone’, and playing ‘out of one’s head’ . . . In these periods, ‘everything becomes easier, confidence rises, time passes without awareness, and *the mind*, which usually to some extent monitors performance and how the situation is unfolding over time, is quieted while performance is at its peak’ . . . Such flow is a transient state that cannot be willfully chosen” [36] (p. 18; emphasis mine). Although Dreyfus and Dreyfus acknowledge that experts can and do deliberate,<sup>16</sup> we should note that they do not claim that deliberation is intrinsic to expertise itself. Rather, they argue that deliberation occurs either below or above the level of expertise (see [37–39]).

However, there is growing empirical and phenomenological literature that supports the view that conscious cognition plays a significant role in skilled action (see [40–43]). Further, Montero “question[s] whether Dreyfus’s description of the phenomenology of grandmaster play is accurate” [44] (p. 385). Montero endorses what she calls the “cognition-in-action principle”, according to which “[f]or experts, when all is going well, optimal or near optimal performance frequently employs some of the following conscious mental processes: self-reflective thinking, planning, predicting, deliberation, attention to or monitoring of their actions, conceptualizing their actions, control, trying, effort, having a sense of the self, and acting for a reason” [18] (p. 38). The cognition-in-action principle is supported by what Montero calls the “methodological principle”, which claims that “[f]irst-person reports of what goes on in one’s own mind should be accepted as (defeasible) evidence for the truth of the report unless we have good reason to question them” [18] (p. 8). Thus, if the phenomenology of skill described by Montero is correct, expertise and multiformity require mindfulness (see also Montero [45] for her further exploration of the relation between consciousness and skill).

In my view, the recent empirical and phenomenological literature is strong enough to support the thesis that expertise requires mindfulness. However, some potential critics might object by saying that the “methodological principle” is neutral in relation to the debate between proponents and opponents of the cognition-in-action principle because the content of the first-person reports might not be the same. It is possible that some first-person reports support the view that experts do not employ conscious mental processes

in exercising their skill. In response to such potential critics, something beyond the first-person-report strategy or the phenomenology of skill is required to support the cognition-in-action principle and then the thesis that expertise requires mindfulness.

### 5.2. The Conceptual Engineering of Habit

Why is it that conscious mental processes (in mindfulness) “do not necessarily or even generally interfere with expert performance, and should not generally be avoided by experts” [18] (p. 38)? Or why should an expert be mindful of his own skilled performance? The cognition-in-action principle does not address these questions because this principle is more descriptive than explanatory. To address the questions, I suggest that we first determine what the aim of skill or expertise is and then consider whether mindfulness makes any contribution to that aim. My answer can be outlined as follows: first, the constitutive aim of skill or expertise is success; second, mindfulness is success-conducive; thus, skill or expertise requires mindfulness.

Not all acquired dispositions are skills. A disposition is a skill in  $\varphi$  only if the disposition is conducive to the achievement of the aim of  $\varphi$  in a variety of situations. To put it another way, a disposition is a skill in  $\varphi$  only if it is *success-conducive in a variety of situations*. This thought leads to two questions: First, what kind of disposition possesses such a *special* success-conducive character? Second, how is such a disposition acquired? Regarding the first question, it is multiform or multi-track disposition that possesses the *special* success-conducive character, whereas a uniform disposition does not (because it is success-conducive only in a particular situation). Regarding the second question, a multiform disposition is acquired via mindfulness. Assume that there is a first-order practical disposition to achieve a particular aim  $A$  and a second-order mental disposition that takes the first-order disposition (and its manifestations) as its object of reflection.

*Case 1.* Assume further that the first-order disposition is uniform or single-track, i.e., that it can achieve the aim  $A$  only within a particular kind of situation. How can such a uniform disposition (in fact, a habit) with the aim  $A$  become multiform? One possible way is to exercise the second-order disposition, the output of which is conscious mental states such as attention to or monitoring of one’s first-order performance issued by one’s first-order disposition. Such (second-order) conscious mental states, according to the double law of habit, will disturb the repetition of the first-order disposition and thus create an opportunity to construct a new pattern of disposition to achieve the aim  $A$ . Here, (the second-order) mindfulness functions as destructive construction.

*Case 2.* Assume that the first-order disposition is a multi-track (say, three-track) disposition with the aim  $A$ . Can such a multiform disposition become more multiform? At this juncture, one can exercise one’s second-order disposition, the output of which is conscious mental states, especially the deliberate judgment regarding one’s first-order disposition. The second-order deliberation is used to figure out what the underlying principle of one’s three-track disposition is and, by applying this principle, to construct a new pattern of disposition to achieve the aim  $A$ . Here, (the second-order) mindfulness functions as methodological construction.

*Case 1* and *Case 2* (stated in this section) show the functional role, rather than the phenomenological role, that mindfulness can play in skill and expertise: mindfulness can extend the original uniform/multiform disposition with the aim  $A$  to the multiform/more multiform disposition with the same aim.

As a side note, the above discussion alludes to a notion of expertise. A special kind of knowing-how, or expertise, can be treated as a hybrid disposition, a combination of a first-order practical or executive disposition and a second-order mental or reflective disposition (the manifestation of which is attention, monitoring, deliberate judgment, understanding, and so on). Elsewhere [8,9] I have developed such a hybrid account of expertise in detail from an epistemological perspective. There are several versions of the hybrid account. One of them is proposed by David Papineau [46–48], who thinks that “[t]here are some things that athletes must think about, and others that they must keep their minds away

from. If you think about too much, you will become disabled. But at the same time, if you think about too little, you won't perform to the best of your ability" [48] (p. 12).<sup>17</sup> Recently, Christensen, Sutton, and McIlwain proposed an insightful hybrid account of expertise, which they call *Mesh*. *Mesh* "sees a broadly hierarchical division of control responsibilities, with cognitive control usually focused on strategic aspects of performance and automatic processes more concerned with implementation", and it "proposes that controlled and automatic processes are closely integrated in skilled action, and that cognitive control directly influences motor execution in many cases" [41] (p. 43). In my view, Ryle also hints at the notion of hybrid disposition, although not precisely the same notion as mine or that of Christensen et al. Ryle states that "execution and understanding are merely different exercises of knowledge of the tricks of the same trade" [23] (p. 42). To put it another way: "Understanding is a part of knowing *how*. The knowledge that is required for understanding intelligent performances of a specific kind is some degree of competence in performances of that kind" [23] (p. 54). Why does an expert require such understanding that issues from exercising intellectual capacity? According to Ryle, "the learning of all but the most unsophisticated knacks requires some intellectual capacity. The ability to do things in accordance with instructions necessitates understanding those instructions. So some propositional competence is a condition of acquiring any of these competences" [23] (p. 49). However, at this juncture, Ryle immediately reminds us that "it does not follow that exercises of these competences require to be accompanied by exercises of propositional competences" [23] (p. 49).

In sum, without mindfulness, multiformity is unlikely to get off the ground. Since in the Rylean framework a habit not only lacks but also excludes mindfulness, a habit is unlikely to be multiform. Two problems might arise.

First, what if one *insists* that a habit can be multiform? A critic (such as Brett) might say that what I have argued so far does not prove that the idea of multiform habit is logically impossible. My response is as follows. It is arguably assumed that actions performed through a habit are predicted (because they are repeated in character). When we attribute a habit to an individual, we use that very habit not only to *explain* but also to *predict* the individual's behaviors (the latter is especially important if the individual's behaviors will threaten our own survival, or if the individual is our competitor). However, actions performed from a multiform disposition that is leveled to a certain extent are dynamic and creative; that is, intelligent actions are difficult, if not impossible, to predict. Therefore, a proponent of the idea of multiform habit must explain how it is possible for a habit to be both *predicted* and *multiform* without being inconsistent. Without this explanation, the idea of multiform habit is confusing.

Can character traits or virtues be treated as cases in which a disposition can be both predicted and multiform? "Character traits can also serve to predict actions (and notice that some authors approach the idea of a character trait on the basis of that of habit). A kind person is likely to behave in a certain way in certain circumstances, just as someone who has a certain habit. Does that mean that manifestations of virtue are devoid of mindfulness and intelligence? I take it that this would be an awkward conclusion. If so, the point about prediction does not sufficiently support the claim about uniformity".<sup>18</sup> In my view, virtue requires habituation, but virtue itself is not a habit but a skill.<sup>19</sup> How can this be the case? Recall our wide-scope/narrow-scope distinction. The idea that virtue requires habituation can be understood as that virtue is related to "habit" under the wide-scope reading. That is, the features of habit are applied to the action that triggers a sequence of virtuous actions, rather than to the actions in the sequence of virtuous actions, which can be performed mindfully and skillfully. So, what we can predict of a virtuous person is only that she will act virtuously, but what she will actually do in a particular situation is beyond our prediction. The manifestation of a virtue depends on the context of a situation.

Second, some might think that the cases of multiform habit are not only possible but also easily conceivable. For example, an anonymous reader of this paper makes the following comment: "Consider common examples of habits, such as the habit of cooking fish on

*Fridays. Why this has to be ‘uniform’? Surely, one can manifest this habit by cooking a different kind of fish each Friday, by using a different recipe, and so on. Similarly, the actions of a dentist washing his hands might differ in important respects (using soap, antiseptic, doing this thoroughly, quickly etc.), while manifesting the same habit”.* This kind of comment is common, but it is misleading because it confuses a habit that initiates a sequence of skillful actions with an *alleged* multiform habit. A person can possess a skill, say, playing tennis, without performing it routinely. The person can begin to make it a habit to perform his skill routinely, for example, by playing tennis twice a week. This, however, does not imply that the person’s skill consequently becomes or transforms into a habit. (Here it is important to remember our wide-scope/narrow-scope distinction.) Regarding the habit of *cooking fish* on Fridays, like the habit of *playing tennis* twice a week, the multiformity feature belongs to the skill of cooking fish *per se*, rather than to the habit that initiates the sequence of skillful actions.

In this section, I have argued against the idea of multiform habit by establishing the following two points: first, habit lacks and excludes something that is required for being multiform, i.e., mindfulness; second, the idea of multiform habit is confusing because a habit cannot be both predicted and multiform. In addition, I point out that the idea of multiform habit stems from failing to recognize the distinction between wide-scope and narrow-scope readings of the term “habit”.

## 6. Conclusions

In this paper, I have constructed a Rylean conception of habit according to which a habit is an acquired disposition the manifestation of which is repeated, automatic, and uniform (Section 2). The Rylean conception of habit is incompatible with the idea of intelligent habit (Section 3). I defend the Rylean conception of habit against the idea of intelligent habit by using the phenomenology of habit (and skill) and the conceptual engineering of habit. The idea of intelligent habit is psychologically improbable (Section 4.1), functionally detrimental (Section 4.2), and conceptually confusing (Section 5). The Rylean conception of habit explains the nature of habit and contributes to the understanding of the neglected relation between habit and skill. In contrast to scholars who think that “[h]abits . . . are both necessary for and constitutive of the development of sporting skills because they can be essentially intelligent and flexible” [51] (p. 158; see also [52,53]), tennis coaches with the Rylean conception of habit and skill would not advise elite athletes to cultivate “intelligent habits” in playing tennis but to attain “skills”.

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## Notes

<sup>1</sup> I thank two anonymous reviewers for raising this issue.

<sup>2</sup> Ryle’s concept of knowing-how has raised issues that are of great interest to contemporary epistemologists, such as whether knowing-how is knowing-that (see [2,3]), whether knowing-how is a skill (see [4,5]), and whether knowing-how can be Gettiered (see [6]), among others (see [7]).

<sup>3</sup> For a detailed explanation of this claim, see [8,9].

<sup>4</sup> With regard to Ryle’s notion of skill, see [10–14]. With regard to the philosophy of skill, see [15–18].

<sup>5</sup> A common example is the contrast between the concept of knowledge (*episteme*) and that of opinion (*doxa*), and the feature of knowledge is thus highlighted—i.e., giving an account.

<sup>6</sup> Julia Annas [19,20] also uses the contrast between expertise and knack to highlight the feature of expertise. For discussion, see [21].

- 7 I shall explain all these features in Section 2.
- 8 I use the term “Rylean” rather than “Ryle’s” because the conception of habit here is constructed by the author with significant modification and development.
- 9 Since a habit, as a disposition, can be directly observed only by its manifestation rather than by itself, the expression “a habit is repeated (or automatic)” actually means “the manifestation of a habit is repeated (or automatic)”.
- 10 Pollard [22] (p. 55) offers a more detailed definition of repetition of habit, although he does not do this for Ryle.
- 11 Thanks to two anonymous reviewers for raising this issue.
- 12 The RDS is a bit complicated. I have elaborated on and defend this Rylean conception at length in [9].
- 13 What justifies the double law of habit? We can treat it as the phenomenology of habit. Carlisle thinks that the double law of habit “gives expression to our everyday experience of habit and habituation” [31] (p. 127).
- 14 Conceptual engineering is concerned with the *assessment* and *improvement* of our representational devices such as concepts (cf. [35]). That is to say, the conceptual analysis in this and next sections is concerned more with how the concept of habit *should* mean.
- 15 Recall the repetition feature of habit. If an individual’s particular performance A is not the same as his past performances arising from the habit  $\varphi$ , then A would not be treated as a performance of the habit  $\varphi$  (although the performance A might be a performance of another habit). If we agree that a habit is a disposition and that a disposition is (partially) defined by its manifestation, then we can conceive of, assuming that repetition is a feature of habit, the constitutive aim of a habit by repeating or reproducing the *same* performance.
- 16 Cf.: “While the expert is capable of deliberation-free action solicited through an intuitive perspective, situations are bound to arise in which experts do engage in deliberation” [36] (p. 18).
- 17 Papineau’s main targets are what he calls “habitualism” and “intellectualism”. The former holds the view that “thought is the enemy of sporting excellence” and that “skilled performers need to let their bodies take over” [47] (p. 295). In contrast, the latter holds the view that “sporting performance depends crucially on mental control” and that “the tailoring of action to circumstance requires intelligent conceptual guidance” [47] (p. 295). Papineau tries to reconcile the two positions by distinguishing different aspects of athletic performance.
- 18 I thank an anonymous reviewer for raising this objection.
- 19 See Tsai [21,49,50] for more details about the virtue-as-skill thesis.

## References

1. Belleri, D. On Pluralism and Conceptual Engineering: Introduction and Overview. *Inquiry* **2021**. [[CrossRef](#)]
2. Stanley, J.; Williamson, T. Knowing How. *J. Philos.* **2001**, *98*, 411–444. [[CrossRef](#)]
3. Stanley, J. *Know How*; Oxford University Press: Oxford, UK, 2011.
4. Carr, D. Knowledge in Practice. *Am. Philos. Q.* **1981**, *18*, 53–61.
5. Snowdon, P. Knowing How and Knowing That: A Distinction Reconsidered. *Proc. Aristot. Soc.* **2003**, *104*, 1–29. [[CrossRef](#)]
6. Poston, T. Know How to Be Gettiered? *Philos. Phenomenol. Res.* **2009**, *79*, 743–747. [[CrossRef](#)]
7. Czarnecki, B. Knowledge-How. In *Oxford Bibliographies in Philosophy*; Pritchard, D., Ed.; Oxford University Press: Oxford, UK, 2016.
8. Tsai, C. The Metaepistemology of Knowing-How. *Phenomenol. Cogn. Sci.* **2011**, *10*, 541–556. [[CrossRef](#)]
9. Tsai, C. The Structure of Practical Expertise. *Philosophia* **2014**, *42*, 539–554. [[CrossRef](#)]
10. Pavese, C. Skill in Epistemology I: Skill and Knowledge. *Philos. Compass* **2016**, *11*, 642–649. [[CrossRef](#)]
11. Pavese, C. Skill in Epistemology II: Skill and Know How. *Philos. Compass* **2016**, *11*, 650–670. [[CrossRef](#)]
12. Backstrom, S.; Gustafsson, M. Skill, Drill, and Intelligent Performance: Ryle and Intellectualism. *J. Hist. Anal. Philos.* **2017**, *5*, 40–55. [[CrossRef](#)]
13. Stanley, J.; Williamson, T. Skill. *Nous* **2017**, *51*, 713–726. [[CrossRef](#)]
14. Weatherston, B. Intellectual Skill and the Rylean Regress. *Philos. Q.* **2017**, *67*, 370–386. [[CrossRef](#)]
15. Dreyfus, H.; Dreyfus, S. *Mind over Machine*; The Free Press: New York, NY, USA, 1986.
16. Selinger, E.; Crease, R. (Eds.) *The Philosophy of Expertise*; Columbia University Press: New York, NY, USA, 2006.
17. Fridland, E. They’ve Lost Control: Reflections on Skill. *Synthese* **2014**, *191*, 2729–2750. [[CrossRef](#)]
18. Montero, B. *Thought in Action: Expertise and the Conscious Mind*; Oxford University Press: Oxford, UK, 2016.
19. Annas, J. Moral Knowledge as Practical Knowledge. *Soc. Philos. Policy* **2001**, *18*, 236–256. [[CrossRef](#)]
20. Annas, J. *Intelligent Virtue*; Oxford University Press: Oxford, UK, 2011.
21. Tsai, C. Ethical Expertise and the Articulatory Requirement. *Synthese* **2016**, *193*, 2035–2052. [[CrossRef](#)]
22. Pollard, B. *Habits in Action*; VDM Verlag Dr. Muller: Saarbrücken, Germany, 2008.
23. Ryle, G. *The Concept of Mind*; University of Chicago Press: Chicago, IL, USA, 1949/2000.
24. Toner, J.; Montero, B.; Moran, A. *Continuous Improvement: Intertwining Mind and Body in Athletic Expertise*; Oxford University Press: Oxford, UK, 2022.
25. Fridland, E. Automatically Minded. *Synthese* **2017**, *194*, 4337–4363. [[CrossRef](#)]

26. Breivik, G. Zombie-Like or Superconscious? A Phenomenological and Conceptual Analysis of Consciousness in Elite Sport. *J. Philos. Sport* **2013**, *40*, 85–106. [[CrossRef](#)]
27. Ferretti, G.; Caiani, S. Habitual Actions, Propositional Knowledge, Motor Representations and Intentionality. *Topoi* **2021**, *40*, 623–635. [[CrossRef](#)]
28. Ryle, G. Why are the Calculuses of Logic and Arithmetic Applicable to Reality. In *Collected Papers Volume 2*; Routledge: Oxford, UK, 1946/2009.
29. Dewey, J. Human Nature and Conduct. In *The Middle Works of John Dewey*; Boydston, J., Ed.; Southern Illinois University Press: Carbondale, IL, USA, 1922; Volume 14.
30. Brett, N. Human Habits. *Can. J. Philos.* **1981**, *11*, 357–376. [[CrossRef](#)]
31. Carlisle, C. Between Freedom and Necessity: Ravaisson on Habit and the Moral Life. *Inquiry* **2010**, *53*, 123–145. [[CrossRef](#)]
32. Carlisle, C. *On Habit*; Routledge: London, UK, 2014.
33. Ravaisson, F. *Of Habit*; Carlisle, C., Sinclair, M., Eds.; Continuum: London, UK, 1838/2008.
34. Butler, J. *The Analogy of Religion, Natural and Revealed, to the Constitution and Course of Nature*; George Routledge and Sons: London, UK, 1736/1884.
35. Cappelen, H. *Fixing Language: An Essay on Conceptual Engineering*; Oxford University Press: Oxford, UK, 2018.
36. Rouse, B.; Dreyfus, S. Revisiting the Six Stages of Skill Acquisition. In *Teaching and Learning for Adult Skill Acquisition: Applying the Dreyfus & Dreyfus Model in Different Fields*; Mangiante, E., Peno, K., Eds.; Information Age Publishing: Charlotte, NC, USA, 2021.
37. Dreyfus, H. Intuitive, Deliberative, and Calculative Models of Expert Performance. In *Naturalistic Decision Making*; Zsombok, C., Klein, G., Eds.; Psychology Press: New York, NY, USA, 2014.
38. Dreyfus, H. On Expertise and Embodiment: Insights from Maurice Merleau-Ponty and Samuel Todes. In *Skillful Performance: Enacting Capabilities, Knowledge, Competence, and Expertise in Organizations*; Sandberg, J., Rouleau, L., Langley, A., Tsoukas, H., Eds.; Oxford University Press: Oxford, UK, 2017.
39. Dreyfus, H.; Dreyfus, S. Some Preliminary Thoughts on Mastery. In *A Qualitative Stance; Essays in Honor of Steiner Kvale*; Nielsen, K., Tanggaard, L., Musaeus, P., Elmholdt, C., Eds.; Aarhus University Press: Aarhus, Denmark, 2009.
40. Gottlieb, G. Unreflective Action and the Argument from Speed. *Pac. Philos. Q.* **2011**, *92*, 338–362. [[CrossRef](#)]
41. Christensen, W.; Sutton, J.; McIlwain, D. Cognition in Skilled Action: Meshed Control and the Varieties of Skill Experience. *Mind Lang.* **2016**, *31*, 37–66. [[CrossRef](#)]
42. Bermudez, J. Do We Reflect While Performing Skillful Action? Automaticity, Control, and the Perils of Distraction. *Philos. Psychol.* **2017**, *30*, 896–924. [[CrossRef](#)]
43. Christensen, W.; Sutton, J. Mesh: Cognition, Body, and Environment in Skilled Action. In *Handbook of Embodied Cognition and Sport Psychology*; Cappuccio, M., Ed.; The MIT Press: Cambridge, MA, USA, 2019.
44. Montero, B. Chess and the Conscious Mind: Why Dreyfus and McDowell Got It Wrong. *Mind Lang.* **2019**, *34*, 376–392. [[CrossRef](#)]
45. Montero, B. Consciousness and Skill. In *The Routledge Handbook of Philosophy of Skill and Expertise*; Fridland, E., Pavese, C., Eds.; Routledge: London, UK, 2020.
46. Papineau, D. In the Zone. *R. Inst. Philos. Suppl.* **2013**, *73*, 175–196. [[CrossRef](#)]
47. Papineau, D. Choking and the Yips. *Phenomenol. Cogn. Sci.* **2015**, *14*, 295–308. [[CrossRef](#)]
48. Papineau, D. *Knowing the Score: What Sports Can Teach Us about Philosophy (and What Philosophy Can Teach Us about Sports)*; Basic Books: New York, NY, USA, 2017.
49. Tsai, C. Phronesis and Techne: The Skill Model of Wisdom Defended. *Australas. J. Philos.* **2020**, *98*, 234–247. [[CrossRef](#)]
50. Tsai, C. Practical Wisdom, Well-Being, and Success. *Philos. Phenomenol. Res.* **2021**. [[CrossRef](#)]
51. Cappuccio, M.; Ilundáin-Agurruza, J. Swim or Sink: Habit and Skillful Control in Sport Performance. In *Habits: Pragmatist Approaches from Cognitive Science, Neuroscience, and Social Theory*; Caruana, F., Testa, I., Eds.; Cambridge University Press: Cambridge, UK, 2020.
52. Cappuccio, M. Flow, Choke, Skill: The Role of the Non-Conscious in Sport Performance. In *Before Consciousness: In Search of the Fundamentals of Mind*; Radman, Z., Ed.; Imprint Academic: Exeter, UK, 2017.
53. Cappuccio, M.; Miyahara, K.; Ilundáin-Agurruza, J. Wax On, Wax Off! Habits, Sport Skills, and Motor Intentionality. *Topoi* **2021**, *40*, 609–622. [[CrossRef](#)]