
**Abstract:** Achievements have recently begun to attract increased attention from value theorists. One recurring idea in this budding literature is that one important factor determining the magnitude or value of an achievement is the amount of effort the achiever invested. The aim of this paper is to present the most plausible version of this idea. This advances the current state of debate where authors are invoking substantially different notions of effort and are thus talking past each other. While the concept of effort has been invoked in the philosophical analysis of a number of important concepts such as desert, attention, competence, and distributive justice, it has hardly ever been analyzed itself. This paper makes headway in this regard by discussing three ambiguities in the everyday notion of effort. It continues to develop two accounts of effort and shows how both of them are achievement-enhancing.

**Keywords:** Achievement, Effort, Well-Being, Intrinsic Value
Effort and Achievement

HASako Von Kriegstein

Ryerson University – Ted Rogers School of Management

I. INTRODUCTION

Many people share the belief that achievements are among the things that can confer value on a life. Thus it is somewhat surprising that (Western) philosophers, while discussing other putative values – such as beauty, knowledge, pleasure, virtue, and love and friendship – in great detail, have largely ignored achievements. This has recently begun to change, and there is now a small but growing literature discussing the value of achievements (whether it is discussed in terms of welfare,¹ meaningfulness,² or simply value without further specification³).

Two main questions


² Laurence James, 'Achievement and the Meaningfulness of Life', Philosophical Papers 34 (2005), pp. 429-42.


⁴ Note also that the notion of achievement has been invoked in the discussion of more encompassing accounts of the good life – Ronald Dworkin, 'Foundations of Liberal Equality', Equal Freedom – Selected Tanner Lectures of Human Values, ed. S. Darwall, (Ann Arbor 1995); as well as in the context of giving an account of the value of knowledge
are being discussed in that context. First, what is it about achievements that makes it reasonable to think that they are intrinsically valuable at all?\(^5\) Second, what are the factors that make one achievement more valuable than another; or, closely related, what makes one event *more of an achievement* than another?\(^6\)

With regard to the latter question it is a recurring theme in the literature that the effort expended by the achiever is an important factor determining (at least partly) the magnitude and value of a given achievement. Simon Keller, for example claims that ‘the greater the effort required for an individual to achieve her goal, the more her welfare is enhanced by its achievement’.\(^7\) The same sentiment is expressed in the following passage by Gwen Bradford whose recent book on

---


\(^6\) There is a difference between the value of an achievement and the magnitude of an achievement (how much of an achievement a given event is). However, I think that insofar as events are valuable in virtue of being achievements (have value *qua* achievement) this value is going to be a function of their magnitude as achievements. Thus, for the rest of this paper, I will speak indiscriminately about the magnitude or the value of achievements.

\(^7\) Keller, ‘Success’, p. 34.
achievements and their value is by far the most thorough treatment of the subject to date.

There is a very strong intuition that hard work, perseverance, and effort matter for the value of an achievement. Even if it is not obvious at first how much effort matters, it seems clear that it does indeed play a role in determining the value of an achievement.8

The idea that the magnitude and value of achievements are closely related to the effort expended is central to Bradford's perfectionist account of achievements, and it is an appealing one. But, despite appearances perhaps, what exactly is meant by ‘effort’ in this context is anything but obvious. Indeed, when reading Bradford, Keller and others on effort, it does not seem like they are using a single more or less well-behaved concept. My aim, in this paper, is to clear this ground and to spell out the most defensible form of the claim that effort is a partial measure of achievement. In doing so, I will provide a discussion of the everyday notion of effort that should be of wider interest. While rarely analyzed itself, the concept of effort is used to analyze other important concepts in a variety of philosophical contexts, including desert, attention, competence, and distributive justice.9 Given the ambiguities in our everyday notion of effort that I discuss in section III, using an unanalyzed notion of effort to explicate these other concepts runs the risk of equivocating between different concepts.

8 Bradford, ‘Value’, p. 208. See also – – –, ‘Recursion’.

Before I get to the ambiguities in the everyday concept of effort (section III), I will further motivate the thought that achievement is enhanced by greater effort (section II). I should add a word of caution here. As of now there has been no attempt in the literature to distinguish carefully between the effort that was actually expended in an achievement and the effort that was (minimally) required for the achievement. For most of the paper, I too will ask the reader to indulge my glossing over that distinction. I will address the question in the last section. Once the different notions of effort are on the table, I argue that the notion best suited to play the role as a factor in the magnitude of achievements is one that construes an agent’s effort-level as the percentage of available resources (of a certain kind) they allocate to the task at hand (section IV). In section V, I refine my account by addressing two puzzles about (this notion of) effort as a measure of achievement: first, what is the relevant amount of ‘available resources’? Second, does all the effort expended in the pursuit enhance an achievement, or should we discount some effort as 'wasted'? (and how do we decide when effort counts as wasted?)

II. THE IMPORTANCE OF EFFORT FOR ACHIEVEMENTS

1. Satisfaction, Admiration and Respect

One way of seeing that effort is achievement-enhancing is to note that effort increases the degree to which it seems appropriate to have certain pro-attitudes towards achievements. Everyone knows how satisfying it is to finish a day of successful hard work; even the food tastes better at night. While this phenomenon is partly explained by increased desire for food due to physical or mental exertion, the general feeling of satisfaction mirrors an attitude that we take towards the achievements of others. We admire when people achieve their goals by means of hard work. It is only consistent, then, that we should feel satisfaction after reaching a goal through intense effort ourselves.
We also feel respect for people who show great persistence in the pursuit of their goals. If this phenomenon was limited to cases of valuable goals (such as helping the poor), we might explain it by saying that we admire the virtue involved. And we do (and should) admire the virtue of people who keep working towards valuable goals. But we also admire persistence in people who pour great efforts into reaching their goals when those are trivial. Think of someone who is trying to learn a new skill, or to reach a personal best in some amateur athletic endeavour. Of course, there is always the danger that a pursuit like this carries too high a cost in terms of missed opportunities to do something else. But looked at by itself such persistence seems admirable; and that is because success that is the result of a lot of effort is a considerable achievement.\textsuperscript{10}

There is a complication here in that there appear to be circumstances in which we seem to have more esteem for people who reach their goals effortlessly. Thinking back to college, for example, there was a general sense that doing well was more admirable when done without much effort. But this phenomenon does not undermine the claim that we generally judge effort to enhance achievement. The reason why effortless achievement is sometimes regarded more highly is simply that success with low effort is usually taken as indicating a high level of ability. This is particularly plausible when the success is sustained, making luck a less likely explanation. I submit that when we admire effortless achievement, we are not evaluating achievement but abilities. Once this is distinguished from the concept of achievement itself, it becomes clear that achieving the same result with the same level of competence is actually more of an achievement for the person with less ability who overcomes that deficit through effort.\textsuperscript{11}

\textsuperscript{10} Bernhard Suits makes this point by imagining a Utopia in which opportunity-costs are almost entirely taken out of the equation. Suits, \textit{Grasshopper}, ch. 15.

\textsuperscript{11} It is worth noting here that, according to John Nicholls, effortless achievement is valued in competitive contexts –
Thinking about effort also helps to capture the natural thought that the magnitude of achievements is partly agent-relative: achieving the same goal can be more of an achievement for one agent than for another. For example, swimming 1000 meters is more of an achievement for a third-grader than for Michael Phelps; walking to the grocery store is more of an achievement for my aunt who has Parkinson than for me; and proving a mathematical theorem would be more of achievement for me than for John Nash.

Note that there is also a sense in which the magnitude of achievements is not agent-relative. It is perfectly natural to say that Michael Phelps' swimming exploits are greater achievements than anything a typical third-grader does; and that my mathematical achievements are no match for Nash's. Maybe there are two concepts of achievements, one agent-relative and one agent-neutral. Alternatively, we may think that the agent-neutral and the agent-relative notions of achievement are rival conceptions of the same concept. Or we may think that the best conception of the magnitude of achievements has different factors, one (or some) of them agent-neutral, and one (or some) of them agent-relative. This last option seems most promising to me, but I will not pursue the issue here. Instead I will focus on the sense in which the magnitude of achievements appears to be agent-relative, and I will argue that this idea can be captured by the notion of effort.\(^\text{12}\)

\(^{12}\) It may be worth noting that one may think that the notion of difficulty is agent-relative and can account for the sense in which the magnitude of achievements is so as well. But the nature of difficulty is itself a contested notion. And it seems reasonable that the ordinary concept of difficulty is ambiguous between an agent-neutral and an agent-relative notion in exactly the same way as the magnitude of achievements is (It is more difficult for me to

---

where it makes sense that we would want to be like the people who do not need to put in as much effort. In non-competitive settings, by contrast, satisfaction with success is higher when effort is required. John Nicholls (1989), *The Competitive Ethos and Democratic Education*, (Cambridge, 1989), ch. 6.
Many scenarios that prompt us to think that the magnitude of achievements is agent-relative are cases in which two people achieve a similar result but one of them has to put in a lot more effort. Two of the examples given above are of that kind. Swimming 1000 meters does not require much effort from a world class swimmer, nor do I have to exert myself to reach the grocery store. By contrast, the third-grader and my aunt with Parkinson have to put in a lot of effort to obtain these results. The sense that doing so is more of an achievement for them can be straightforwardly explained by saying that, ceteris paribus, more effort means more considerable achievement.

Other cases are less clear. Take the example of proving some simple mathematical theorem. I said that doing so would be more of an achievement for me than for John Nash. We can spell out this scenario in ways in which this too is explained by differences in effort. Given that my mathematical intuitions are not as good as Nash's, I am likely to have many false starts, and when I eventually get on the right track it will take me a while to recognize this and work through all the steps. In this case my proving the theorem being more of an achievement than Nash's corresponds to my putting in more effort. But what if I sit down, happen to have an idea that works right away, and complete the proof with the same amount of effort as Nash (whose greater ease in working through the proof is balanced off by making one false start)? Is it not plausible to still think that prove a mathematical theorem than for John Nash; but John Nash also does more difficult mathematical proofs than me).

Bradford claims that difficulty is explicable in terms of effort e.g. Bradford, ‘Value’, pp. 218-21, and — — —, *Achievement*, ch.2 – especially pp. 28-9. If that was right, we could say that the role I reserve for effort is played by difficulty, which in turn is to be analyzed in terms of effort. But I think the only thing we would gain from that move is the potential for an unnecessary dispute over the nature of difficulty. Note, for example, that Portmore, while agreeing that difficulty is a measure of achievement, explicitly rejects the idea that difficulty can be reduced to effort; Portmore, ‘Welfare’, p. 10.
the proof was still more an achievement for me than it was for him?

There are two ways of accommodating that thought. However, both of them should be resisted and so we should reject the claim that my proof is a greater achievement than Nash's. First, one may point to the fact that Nash was far more likely to achieve his goal than I. This is, of course, true but it does not by itself justify the claim that my achievement is greater. Overcoming steep odds is achievement-enhancing only when done in the right way – through effort or skill. Beating the odds per se does not make for great achievement; lottery winners are a case in point.\textsuperscript{13}

Second, one may think that for something to be an achievement it has to stand out as special in the life of the agent.\textsuperscript{14} But this \textit{rarity requirement} has no place in the best account of achievements. It is important to distinguish the question whether (and to what degree) a given event is an achievement from the question of how much this event is appreciated as an achievement. I am indeed likely to attach more importance to, or feel more satisfaction about, proving a trivial mathematical theorem than John Nash. But to explain this, we do not need to turn to the magnitude of the achievement. I might be happy because, knowing my mathematical talents, I expected having to put in much more effort. Alternatively, having been unsure about my talents, I might conclude that I am quite gifted and take satisfaction in that thought. Finally, Nash's

\footnotesize{13} We can distinguish two different roles luck may play in the scenario under consideration. First, I might just have gotten lucky to get a correct proof at all. In this case we may wonder whether the proof constitutes an achievement at all, for surely achievements require that the goal was reached somewhat competently. Second, I might have been just as competent as Nash, i.e. we were both overwhelmingly likely to get a solution eventually. It is just that he was likely to get there with little effort, whereas I was likely to need a lot of effort. In that scenario, I have just gotten lucky to not have to put in as much effort as expected, but this does not diminish my competence and my achievement is thus equal to Nash's.

\footnotesize{14} Cf. Bradford, \textit{Achievement}, pp. 60-3.
appreciation of trivial mathematical achievements may have been dulled as they are routinely part of his life, while the same is not true for me. This explains why I would attach more importance to the achievement, but it is no reason to think that mine is actually more of an achievement. More generally, people who reach impressive goals with regularity may stop thinking of these successes as great achievements. But that does not mean that their deeds actually stop being achievements. The rarity requirement would have the absurd consequence that the best way to have a life full of great achievements would be to be fairly unambitious most of the time and do something impressive every so often. While this may not be a bad way to live, it clearly does not involve more achievements than successfully pursuing impressive goals every day.

Thus, when we fill out the details of the scenario in a way that does not involve a difference in effort, it becomes much less plausible to say that my achievement is greater than Nash's. I conclude that the scenario does not undermine the claim that the agent-relative dimension of the magnitude of achievements can be captured by the notion of effort. And the latter provides further support for the claim that effort is achievement-enhancing.

III. WHAT THE EFF? – THREE AMBIGUITIES IN ‘EFFORT’

While authors like Gwen Bradford and Simon Keller award a prominent place to effort in their accounts of achievements, they have little to say about effort itself. Indeed, Bradford suggests that effort may be a primitive concept not capable of further analysis. And she appears confident that, even if it was possible to further analyze the concept, such an analysis would have no implications for the way she wants to use it in analyzing the concepts of difficulty and achievement.15 However, just looking at the scant remarks that Bradford and Keller do make about the nature of effort one

does not come away with the impression that they are working with a single more or less well-behaved concept. Here is a passage from Bradford:

I take effort here as something quite familiar – exertion of will. We experience exerting our will when we struggle to get out of our cozy bed in the morning, when we try to lift heavy grocery bags out of the trunk of the car, resist temptation to lose focus listening to a boring lecture, or push ourselves to try to understand a difficult text. These are all experiences of effort, which is to say, exerting our will.16

And here is Keller:

Suppose that you achieve your goal of winning a gold medal and I achieve my goal of winning a silver medal; or that we each achieve the goal of completing a marathon, but you have one leg and I have two; or that we each contribute to a scientific breakthrough, but your contribution is greater than mine. In all these cases, on the view that I’m suggesting, the contribution to your welfare is greater. You contribute more productive effort than me;17

For good measure, consider the following passage from Doug Portmore who argues that, pace Keller, effort is not a measure of the value of achievements.

To illustrate, suppose that my goal is to solve a set of extremely simple arithmetic problems (a goal worth pursuing, let us assume), and that I can do so either by using paper, pencil, and the methods I learned in elementary school or by going out and


17 Keller, ‘Achievement’, p. 34.
purchasing a calculator and using it instead. The first method will certainly involve more effort, but it will not be more difficult, just more tedious

In these short passages we can already see a number of different notions of effort at work. Bradford's idea seems to be that to expend effort is to exert one's will as a way to master some kind of inner resistance. Keller's example of running a marathon with a missing limb alludes to the overcoming of a lack of physical ability. His other two examples introduce the notion that, depending on the results, effort can be more or less productive. Portmore seems to presuppose that to exert effort is to use up a certain amount of resources, such as time and mental energy. While all these notions are in the same conceptual ballpark (which is why none of them jumps out as an obvious misuse of the term 'effort'), they are not equivalent in any obvious way. Indeed, I think that ordinary usage of 'effort' ranges over different phenomena which can result in its eliciting conflicting intuitions.

This matters because (dis)agreements among those interested in the connection between achievement and effort may be merely apparent, when they use different conceptions of effort. The fact, for example, that both Keller and Bradford subscribe to the idea that effort is an achievement-enhancer may mask a substantive disagreement about what exactly makes achievements great. And, pace Bradford’s assumption that further analysis of effort would not undermine her account of the relationship between effort and achievement, we shall see in section 3.3 that some of her claims rely on a rather controversial way of thinking about effort. Thus, if effort is to play an important role for the analysis of achievement (or any other concept), it is

18 Portmore, 'Welfare', p. 11.

19 As will become evident in the discussion below (section 3.3), it is not clear that Bradford always thinks about effort in this way.
necessary to clarify what exactly a unit like Bradford's proposed “eff-minutes”\textsuperscript{20} is supposed to measure (hence the title of this section).

In the rest of this section, I am going to do some extensive ground-clearing by considering a number of ambiguities in the use of 'effort'. Each of the following three sub-sections will discuss a scenario that shows that there are different ways of thinking about effort. I will argue that the first two ambiguities can be dispelled, but that the last one points to the need to distinguish two concepts of effort. At this point, we will have arrived at the most explicit characterization of effort in the philosophical literature. This will be put to use in section 4, when we will see that, while each of the two concepts of effort developed here is a factor in the magnitude of achievements, they make their contributions in rather different ways.

\textit{1. Effort as Dedication of Resources}

Consider

\textit{A Tale of Two Brothers}: Kyle and Cody are brothers. Cody is a lumberjack and Kyle a philosopher. When Cody gets home at night, he is tired. He thinks that his job requires a lot of effort, while his brother gets to just sit around all day. When Kyle gets home at night, he is tired. He thinks that his job requires a lot of effort, while his brother gets to just mindlessly cut down trees.

Kyle and Cody are thinking about different kinds of effort; mental and physical effort respectively. And insofar as each is thinking about one of these kinds only, they are each correct that they are exerting a lot more effort than the other. This, however, is not a deep conceptual difference. Both physical and mental effort involve the employment of limited resources that are in some sense

\textsuperscript{20} Bradford, \textit{Achievement}, p. 42.
internal to, or part of, the agent.\footnote{This is a rough way to put the idea and would need refinement for a full blown analysis of (physical and mental) effort. To see this, consider that giving blood, for example, fits the model of “intentional employment of internal resources”, but the amount of blood given would clearly be a poor measure of effort. I think that the most promising way to rule out cases like this would involve a fine-tuning of the notion of intentional employment. While the details of such an account are beyond the scope of this paper, it would have to deliver the intuitive result that blood is a resource that I can intentionally control only when and insofar I treat it as an external resource. The way that I control my blood is similar to the way that I control my money – I have the right and the means to decide what happens to it (to some degree); it is not at all like the way I control my limbs or my thoughts – I cannot direct my blood at will.}

The difference between Kyle and Cody lies simply in what kind of resources they are using up. As a schematic placeholder for the relevant science we can imagine that Cody's job involves burning a lot more calories than Kyle's, while the latter is using up all of his mental capacities with little room for attending to anything but his work.

We may find that ultimately mental and physical effort can be reduced to a single notion of effort. That depends on whether there is a meaningful way in which we can speak of an amount of mental resources as equivalent to some amount of physical resources. But we need not worry about this here. As long as we accept that each form of effort is a factor in the magnitude of achievements, it does not matter much whether we treat them as two different factors or as one factor. And the contribution that each makes to the magnitude of achievements can even be used as a way of converting one form of effort into the other. For example, we might say that the mental effort Kyle needs to exert to write a book contributes more to the magnitude of his achievement than the physical effort Cody exerts when carrying his chainsaw to the truck.\footnote{From rough ordinal comparisons like that we might be able to work our way up to fairly precise comparisons. Cf. Bradford, \textit{Achievement}, pp. 40-1. We might find that some amount of physical effort is on a par with some amount of mental effort (that is to say neither is more effortful nor are they equally effortful) but that would still not inhibit our}

So, the fact that
there are these different kinds of effort does not pose much of a problem for anyone who wants to employ the notion of effort without further analysis. Putting in effort, we may think, is to dedicate certain kinds of internal resources to a task. That there are different kinds of such resources is not a deep problem.

2. Forcing Oneself

The idea of effort as dedication of resources just introduced is challenged by cases that seem to involve a difference in effort but no difference in the amount of resources used. Consider

Math Test: Billy and Liz are classmates in elementary school. They are both equally gifted when it comes to maths and they both take a test that is not very hard but does require them to focus for 15 minutes. Billy loves math and dives right into the test. Liz, on the other hand, does not enjoy math. While completing the test, she is constantly tempted to think about the novel that she is reading for her English class. Both Liz and Billy score 90% on the test. Since they are equally gifted and achieved the same result, their teacher concludes that they must have put in equal effort. However, Liz, but not Billy, is exhausted after the test.

The fact that Liz is exhausted after the test seems to indicate that she exerted more effort than Billy. But, at the same time, the teacher's reasoning that equal ability and equal results on an equal task indicate equal effort on part of the students seems sound. The same tension can be observed ability to speak meaningfully about quantities of effort in general. Cf. Ruth Chang, ‘Introduction’, R. Chang ed., Incommensurability, Incomparability, and Practical Reason, (Cambridge, 1997).

23 The general point here is somewhat analogous to a worry that is sometimes expressed in discussions of hedonism, where it is said that, for example, the pleasure of smoking a cigar cannot be compared with the pleasure of hearing a symphony. Cf. Franz Brentano, Vom Ursprung Sittlicher Erkenntnis, (Leipzig, 1889), p. 28; for discussion see Fred Feldman, Pleasure and the Good Life, (Oxford, 2004), pp. 45-9.
in what Susan A. Jackson and Mihaly Csikszentmihalyi, in their work on flow states in sports, have termed the apparent paradox of effortless effort.\textsuperscript{24}

Sport involves varying degrees of physical effort, and all sports lift the level of effort above average. To perform ... requires a commitment of mental and physical energies to the task. Athletes are pleasantly surprised, when, instead of working harder, they feel they are working more easily to achieve high standards of performance during flow.\textsuperscript{25} ... And it is this process, of the body, and mind performing at the limits of their capacity and yet doing so effortlessly, that eventually produces total absorption, or the merging of action and awareness.\textsuperscript{26}

What both the apparent paradox of effortless effort and Math Test point to is that sometimes when we judge whether an activity was effortful we do not (just) look at how many resources (physical or mental) we have used, but (also) at whether or not we had to force ourselves to do so (see also the quote from Bradford above). In Math Test, Billy and Liz, being equally gifted, both have to dedicate the same amount of mental resources in order to score 90\% on the test. But only Liz has to force herself to do so. That is why she is exhausted afterwards. Billy, on the other hand, is in flow (or something close to it), he does not need to force himself at all – in that sense his taking the test is effortless. Nevertheless, he spent just as many mental resources on the task as Liz – and in that sense his taking the test was effortful. The same applies to the athletes Jackson and Csikszentmihalyi describe. In one sense they are exerting enormous amounts of effort in virtue of


\textsuperscript{25} Jackson/Csikszentmihalyi, \textit{Flow}, p. 75.

\textsuperscript{26} Jackson/Csikszentmihalyi, \textit{Flow}, p. 19; emphasis added.
dedicating mental and physical resources to their performance. In another sense, they do not exert effort at all – they are not forcing themselves.

We might think, then, that there are two different concepts of effort: dedicating resources and forcing oneself. If that was right, authors using the notion of effort should clarify which one they are using. I think it is true that both of these notions affect our intuitions about effort. However, I do not think that forcing oneself actually latches onto a distinct concept of effort.\textsuperscript{27}

Consider again the difference between Liz on the one hand, and athletes in flow and Billy on the other. The important difference between them is, I submit, that Liz is being tempted to do something else, whereas Billy and the athletes are not. For whatever reason, thoughts about her novel keep becoming salient in Liz’ consciousness during the test. She constantly has to force herself not to give in to the temptation to follow these thoughts instead of using her mental energy to focus on the math task. But, of course, fighting temptation is a mental task itself.\textsuperscript{28} Thus, in order to exert an equal amount of effort as Billy on the math test, Liz needs to accomplish the further task of holding temptation in check. If this is right, we should not say that Liz is exerting a different kind of effort – the forcing oneself kind – in addition to the mental effort both her and Billy are exerting. Rather, Liz is exerting more of the same kind of effort, because she is actually pursuing a more difficult (or an additional) goal.

By way of analogy imagine that you and I are each carrying a big TV out of our respective

\textsuperscript{27} Neither do Jackson and Csikszentmihaly: ‘In fact a great deal of effort is expended but because the athlete is not forcing her actions, it can \textit{seem as though} the performance is proceeding spontaneously.’ Jackson/Csikszentmihalyi, \textit{Flow}, p. 74; emphasis added.

\textsuperscript{28} For extensive lay-friendly discussion of this point see Roy Baumeister and John Tierney, \textit{Willpower: Rediscovering the Greatest Human Strength}, (New York, 2011).
living rooms. We are equally strong, the TVs are equally heavy, we are equally well rested, and the distance we have to cover is the same. The only difference is that you have an eight-year old son who is unhappy with the idea of getting rid of the TV, and is trying to pull you and the TV back into the living room. Chances are you are going to spend more effort on the task than I. But you do not have to exert a different kind of effort in addition to the physical effort we are both exerting – the 'forcing your son' kind. Forcing your son to let you walk out is just an additional task and thus your task is more difficult than mine. Of course, there is a difference between this case and Math Test: the additional task in your case is the result of external factors, while the additional challenge Liz faces is created internally. But I do not see why that should matter. Imagine a variation of Math Test in which some cruel experimenter shows Liz her favourite candy-bar every three minutes during the test. Now the temptation (the additional mental task) is created externally, but this does not seem to change anything in terms of effort.

I conclude that forcing oneself is not the hallmark of a second kind of effort (in addition to the resource dedication kind introduced above). Instead, having to force oneself is the mental task of fighting off tempting distractions. Performing this mental task requires resources and is thus effortful. Because we rarely find ourselves so locked into a particular activity that we are oblivious to tempting distractions, the task of fighting them is a constant companion to effortful activity. That explains why we might come to regard it as a necessary condition for effort and are prone to describe flow states as effortless. However, flow states are not effortless; they are free of salient tempting distractions. The apparent paradox of effortless effort would be more accurately described as temptationless effort – a phenomenon that, while maybe rare, does not have the appearance of paradox. On a conceptual level, then, we can put the worry about forcing oneself to rest. However, we need to be careful when mining our intuitions about effort. The absence of
forcing oneself does not necessarily mean the absence of effort – it just indicates that the task is, in one respect, easier than it could be.

3. Percentage and Absolute Amount

The following scenario is adapted from one of Bradford's examples.

_Fairy Godmother:_ Betty is participating in a 10k track race with her running-buddy Steph cheering her on from the sidelines. Ten minutes in the Fairy Godmother of Abilities magically endows her with the capacity to exert far more effort than ever before – 10 times her original max. The Fairy Godmother endows Betty with this ability for five minutes, then reduces her max back to its original level. … But Betty continues to exert intense effort at the same rate even during this interlude. The increase in capacity is completely unperceived by her.²⁹ Steph, however, is in the know about the activities of the Fairy Godmother. She is cheering Betty on to try harder, but Betty signals that she is trying as hard as she can. At first Steph accepts that, but once the magic has been worked, she starts yelling again, telling Betty that she can try harder now. Betty does not react to that and falls just short of beating her previous personal best. Steph comments that this is, because during those magical five minutes she did not put in enough effort. Betty replies that she was working just as hard during those five minutes as during the rest of the race. Steph is unmoved. She claims that to exert full effort means to make the most of your abilities. And during the five minutes when Betty's ability to exert effort was souped-up, she did not make the most of this ability.

I believe that this dispute between Betty and Steph is the result of them using two genuinely different notions of effort. Betty would probably agree with the following passage from Bradford.

²⁹ Cf. Bradford, _Achievement_, pp. 53-4. If you think that this scenario involves a conceptual confusion, hold that thought. I will address this worry below.
Now, it's possible ... that there is a universal maximum effort for all human beings – no one could ever exert more than this maximum, and everyone is capable of it … But it seems far more likely that different people are capable of exerting different maximum levels of intense effort. It just seems to be true that some people can try harder than others.  

Steph (her role in the scenario being my addition to Bradford's story) would beg to differ. On her understanding of effort there has to be a 'universal maximum effort for all human beings'.

Before I describe the two different notions at play here, we need to set aside one possible but misleading interpretation of the phrase 'different people are capable of exerting different levels of intense effort'. It would be tempting, for example, to say that someone with ADD is capable of exerting less effort when reading than someone without that affliction. However, it is important to keep the lesson from Math Test in mind. Someone with ADD reading a book is actually engaging in a much more difficult task than someone else doing the same. For someone with ADD all kinds of tempting distractions are going to become salient and, if they are to complete the task, they will have to fight off these temptations which is going to require a lot of their mental resources. Thus, it is true that they are less capable of exerting effort on the task of reading the book, but that is because they are simultaneously attempting another task. A case like that does not show that some people are actually capable of exerting more effort any more than the TV carrying case in section III.2. There too, it is true that you are capable of exerting less effort in carrying your TV than I am, but this is just because some of your efforts are directed towards the task of fighting off your belligerent son.

30 Bradford, Achievement, 52.
With that out of the way, we can ask whether it really does seem true, as Bradford claims, that 'some people can try harder than others'. What would it mean for it to be true? I think it would have to mean that some people simply have more of the relevant resources at their disposal than others. And it does seem to be true (obvious even) that some people have more mental and/or physical resources than others. There is, then, a notion of effort that makes it true that different people can exert different amounts of it. According to this understanding the maximum capacity of effort for a given person is the amount of physical and mental resources at that person's disposal. This is the notion of effort Betty has in mind.

But there is also another notion of effort. This notion of effort is familiar from discussions about desert and distributive justice. A common form of luck-egalitarianism claims that wages should be distributed according to effort. The underlying reason for that suggestion is that people can control and claim credit for how much effort they are exerting. For an example of this position witness Wojciech Sadurski.

Two main alternative measures of desert are usually suggested: effort or objective contribution. It should be clear from the preceding remarks that I consider effort to be the principal criterion of desert, mainly because 'contribution' or 'success' reflect, among other things, factors which are beyond our control and thus for which we cannot claim any credit.31

The merits of this kind of position in debates about distributive justice need not concern us here. What is relevant, however, is that this position would be internally unstable if it employed the notion of effort that Bradford seems to operate with. If, as this notion implies, my effort-level is

31 Sadurski, Desert, p. 134.
simply a matter of how many resources I employed in a given task and some people happen to have more resources than others, effort fails the suggested test for a desert base.\textsuperscript{32} Our maximum effort-level would be just another 'factor beyond our control'.

Another way of seeing that there are two different notions of effort at play here is that, from Sadurski's point of view, the Fairy Godmother of Abilities in Bradford's scenario seems to be out of her element. She trades in abilities, after all, and abilities and effort are two very different things. As someone like Sadurski would see it, abilities are aptly described as (maybe a special kind of) resources whereas effort is the degree to which resources are put to use. In that sense \textit{Fairy Godmother} is conceptually confused. It is impossible to increase the capacity to exert effort. Instead, exerting effort to some degree just is to make use of one's capacities to that degree. What happens, when the fairy godmother is supposedly increasing Betty's capacity to exert effort, must be this: the fairy godmother makes additional physical or mental resources available to Betty. Since Betty does not know this, she continues to use just as many resources as before. In the sense in which effort simply consists in the dedication of these kinds of resources to a task she is working just as hard as before. However, she is now using a smaller part of her available resources. This is what Steph has in mind when she reproaches her for not trying hard enough. And this is also the notion that Sadurski has in mind. What part, or percentage, of the resources available to a person they dedicate to their work should determine their wage, because it is that – not the absolute amount of resources available to them – which they sufficiently control. According to this second notion of effort, it is a matter of conceptual truth that every person's maximum level of effort is equal. One's effort-level is the percentage of one's internal resources (physical and mental) that one employs to a given task. No matter how many resources one may have, the maximum level will

The following analogy illustrates the two different concepts of effort quite nicely.

Financial Effort: Donald Trump's goal is that candidate A will win the election. Ronald Chump, on the hand, backs candidate B. Both men think that donating money to a Super PAC associated with their candidate is the only way in which they can influence the election and thus they both set out to make a 'financial effort' to bring about their respective goals. Trump makes a series of donations totalling 31 million dollars – which equals 1 per cent of his net worth. Chump also makes a series of donations, his are totalling 2500 dollars – which equals 50 per cent of his net worth.

In one sense, Trump has made a tremendous financial effort, whereas Chump's effort, while sizeable, is nowhere near Trump's. But, of course, Trump has donated just one percent of his net worth to the Super PAC, whereas Chump has donated 50 per cent of his. In this sense, Chump has made a much greater financial effort than Trump. These days, financial differences between people are much more dramatic than the differences in their physical and mental endowments. However, the same two notions of effort apply in both cases. Effort can mean either the total amount of internal resources dedicated to a task, or the percentage of available resources dedicated to a task. In the first sense, Bradford is right to say that 'some people can try harder than others'; in the second sense this is not only false, but necessarily so.

IV. EFFORT AND ACHIEVEMENT

I agree with authors like Bradford and Keller that effort is one of the factors that determine the magnitude of achievements. But I have now argued that there are two different notions of effort. Let us call them 'percentage-effort' and 'absolute-effort' (for absolute amount) respectively. This raises the question which kind of effort is the one relevant to the magnitude of achievements. The answer is that percentage-effort is the more important concept here. But, in a less direct way,
absolute-effort also has a role to play.

To fully explore the latter suggestion would take us far beyond the scope of the current article, but let me briefly explain what I have in mind. I take it to be a plausible thought that one factor determining the overall magnitude of an achievement is how much of a difference the actions of the agent make to the likelihood of success. That is, if prior to my actions there is a low chance of my goal being realized but this probability rises substantially when taking my actions into account, my success is more of an achievement (other things being equal) then if my actions had made less of a difference. That explains, for example, why neither winning the lottery, nor making sure Vermont votes against the GOP candidate in a presidential election is much of an achievement. Regardless of one's actions the probability of success is very high in the Vermont and very low in the lottery case (assuming one does not fix the lottery). If, by contrast, a pitcher studies videos and scouting reports that help him to better understand and exploit the weaknesses of an opposing lineup, his success is an achievement partly because these actions made success more likely.

Now, how much of a difference an agent's actions make to her chances of success is partly

---

33 While this is an intuitive thought that captures the idea that for something to your achievement you have to be able to take credit for its obtaining, it invites a lot of difficult questions. In particular, how are we to make sense of the 'prior probability' of an event's obtaining? It cannot just be the probability that the event would come about if the agent had not acted in its pursuit, for then things like crossing the street would be great achievements (unless I had acted in pursuit of reaching the other side, there was a near zero chance that I would end up there; given that I did act in pursuit of this goal, I will reach the other side with near certainty). My favoured solution is to say that the relevant prior probability is the probability that the event would have occurred given that a standardized agent in the position of the actual agent would have pursued it as a goal. But how exactly we should think about a standardized agent is another difficult question; discussing this question is beyond the scope of this paper.
a function of how much effort she exerts. To see this, consider the following simplified way of thinking about actions. Actions generally involve a combination of effort and skill and this combination (together with facts about the goal or intention) determines the likelihood of success. As a general rule skill and effort can be substituted for each other to some degree: a less skilled agent can make up for her lack of talent with great effort, and a lazy agent may compensate her lack of effort through great skill. Keeping skill level constant, then, we should generally expect a correlation between effort and contribution to likelihood of success. That means that effort, via this contribution, has an achievement enhancing effect, and this role can be played only by absolute-effort. When one of two equally skilled agents dedicates more physical or mental resources to a task she will generally be more likely to be successful; and that is so independently of how much such resources she could have employed. Potential resources simply have no bearing on the likelihood of success as long as they remain untapped. Thus, it is absolute-effort that enhances achievement in this indirect way.34

This story about the contribution of absolute-effort, however, does not account for the kind of intuitions about effort and achievement I discussed in section 2. While a third grader's swimming 1000 meters is more effortful than Michael Phelps', this extra effort leads to (at best) an equal chance of success. Thus, the sense that extra effort makes for more significant achievement is not adequately captured by the observations made so far. Moreover, it is not even clear that the third-grader does actually exert more absolute-effort than Phelps. If we accept that

34 I think that this may be the best way of making sense of the way that Keller talks about achievement and effort, cited above, when he gives the example of two researchers making differently sized contributions to a scientific breakthrough and claims that the one with the greater contribution has contributed ‘more productive effort’. Keller, ‘Achievement’, p. 34.
more effort makes for more achievement even if other factors are held constant, we have to focus on percentage-effort.

Percentage-effort is a measure of how close the particular agent in question had to go to their limits in order to reach their goal. It is this notion that accounts for the agent-relative aspect of the magnitude of achievements. A typical third-grader may not have to expend more resources than Michael Phelps to swim the same distance. But she does have to get closer to her limit – that is why it is more of an achievement for her. This also accounts for our increased pro-attitudes towards effortful achievements. It is very intuitive to think that it is admirable if someone operates near the limits of their physical and mental abilities.

I conclude that, while absolute-effort may play the indirect role indicated above, percentage-effort is the central notion accounting for the intuitive links between effort and the magnitude of achievements discussed in section II.

V. TWO PUZZLES

I have argued that, other things being equal, it is a greater achievement for someone to reach a goal with more rather than less percentage-effort; and that this explains the sense in which the magnitude of achievements is (at least partly) agent-relative. There are two puzzles that arise from this view. First, we need to have an account of what resources count as 'available' – otherwise we will be unable to make sense of the 'percentage of available resources' that percentage-effort is supposed to represent. Second, it seems that some of our efforts in reaching a given goal are more productive than others; in fact, some efforts seem outright wasted. Should we say that such efforts are also achievement-enhancing? If not, how do we distinguish wasted from productive effort? I will address these questions in turn.
1. Calculating Percentage-Effort

Effort as a percentage of resources dedicated to a task comes with the following complication: a percentage of what? Above I spoke of 'available resources', but it is not clear what counts as available in this context. There is no such problem for absolute-effort. When we say that effort is simply the amount of resources dedicated to a task we can (in principle) simply calculate that amount by multiplying the average intensity level during a task (how many resources are on average being used up at any moment during the task) with the time the task is being engaged in. But for percentage-effort we need to compare that amount to some conception of available resources. How are we to think about this latter notion?

The puzzle can best be seen by focusing on time. Clearly, the longer a period we take into consideration, the more resources will be available. So we need to decide how long a period we should use for our comparison. One obviously hopeless option is to count only the moment when effort is the most intense. If Pedro works for 10 hours at half his maximum possible intensity, and Amir works for one hour at 60 per cent of his, Amir does not put in more percentage-effort. More plausibly, we might take into account all and only those times during which the agent acted in pursuit of the goal. If, for example, I reached a goal by working with half my maximum intensity for an hour on Monday and then with 90 per cent of my maximum intensity for an hour on Wednesday, we would say that my effort-level in reaching this goal was 70 per cent. But this, too, seems wrong; for on this picture duration would not matter at all. Imagine that my neighbour Andreou worked two hours on Monday at half his maximum intensity and then two hours on Wednesday at 90 per cent. According to the current picture he did not put in more percentage-effort than I did which seems absurd. A third option would say that what counts is the interval between adopting the goal and reaching it. This takes care of the case of me and my neighbour,
but it gives undue prominence to someone who takes fewer breaks. Say that my other neighbour, Calvin, works for two hours at half his maximum intensity on Monday and then another two hours at 90 per cent on Thursday. It seems false to say that he worked less hard than Andreou simply in virtue of doing his second shift one day later.

I propose that the time span to take into account is the interval between adoption of the goal and the last moment when it is possible to reach it. What this latter moment is will be dictated either by the goal content, or by particular events that are important for the goal. For an example of the deadline being imposed by the goal content, imagine that someone has the goal of finishing college within four years. This goal includes a definite deadline, and resources that are available only after the deadline should not count. For an example of a deadline imposed by events outside the goal content, imagine someone having the goal of gaining recognition from their professional role model. This goal can only be reached as long as the role model is alive. The limiting case of a deadline being provided by circumstances is the death of the agent herself. Whenever there is nothing else limiting the amount of time the agent has to reach a goal, the time interval we should focus on in calculating percentage-effort is the time between the adoption of the goal and the agent's death.

The obvious advantage of this suggestion is that it provides a very natural rendering of the phrase 'available resources'. If the agent wants to reach her goal, she can try from the moment she adopts the goal up to the last moment when it is possible that the goal will be reached.\footnote{If, in the early stages, the agent does not do enough or things go badly the goal might become impossible before the deadline that is dictated by the goal content (or the circumstances) at its conception. Cases like this might be quite difficult to handle for an account that wanted to extend my model to give an account of (valuable) failure. For my current purposes I can ignore such cases, as they are not even in the market for being achievements at all.} These are,
in fact, all the resources that are available to her in pursuing the goal. Assuming that Andreou and Calvin have goals that specify the same deadline, it also delivers the intuitive result about their case, namely that they have put in equal effort and that their achievements are, in that respect, on a par.

A problem arises if their goals come with different deadlines. Say that Andreou's goal was to be done by Friday, while Calvin had given himself until Sunday (each adopted the goal on Monday). Now my proposed view says that Andreou exerted more percentage-effort than Calvin, because the interval he had to complete the task was shorter and, thus, he had fewer resources available of which he then used a larger share. While this may seem counterintuitive at first, I think that it is actually the right result. Andreou's goal required him to use up a larger share of the resources available to him up to the time he had given himself, and his achievement seems a little more considerable than Calvin's in virtue of this fact.36

A related worry would be that people who die young get extra amounts of percentage-effort for free as it were, because their available resources (against which the resources they actually exert are measured) are reduced by their early death. Again, however, this seems right to me. Someone who achieved some temporally open-ended goal while dying at thirty has in one sense achieved more than someone who achieved the same goal while living a few decades longer. The notion that percentage-effort is achievement-enhancing seems to be closely related to the idea that an event becomes more of an achievement, if the agent 'puts more of herself into it'.37

36 Insofar as this reply fails to convince, it is worth pointing out that the way the scenario is described invites the interpretation that at some point Calvin set himself a new goal of finishing on Thursday (when he did). But this would, of course, change the situation to one in which he exerted just as much percentage-effort as Andreou.

someone spends the same amount of absolute-effort in a life that is short as someone else whose life is long, the former person has 'put more of herself' into her project.

So the current suggestion can pass muster: an agent's percentage-effort in pursuing a goal is equal to the percentage of possible absolute-effort that he did exert; 'possible absolute-effort', in turn, is to be understood as the maximal amount of absolute-effort that the agent could have exerted between adopting the goal and the latest point when the goal could have been realized.

2. Wasted Effort

Suppose Ahmed and Boris are reaching similar goals but Ahmed expends a lot more percentage-effort in the process. According to what I said so far, Ahmed's success is more of an achievement than Boris'. Suppose further, however, that the reason Ahmed expended more effort is that he engaged in some of the following behaviour: continuing with a strategy after deciding it was not going to work; putting in very intense effort when less effort would have been sufficient; using an effort-intensive trial and error strategy instead of investing a few minutes to figure out the best way to proceed; and so on. The question is whether only effort that was really needed should count towards the magnitude of achievement.

The position that every bit of effort should count has the attraction of simplicity. Adopting it would save us the task of devising a criterion for distinguishing productive from wasted effort. Unfortunately, this is pretty much the only thing this view has going for it. Expending more effort than needed does not increase one's achievement. This statement needs to be qualified. People who exert more effort than is necessary to achieve a particular goal will often do so, because they have adopted a further goal that exceeds the original one. For example, they might adopt the goal of finishing a task faster than originally planned, or they might try to do a better job than their original
goal prescribed (this may or may not be the result of recognizing that they have more resources available than necessary to accomplish the original goal). An agent in a case like this achieves more than another who expends less effort and reaches only the original goal. But this is because the former achieved further (or more impressive) goals; not because her achievement of the original goal involved more effort. In fact, one may even be tempted to think that exerting unnecessary effort diminishes an achievement. Is it not more of an achievement to reach a goal with the least amount of effort needed, rather than to hassle unnecessarily? But here, again, we need to be careful not to overlook the achievement of a further goal. An agent might have the goal to accomplish a task with the least amount of effort possible (many of my students appear to have goals of that type) in which case it is an achievement when she does so. But, again, this does not have an impact on the magnitude of the achievement of the original goal itself.

Some efforts, then, make no difference to the magnitude of achievements. But how are we to distinguish effort that is wasted in that respect from productive effort that does? One way of doing this is

*Objectivism about Wasted Effort (OWE)*: take the combination of the goal and the agent (with all her attributes) and determine what the least amount of effort is that she would have to exert to reach the goal (while not increasing her reliance on good luck).

This is the amount of productive effort for that particular agent to reach that particular goal. Everything beyond this amount is wasted.

While OWE obviously gets something right about how much effort is productive, there are significant problems with it.

OWE requires answers to some difficult questions about the agent. In order to preserve the agent-relativity of the effort dimension, the amount of effort deemed productive has to be the amount that the *particular agent in question* would have needed to expend – hence my
parenthetical remark above that we need to think about the agent 'with all her attributes'. This, however, threatens to render OWE trivial. For, we might think, if we truly consider all of the agent's attributes, she could not but have exerted the exact amount of effort that she actually did. And if we stop short of this kind of psychological determinism, we face uncomfortable questions. Consider some of Ahmed's behaviours from above. Maybe trial and error is Ahmed's standard modus operandi. If so, is it clear that he could have saved effort by concocting the best strategy beforehand? Or maybe he is just the kind of guy who always goes all out when doing anything. If so, is there a real sense in which he could have reached the goal with less intense effort? These are not rhetorical questions. They are hard questions and an account like OWE needs to answer them.

In answering these questions, it is important to do it in a way that avoids tension with the motivation behind considering effort an important dimension in the first place. I said above that including effort as a factor in the magnitude of achievements captures the common idea that something being hard for the agent makes for a more significant achievement. Alternatively, we may say that effort is meant to capture how much overcoming of obstacles (of all shapes and kinds) an agent actually engages in to reach her goal. And it seems that in Ahmed's success through trial and error, for example, his failed attempts are obstacles he overcame and that this made reaching the goal hard for him in the required sense. The situation is different, however, when he exerts effort on a strategy he has already concluded is not going to work; he does not actually overcome any obstacles here (at least not ones that lie on his path to the goal).

I propose, then, to take the perspective of the agent into account. This is not as much of a departure from OWE as it may seem at first. For we can use some of the agent beliefs about effort as the criterion that helps us to distinguish the courses of action that are open to her from those that are not. Consider
*Wasted Effort:* all effort that an agent expends in pursuit of the goal count as productive (achievement-enhancing), except any that she herself believes to be unnecessary in the sense that it does not make a positive difference to her chances of success.

*Wasted Effort* is a specification, rather than a rival of OWE. Put in terms of the latter view, the fact that the agent believes that her effort is not needed gives us reason to think that she actually could have pursued her goal while putting in less effort. Absent such a belief pursuing her goal with less effort would not have been open to her, because it would have amounted to not really pursuing the goal at all.

Adopting *Wasted Effort* reinforces the agent-relativity of the effort dimension of achievements; not only do different people need different amounts of effort to reach similar goals, but how much of their expended effort counts as productive is a function of how they approach and think about the task. At the same time, this proposal solves the problem of how to determine which attributes and behaviours of the agent should be considered 'part of the package'. It does not matter whether Ahmed is actually free to change his way of doing things; it only matters whether he thinks his effort makes a positive difference or not. With regards to the three ways above in which I imagined Ahmed to 'waste' effort *Wasted Effort* delivers the following verdicts. The effort involved in his trial and error procedure is productive effort.\(^{38}\) In the case in which he tries harder than he has to, the verdict depends on his subjective state: if he believes that he is trying harder than he has to, the extra effort is wasted; if not, it is productive. And in the case in which he continues to pour effort into a strategy he has already decided is not going to work, the effort is

---

\(^{38}\) This is at least the most natural way to think about the scenario. But we could fill in the details in a way in which this was not the case.
wasted. These are plausible results that vindicate *Wasted Effort*.39

Let me clarify my proposal by considering two versions of an objection that misconstrues it. It might be argued that *Wasted Effort* is either circular or, at least, gets things backward. If the agent needs to know that her effort is wasted in order for it to be true that it is wasted, there appears to be a tight circle. For she can know that her effort is wasted, only if she believes truly that her effort is wasted; and what she believes truly had better not be that she believes truly that her effort was wasted. However, this worry about circularity would be misplaced, for my account requires merely that the agent *believes* that her effort is not needed and she can have this belief independently of whether it is true.

But the proposal might still seem to reverse the order of explanation. The natural way to think about the relationship between the facts about wasted effort and the agent's beliefs about it is as follows. The agent has a belief about whether her effort is wasted or productive and this belief is either true or false in virtue of the facts about the matter. By contrast, what I may seem to be suggesting is that the agent's belief about whether her effort is wasted determines the facts about the matter – the belief is self-validating. This picture is particularly unattractive because it seems likely that the agent will form her belief about whether her efforts are wasted on basis of a different view about wasted effort (imagine her deliberating about the question; she will surely be looking for evidence other than what her own beliefs are). And thus we end up with a belief that is (a) formed on the basis of a false view about its subject matter, and (b) self-validating. That is an

39 One may think that a trial and error procedure should not count as achievement enhancing. But I think there are other reasons for thinking that trial and error usually makes for lesser achievements. Most notably trial and error procedures usually involve less difficulty than strategies that were thought out in advance, because the latter involve specific subgoals and thus offer more ways in which the agent may fail. Cf. Hurka, *Perfectionism*, p. 124.
unappealing combination indeed.

But this version of the objection also misunderstands *Wasted Effort*. The distinction between wasted and productive effort that I am trying to draw is the distinction between effort that enhances achievement and effort that fails to do so. It is not the distinction between effort that makes a difference to the chances of success and effort that does not. According to some versions of OWE these distinctions may be co-extensive, but according to *Wasted Effort* they are not. The belief that the agent has is a belief about which side of the second distinction her efforts fall on. That belief, in turn, (partly) determines on which side of the first distinction they belong. Thus, her belief is neither self-validating, nor (necessarily) formed on a false view about its subject matter. She might correctly believe that her efforts are not making a difference to her chances of success regardless of what beliefs she has (if any) about whether her efforts are achievement-enhancing. Finally, that the belief that her effort does nothing to increase her chances should be a necessary condition for her effort to count as wasted is well-motivated. For, as I pointed out above, there is a sense in which absent such a belief she could not have achieved her goal with less effort.

VI. CONCLUSION

I have argued (1) that effort is a plausible candidate for being a factor in the magnitude of achievements, (2) that we need to distinguish between absolute-effort and percentage-effort, and (3) that it is percentage-effort that can play the role for the magnitude of achievements outlined by (1). I have further argued that the relevant time span from which percentage-effort is to be calculated is the interval from the adoption of the goal to the latest possible time the goal could have been reached; and that 'unnecessary' effort enhances achievement only insofar as the agent is unaware that the effort is not needed to enhance her chances of success. I take these to be important
results for the axiological study of achievements while my discussion of the ambiguities of the ordinary concept of effort should be of interest to anyone who wants to use that notion in the philosophical analysis of other concepts.\footnote{Earlier versions of this paper were presented at the meeting of the Canadian Philosophical Association in Victoria BC, at the department of philosophy at the Hebrew University of Jerusalem and at the department of philosophy at Indiana University of Pennsylvania. I thank the members of these audiences for their helpful questions and suggestions. In addition, I would like to thank Daniel Attas, Naama Goldberg, Thomas Hurka, Dominic Martin, Ittay Nissan-Rozen, Andreas Tupac Schmidt, Wayne Sumner, Sergio Tenenbaum, Ariel Zylberman and two anonymous referees for their invaluable comments on earlier drafts.}

coso.vonkriegstein@ryerson.ca