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CULTIVATING INTELLECTUAL VIRTUES

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ABSTRACT. The topic of the educational role of the intellectual virtues is explored. It is argued that the overarching epistemic goal of education is the development of intellectual character, and it is further proposed that the relevant notion of intellectual character is virtuous intellectual character. Virtuous intellectual character is contrasted in this regard with an alternative character-based conception of the overarching epistemic goal of education in terms of critically rational intellectual character. Finally, some of the main issues facing this conception of the educational role of the intellectual virtues are considered, especially regarding the concern that educating for the intellectual virtues is problematic because it involves inculcating in students certain core values.

KEWYWORDS: Critical Thinking; Epistemology of Education; Intellectual Character; Intellectual Virtues.

1. INTRODUCTORY REMARKS

Our interest is in the educational importance of cultivating intellectual character, where this is understood in the specific sense of cultivating *virtuous* intellectual character, and thus the intellectual virtues that comprise virtuous intellectual character. To this end, we will begin by exploring the epistemic goals of education, and outlining why the cultivation of intellectual character is a plausible candidate to be the overarching epistemic goal of education. We will also be examining why the development of intellectual character should be concerned with cultivating the intellectual virtues

specifically, as opposed to developing other elements of a subject's integrated cognitive skills and abilities, such as her critical thinking capacities. Finally, we will consider some of the practical and theoretical issues involved in incorporating the intellectual virtues into one's pedagogical practices.

2. THE OVERARCHING EPISTEMIC GOAL OF EDUCATION

Education serves many purposes, not all of them obviously epistemic. For example, it clearly serves social, political, and practical purposes. Nonetheless, a fundamental goal of education is clearly epistemic, in that it is hard to understand what an educational practice might be that didn't cultivate the subject's epistemic capacities, such as by helping that subject to acquire new knowledge or develop new cognitive skills. Indeed, a putatively educational practice that by design didn't have any positive epistemic outcomes for the learners—which was merely indoctrination of falsehoods, for example—would not be regarded as a genuine educational practice at all (even if the proponents of this educational program insisted on labelling it in this fashion). (Robertson 2009; Pritchard 2013; Baehr 2016).

Relatedly, many of the non-epistemic goals of education only make sense if they are combined with epistemic goals. Think, for example, of the idea that education has an important role to play in a democratic society of helping to produce informed citizens. (Gutmann 1987; Galston 1989; Ravitch 2001; Ben-Porath 2006; Crittenden & Levine 2018; Curren & Dorn 2018) This would clearly be a social and political goal of education. And yet it also has a core element that is manifestly epistemic. One cannot create politically informed citizens unless one informs them, and that involves giving them the knowledge and skills needed to navigate the relevant political terrain.

But what is the epistemic goal of education? One might antecedently think that it simply involves ensuring that students have useful knowledge and cognitive skills. The problem with this way of thinking about the epistemic goals of education, however, is that it is compatible with practices that seem antithetical to the educational enterprise. In particular, these epistemic states and skills could be instilled within students via rote learning. Indeed, this might be the most effective way of instilling them. And yet, these days at least, we would not consider such a pedagogical approach as having much in the way of educational merit. For one thing, while in one sense students might be learning facts and skills via this method, there isn't much by way of teaching taking place—in fact, the teacher seems rather superfluous to this process (a security guard might be just as

effective). For another, the epistemic states and skills that the students are acquiring are epistemically quite impoverished. For example, students who have mastered arithmetical tables via rote learning may not gain any real understanding of mathematical concepts, and as a result it is unlikely that they will be able to use what they have learnt to extend their knowledge and skills further by themselves.

This issue has taken on a new dimension in the technological age that we live in, whereby much of our most commonplace knowledge and skills is becoming increasingly off-loaded to technology. If education is just about ensuring that students can reliably reproduce facts or perform certain activities, and both can in many cases be done equally well (indeed, usually much better) via the use of technology, then it seems that in the future educators won't have much to do. For many educational tasks we could dispense with the educators and simply upgrade the technology. Conversely, if we believe that no amount of technological off-loading of this kind can mitigate the need for education, then that suggests that there is more to the epistemic goals of education than simply instilling facts and skills into students.[1]

The foregoing suggests that the overarching epistemic goal of education is not merely the development of epistemic states, like true belief or knowledge, and cognitive skills, but rather the cultivation of good intellectual character. Intellectual character refers to the subject's integrated set of cognitive skills and abilities, and which collectively represents the intellectual aspect of that agent's character. Good intellectual character is thus the integrated set of the subject's cognitive skills which reflect well on the intellectual aspect of the subject's character.

To see why good intellectual character might be important from an educational point of view, think again about our rote learners. Although they are acquiring new cognitive skills, they are not developing their intellectual character. Instead, this skill development is entirely piecemeal and passive. We want our students to be active learners rather than passive recipients of information and skills, and that means developing the kinds of skills that are representative of a good intellectual character. Compare, for example, how the rote teaching of arithmetic might contrast with a pedagogical approach that aims instead to help students to understand what it is that they are learning. In the latter case, the curiosity of the students will be stimulated, as will their intellectual autonomy as they employ their understanding to expand what they have learnt in new directions. The students are doing more than passively mastering a particular cognitive skill, but rather acquiring it actively, through their own endeavors to understand (under the guidance of the educator), and in the process they are cultivating good intellectual character traits. This ensures that the cognitive skill they are learning is integrated within their wider set of cognitive skills, so that it can lead to the self-

directed development of new knowledge and skills. What the educator is doing is using the teaching of this specific cognitive task to foster the wider goal of enhancing the student's good intellectual character.

One important advantage of thinking of the overarching epistemic goal of education as being the cultivation of good intellectual character is that it can capture the sense in which education promotes epistemic autonomy. Educators undoubtedly want their students to know specific facts and to be able to master specific cognitive skills. One cannot learn chemistry, for example, without knowing key facts about the periodic table. But the ultimate goal of education is not merely the imparting of epistemic states and skills, but rather the development of the kind of higher-level cognitive skills that enable students to think for themselves and, crucially, learn for themselves. It is not enough for the budding chemist to merely regurgitate what they have learnt (e.g., by appealing to the authority of the teacher, or what is written in the textbook), but they must also be able to understand it, and that means being able to explain why it is true, to be able to articulate and defend their knowledge. That requires the higher-level cognitive skills that are part of a good intellectual character, such as the ability to marshal reasons in support of one's beliefs and in the process critically reflect on the evidential basis for those beliefs.

The importance of these intellectual character traits becomes particularly evident once one turns from fairly uncontentious matters of fact—of a kind that would be taught in a school chemistry class, for example—to more controversial subjects where the facts are open to question. Consider the teaching of history, for example. For a subject matter like this it is crucial that students learn how to think critically about the information presented to them, and are not merely passive recipients of it. A student who merely regurgitates historical facts, for example, has only the most minimal grasp of the subject matter of history, especially when compared with a student who has a rich and nuanced appreciation of the subject, one that informs, and is informed by, their experience of the contemporary world.

3. GOOD INTELLECTUAL CHARACTER

So what constitutes a good intellectual character? Thus far we have charactered this notion largely in terms of certain core critical thinking skills, such as a responsiveness to evidence, a willingness to critically evaluate evidence and reasons, an ability to articulate a rational defence of a viewpoint, and

so on. These are all clearly general features of a good intellectual character, and not merely cognitive skills exclusively concerned with a particular cognitive task. In particular, these are all high-order cognitive skills, in the sense that they play a managerial role in one's overall cognitive economy by governing one's intellectual activities in general as opposed to being devoted to specific cognitive tasks (like, for example, arithmetic). Moreover, they are essentially active cognitive skills too, in that they involve an active intellectual engagement with the subject matter, as opposed to being the kind of cognitive skill that can be acquired and manifested entirely passively.

One conception of a good intellectual character that could be in play when it comes to the overarching epistemic goal of education could thus be the development of a kind of critical rationality. On this proposal, education is devoted to cultivating good intellectual character in the specific sense of *critically rational intellectual character*. Such a thesis has some prominent defenders in the literature.[2] I want to argue instead, however, for a more demanding conception of good intellectual character that specifically concerns the intellectual virtues. On this alternative model, the good intellectual character that is the overarching epistemic goal of education is to be understood as *virtuous intellectual character*.[3] As we will see, there is a great deal of overlap between these two conceptions of the overarching epistemic goal of education. In particular, a virtuous intellectual character entails a critically rational intellectual character, but not *vice versa*. It will thus be important for our purposes to spell out why the former is a more demanding conception of good intellectual character, and what practical implications this has for educational practice.

A subject's virtuous intellectual character is the integrated set of her cognitive skills and abilities, including, crucially, the distinctive cognitive skills that meet the specific conditions to qualify as intellectual virtues. The intellectual virtues are admirable intellectual character traits, such as curiosity, intellectual humility, intellectual tenacity, conscientiousness, and intellectual courage. On the standard construal of these character traits, they have several distinguishing features.[4]

Intellectual virtues involve a distinctive kind of motivational state, in that to manifest an intellectual virtue is for one's virtuous activity to be grounded in a fundamental valuing of, and thus desire for, the truth (such that one is concerned with forming accurate beliefs, avoiding error, and so forth). (Pritchard *forthcomingb*) This is what sets the intellectual virtues apart from other virtues, such as moral virtues (e.g., the virtue of compassion), as the latter involve a different, non-intellectual, motivational state. One important consequence of this feature of the intellectual virtues is that one cannot manifest them in a purely strategic fashion. There might, for example, be a practical utility in

presenting oneself as intellectually humble, but if it is this motivation that grounds one's apparently intellectually humble behavior, then this isn't the manifestation of a genuine intellectual virtue.

Intellectual virtues are not innate cognitive abilities, but rather must be acquired, ideally through the emulation of virtuous subjects that the agent is in direct contact with. Moreover, intellectual virtues are unlike some other cognitive skills (such as riding a bike) in that even once acquired they can still be lost—one must keep cultivating one's intellectual virtues in order to retain them, as without cultivation one can find oneself drifting towards one of the corresponding intellectual vices associated with that intellectual virtue. The process of acquisition requires reflective engagement on the part of the subject—one cannot acquire an intellectual virtue in an entirely passive fashion. Mastering an intellectual virtue requires practice, a process known as habituation. The goal is to make the manifestation of intellectual virtue automatic, such that it becomes second-nature (which means that although reflection is required to acquire the intellectual virtues, once mastered there need be no reflection involved in their manifestation). The difficulty of mastering an intellectual virtue lies in navigating between the two corresponding intellectual vices, the intellectual vice of excess and the intellectual vice of deficiency. For example, the intellectual virtue of curiosity lies between the corresponding intellectual vice of excess involved in being overly curious, such as when one is motivated to pursue pointless or irrelevant inquiries, and the corresponding intellectual vice of deficiency, as when one is simply lacking in curiosity.

A further feature of the intellectual virtues that is important for our current concerns is that they are held to be—in common with the virtues more generally, such as the moral virtues—highly valuable character traits, both in instrumental and non-instrumental (final) terms. Their instrumental value should be clear, as these are desirable character traits that are desirable in part because they are so practically useful. Think, for example, of the practical drawbacks of being a dogmatic individual who is resistant to new or unwelcome evidence. The practical value of an intellectual virtue like intellectual humility thus lies in how it helps agents to avoid such practical drawbacks (in this case by being open to new and unwelcome evidence).

The intellectual virtues are held to not only be instrumentally valuable, however, but also finally valuable. They are constituent parts of what it is to live a good life of human flourishing, what the ancient Greeks referred to as *eudaimonia*. One can see the plausibility of this proposal: even if one removes all the practical advantages of the intellectual virtues, one would still prefer to be an intellectually virtuous subject than to not be.[5]

With the intellectual virtues so construed, it should be clear that possessing the integrated set of these character traits, and thus having a virtuous intellectual character, entails having a critically rational intellectual character. The intellectually virtuous subject would be conscientious in her assessment of the evidence that she has for her opinions, would have the intellectual humility to non-dogmatically weigh-up new evidence that comes her way, would be curious about alternative opinions, would have the intellectual courage to consider unpopular viewpoints that are nonetheless suggested by the evidence, and so on. Interestingly, however, while virtuous intellectual character entails critically rational intellectual character, the converse is not the case.

There are two main (and closely related) differences between critical rational capacities and intellectual virtues. First, there is the crucial difference that critical rational capacities don't demand the motivational component that is essential for the intellectual virtues. In particular, one can have the cognitive skills associated with a critically rational intellectual character without those skills being motivated by any fundamental valuing of, and thus desire for, the truth. On the contrary, one could consistently manifest those skills in a purely strategic fashion. The expertise of a leading lawyer, for example, could involve a purely strategic employment of critically rational cognitive skills, in that the lawyer has no particular concern for the truth but only, say, for winning cases. As we have seen, however, the intellectual virtues are not like this, in that one cannot manifest an intellectual virtue without one's virtuous behavior being grounded in a desire for the intellectual good of truth.

This relates to a second fundamental difference between critical rational capacities and intellectual virtues. While both are quite general cognitive skills, in that they can be employed across a range of subject matter (as opposed to being tied to a particular cognitive task), the intellectual virtues are nonetheless much richer in content than critical rational capacities. What I mean by this is that they are essentially tied to who one is as a person, where that includes such important features of one's personhood as one's fundamental values. This is the sense in which developing a student's intellectual virtues is thereby helping them to develop as a person, as opposed to merely training that student to master certain cognitive skills, including cognitive skills of a quite general kind (such as critical rational capacities).

With these contrasts between virtuous intellectual character and critically rational intellectual character in mind, consider a subject who has developed critical rational capacities and where these capacities are in addition grounded in the motivational state that is associated with the intellectual virtues (after all, while one can manifest the critical rational capacities without this motivational state, the former doesn't preclude the latter). Notice, however, that in such a case it is hard to see why the

subject wouldn't eventually end up displaying the intellectual virtues. The subject's rational behavior would be rooted in their fundamental values, and so would be naturally described in terms of character traits like being curious, being intellectually conscientious, and so forth, rather than merely in terms of certain general cognitive capacities. This point reinforces the idea that despite the close overlaps between critically rational intellectual character and virtuous intellectual character, it is virtuous intellectual character that is the more demanding notion. It also reminds us of the fundamental importance of educating for virtuous intellectual character rather than just critically rational intellectual character, since where they come apart it is the former that is more desirable from an educational point of view. While we certainly do want students to develop their critical rationality, we want them to do so while also recognizing the importance of the truth, and not merely in a strategic fashion. This means that we want the development of critical rationality to be part of a wider enhancement of their intellectual personhood, and that entails the cultivation of a virtuous intellectual character.[6]

4. OBJECTIONS

A number of objections have been raised to the idea that we should be educating for virtuous intellectual character. Some of these concerns are really objections to the nature of intellectual virtues, as opposed to being specific to the idea of putting the intellectual virtues into the heart of the educational enterprise. For example, there have been empirical challenges to the very idea that character traits like virtues explain behavior in the manner alleged, as opposed to that behavior being more attributable to purely 'situational' factors. While this literature has mostly focused on the moral virtues in this regard, it has been argued that one can extend this objection to the intellectual virtues specifically. If that's right—and note that the 'situationist' critique of virtue theory is highly contentious, so this is a big 'if'—then obviously that would be a devastating blow to any educational proposal that essentially appealed to the intellectual virtues.[7]

Of the objections that specifically concern putting the intellectual virtues at the heart of education, rather than intellectual virtue theory more generally, we can distinguish between broadly practical and theoretical concerns. On the former front, for example, there are empirical issues regarding how one goes about measuring the educational development of virtue, and intellectual virtue in particular. (Curren & Kotzee 2014; Kotzee 2015; Carter, Kotzee & Siegel 2019) Moreover,

there are practical (as well as theoretical) problems posed by the role of exemplars involved in the acquisition of the intellectual virtues in educational settings, particularly in terms of the difficulty of ensuring that students are appropriately related to such exemplars, given that one cannot realistically expect educators to be, on the whole, intellectual paradigms.[8] In what remains of this chapter, however, I want to focus on a largely theoretical challenge to casting educational practices in terms of the cultivation of virtuous intellectual character.

The theoretical objection I want to consider is the concern that making the cultivation of virtuous intellectual character central to education involves a kind of problematic indoctrination of students. One can see the general contours of the argument by comparing educating for virtuous intellectual character with educating for critically rational character. In the latter case, one can acquire the relevant skills without thereby adopting any axiological commitments regarding their final (as opposed to merely instrumental) value. Accordingly, it is consistent with this approach that the student goes on to apply the critical spirit to critical rationality itself, and so is sceptical about its ultimate value. In contrast, to master the intellectual virtues is precisely to internalize the relevant motivational component, which means in turn to recognize, and thereby value accordingly, the finally valuable intellectual good of truth. Educating for virtuous intellectual character thus brings with it fundamental axiological commitments that other approaches to the epistemic goal of education don't incorporate. (Siegel 2016).

Note that this feature of educating for virtuous intellectual character is not an unfortunate consequence of the proposal but right at its very heart. As we saw above, it is built into the very idea of virtuous intellectual character that it has this axiological feature. If that's right, then this is not an objection that can be avoided by refining the position, as if one takes this element of the view away, then what remains would not qualify as a *bona fide* version of the original proposal.

On closer inspection, however, it is far from clear why the proponent of educating for virtuous intellectual character should be so concerned by this objection. Sure, this approach involves instilling in students a fundamental respect for the truth, and thus for such things as accuracy, evidence, avoiding falsehood, and so on. But is that really so contentious? It is not as if this involves demanding of students that they endorse the specific values of a particular culture (such as Christian values, say), much less that it would instill values that are controversial. Certainly, some people have no respect for the truth, but this is widely regarded as a failing on their part, and it would be odd for an educational practice to be faulted for helping students to avoid such a failing.

Moreover, given the fundamental role of epistemic goals in educational practices that we noted above, it would be an unduly narrow conception of the goals of education that didn't include a concern for the truth. Consider, for example, the idea that education serves the civic function of creating informed citizens that we outlined earlier. Could such a social and political goal really be achieved via education without also instilling in students a respect and concern for the truth? Can we even make sense of the idea of students being motivated by such civic concerns and yet at the same time being indifferent to the truth and all that involves (such as being unconcerned about the accuracy in their beliefs in this regard)? That strikes me as implausible.

Note too that the idea that students shouldn't be encouraged as part of an educational practice to care about the truth, but must decide about something like this entirely independently, seems to itself presuppose an important axiological claim. That is, it seems to presuppose that intellectual autonomy is an overarching value that governs the educational enterprise. But why would that value be any less contentious in this regard than the value of truth? Moreover, it is hard to see how students are meant to manifest intellectual autonomy without also acquiring a desire for the truth. Being intellectually autonomous entails being able to make up one's own mind about what to believe (and thus what to value), but in order to competently do that one needs to know the facts that are relevant to making this decision, and that surely requires one to care about the truth. The crux of the matter is that it seems that a desire for the truth is a foundational value in this regard, in that it is a value that needs to be in place in order for more specific values, like the value of intellectual autonomy, to function. This would also explain why educating for virtuous intellectual character involves both instilling a desire for the truth and also giving students the skills to be genuinely intellectually autonomous. Properly understood, the latter isn't in conflict with the former; instead, its proper manifestation presupposes the former.

A final point I want to make about this line of objection is that it may get run together with a slightly different kind of criticism associated with educating for virtuous intellectual character. This is that any conception of education that has the virtues (and thus the intellectual virtues) at its heart is thereby incorporating a particular European-centric cultural framework, and hence is implicitly espousing hegemonic ideas about its cultural superiority. I think this objection is misplaced since it conflates the general structure of the proposal with a particular way of applying that proposal. We may primarily get our conception of the virtues, and thus the intellectual virtues, from Ancient Greece, but it would be a mistake to think that the ideas at issue are tied to this particular cultural tradition. Indeed, this is simply factually incorrect, in that one finds broadly virtue-theoretic

proposals, including ones with a specific focus on the intellectual virtues, in several other cultural traditions.[9] More generally, there is nothing particularly European-centric about placing an important premium on the value of the truth, as lots of different cultural traditions incorporate the very same concern.

It follows that while one might elect to educate for the intellectual virtues by embedding them within a certain cultural tradition that one wishes to eulogize, this is in no way essential to the guiding idea in play. Furthermore, educating for the intellectual virtues would be antithetical to any such exercise in cultural hegemony anyway, as one would be giving students the intellectual skills to identify the problematic nature of what is being proposed. Virtuous intellectual character is not a friendly bedfellow of propaganda. The upshot is that allowing the intellectual virtues a fundamental role in one's educational practices is entirely compatible with an educational approach that has no truck with the idea of the inherent superiority of a particular cultural tradition.[10]

5. CONCLUDING REMARKS

We have argued that there is an overarching epistemic goal to education, and that this is the development of good intellectual character. Moreover, we have seen that the specific sense of good intellectual character that is relevant in this regard is virtuous intellectual character, and thus involves the cultivation of the intellectual virtues.[11]

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NOTES

[1] This issue has recently been explored in an acute form in terms of the relevance of *extended cognition* to education, whereby technology becomes a part of a subject's cognitive processes, and hence enables them to directly gain knowledge and skills that would have otherwise taken considerable training. See, for example, Pritchard (2014; 2015; 2018), Heersmink & Knight (2018), Kotzee (2018), and Pritchard, English & Ravenscroft (2021). For further discussion of the epistemological implications of cognitive augmentation in general, see Carter & Pritchard (2019).

[2] The foremost contemporary defender of this thesis is Siegel (1988, 1997, 2003, 2017, 2017). See also Scheffler (1973), who offers an influential precursor to this contemporary proposal (and which Siegel has described as an important influence on his thinking in this regard).

[3] For some recent defenses of this general account of the overarching epistemic goal of education, see Pritchard (2013; 2016; 2018; 2020), Baehr (2015; 2021), and Croce & Pritchard (*forthcoming*). For discussion, see also Hyslop-Margison (2003), Battaly (2006), MacAllister (2012), Sockett (2012), Watson (2018), Byerly (2019), and the essays collected in Baehr (2016). There is also a wider literature exploring the virtues in general and education, usually with a specific focus on the moral rather than intellectual virtues. See, for example, Carr (2014) and Kristjánsson (2015).

[4] The standard account of the intellectual virtues is broadly Aristotelian. See Zagzebski (1996) for a highly influential neo-Aristotelian account of the intellectual virtues. See also Roberts & Wood (2007), Worley (2009), and Baehr (2011). For a useful recent survey of the literature on the intellectual virtues, see Battaly (2014).

[5] Classically, this point is often expressed in terms of how the intellectually virtuous subject has wisdom, at least in the sense of practical wisdom (*phronesis*), if not also in terms of theoretical wisdom (*sophia*). Whatever circumstances one faces in life, it is better to confront them with wisdom than without. See, for example, Whitcomb (2010), Baehr (2012), and Curren (2014).

[6] For further discussion of the educational debate between proponents of virtuous intellectual character and proponents of critically rational intellectual character, see Siegel (2017), Hyslop-Margison (2003), Huber & Kuncel (2016), Baehr (2019), and Carter, Kotzee & Siegel (2019).

[7] Harman (1999; 2000) and Doris (2002) offer influential presentations of the situationist critique of virtue theory. For an important response, see Jayawickreme *et al* (2014). For a key defence of the application of this situationist critique to the specifically intellectual virtues, see Alfano (2012). For some responses to the latter, including with the epistemology of education specifically in mind, see Pritchard (2015), Baehr (2017), and Carter & Pritchard (2017).

[8] Much of this discussion mirrors more general issues about the role of exemplars in virtue-based educational theory, though recently there has been some specific discussions of the intellectual virtues in this regard. On the former front, see Zagzebski (2010; 2017), Croce & Vaccarezza (2017), Croce (2019; 2020), Korsgaard (2019), Kristjánsson (2020). On the latter front, see Porter (2016), Tanesini (2016), Alfano & Sullivan (2019), van Dongen (2017), and Croce & Pritchard (*forthcominglb*).

[9] See, for example, Ryan & Mi (2018), which discusses the relationship between the intellectual virtues and Confucian thought.

[10] Consider, for example, the 'Anteater Virtues' project that I run at the University of California, Irvine, and which is devoted precisely to bringing the cultivation of virtuous intellectual character into heart of the curriculum. The project is explicitly not cast in European-centric terms, however, as a range of disciplinary perspective and cultural traditions are represented. For an evaluation of the effectiveness of this pedagogical intervention, see Orona & Pritchard (2021). Another example of an educational initiative concerned with the development of virtuous intellectual character without in the process focusing on European-centric cultural ideas is the prison education project described in Pritchard (2019; *forthcominga*).

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