My aim in this chapter is to understand more precisely what kind of irrationality is involved in procrastination. I will argue that procrastination is one of the corresponding vices of an overlooked virtue, which I will call “practical judgment”. In the first section, I provide the background model I will employ in my account of procrastination, the Policy as Action Model (PAM). Relying on this model, in the second section, I characterize a form of procrastination that will play a central role in my account of “long-term procrastination.” The third section defines the instrumental virtue of practical judgment; I argue there that procrastination is the vice of deficiency that corresponds to this virtue. The fourth section extends this account of procrastination to cases that do not fall under the heading of long-term procrastination. Finally, the fifth section argues for an important consequence of this view: procrastination so understood is a failure of instrumental rationality that can be so characterized without assuming the correctness of any further substantive norms of rationality. If this argument succeeds, it constitutes an important objection to Christine Korsgaard’s claim that a purely instrumental conception of rationality is incoherent.

BACKGROUND

I outline below the main features of the theory of long-term actions, plans, and policies—the “Policy as Action Model,” or PAM—that will inform the rest of the chapter. I do not want to claim that different views of long-term activity could not accommodate the account of procrastination I present here; however, the exposition of the account is made much simpler by assuming PAM.¹

¹. I do argue elsewhere, however, that the two central features of PAM discussed below are incompatible with the central motivation of Bratman’s influential “two-tier model” (see Bratman, Intention, Plans, and Practical Reason) and that for this very reason, PAM provides a better account of the rationality of actions in light of plans, policies, and intentions (see Tenenbaum, “Intention and Commitment”). If I am right about that, and if the account of the irrationality of procrastination presented here is persuasive, this would be further evidence in favor of PAM.
According to PAM, plans, policies, and long-term projects are simply ordinary actions, or, at least, they should be viewed as ordinary actions as long as we’re considering solely the issue of rational evaluation of these plans, policies, and long-term projects (for short, I will call all of these “long-term activities”). At first, PAM might seem implausible: actions are continuous through time, while long-term activities such as policies involve multiple steps at different points in time. If I am swimming, I am engaged in one continuous act of swimming, while if I have the long-term project of writing a novel, I will write a few sentences today, make some revisions tomorrow, send a chapter to my publisher next month, and so forth. However, actions often, if not always, have stages, and for most, if not all, ordinary actions, it is possible that the stages do not succeed each other continuously or without interruptions. If I am baking a cake, I will need to measure the flour and break some eggs, but these actions need not follow each other immediately. Between measuring the flour and breaking the eggs, I might step outside to check if the mail has arrived. This interruption makes my action of baking a cake no less unified than if I had moved from measuring the flour to breaking the eggs without even catching my breath. In other words, measuring flour and breaking eggs are parts of the same action of baking a cake whether or not they are separated by other actions that are not themselves parts of the action of baking a cake. So, the central idea behind PAM is that instances of long-term activities stand in the same relation to the more general long-term activity as parts of an action stand to an ordinary action. My typing a few sentences is part of my action of writing a novel, just as my measuring the flour is part of my action of baking a cake; similarly, my exercising today is part of my policy of exercising every week in the same way as my pulling my hand out of the water is part of my action of swimming.

The chart in figure 8-1 represents our ordinary action of baking a cake.

We can think of this kind of chart as representing the higher actions (in this case, “baking the cake”) in the role of controlling the smaller actions and actions to the left as preceding actions to the right at the same level. The meaning of controlling, when we look at the relation between baking the cake and measuring the flour, is quite clear: measuring the flour is undertaken as a means to baking the cake. It is less clear how to understand the relation between baking the cake and listening to the radio as one in which the former controls the latter. Obviously, I do not listen to the radio as a means to baking the cake. But we can say that the larger actions control the whole pattern of action, including actions that are better seen as interruptions in the following sense: insofar as I am rational, which smaller actions are performed (such as checking the cat) are performed

2. It is widely agreed that adopting a policy, for instance, is an action. However, the claim here is that having a policy is an action.
3. Michael Thompson makes similar points in part II of Life and Action.
only insofar as they do not conflict with the ends of the larger action (that is, baking the cake). In other words, other things being equal and insofar as I am rational, I would not have performed this action if it were not for the fact that I judged that it could be part of a set of actions that would lead me to the successful realization of my aim of baking the cake. We can say that, according to PAM, policies control the actions I engage in within the life of the policy in the same way that ordinary actions control smaller actions. In fact, we could draw a parallel chart for my exercising policy (figure 8-2).

Needless to say, instances of a policy might be separated by much larger temporal gaps than parts of an ordinary action. For instance, suppose I have a policy that I keep walking in the same direction if I am lost. Since I am almost never lost, I am rarely doing anything that instantiates the policy (at least, if we do not count vacuous instantiations). However, even while years elapse without my ever getting lost, it is still true that I have the policy. But once we allow that ordinary actions allow for temporal gaps between their parts, it is unclear why the size of the gap would disqualify something from being an action. In fact, there seems to be a seamless continuum between baking a cake and long-term activities such as exercising regularly in terms of “gappiness” that includes, for instance, sightseeing, taking care of the children for a day, studying for an exam, and so forth. Someone who thinks that temporal gaps of a certain size disqualify something from being a continuous action needs to provide a principled reason to draw at least a rough line somewhere in this continuum.

I do not want to dwell on this model, but I do want to point out two related consequences of PAM. First, notice that as long as I exercise regularly and my exercising regularly is produced in a normal way, my pattern of activity exhibits no irrationality with respect to this policy. Leaving aside the cases in which I execute my policy as a result of sheer luck (which would be rather bizarre cases in our example of exercising

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4. I do not want to claim that these consequences are unique to this model or that these consequences are not compatible with other views about the nature of long-term activities but only that PAM provides a clear formulation of, and a straightforward route to, these consequences.
regularly), I can display irrational behavior with respect to this policy only if I fail to execute it. This is not true for any account of long-term activities. By some accounts, there might be requirements about when I am allowed to reconsider a policy or consider an exception for it or requirements that determine that I have to undertake particular actions in light of a certain project.

Suppose, for instance, that I have a long-term project of eating healthily. Of course, this project does not necessarily require that I \textit{never} eat any kind of food that is nutritionally subpar. Suppose now that I choose to eat a large brownie. Under which conditions would my eating a large brownie be irrational? One possible answer would be to hold the view that “exceptions require rules,” or ERR. According to ERR, I should eat a large brownie only if my reason to eat the brownie right now could be generalized without undermining my long-term project. Two possible reasons for eating a brownie right now would be “I feel like it” or “I have been really good for a whole month.” The second reason would obviously generalize; if I allow myself to eat brownies only if I have not eaten anything nutritionally dubious for at least a month, I am certainly acting in accordance with my long-term project of eating healthily. However, according to ERR, if I eat brownies on the basis of the first reason, I am most likely being irrational, since I probably know that if I were to eat everything that I felt like eating, I would not succeed in my long-term project of eating healthily.\footnote{See Gauthier, “Resolute Choice,” and Bratman, “Temptation Revisited,” for similar constraints on exceptions. I argue in more detail that their views are committed to this consequence as well as to the impossibility of top-down independence (see below) in Tenenbaum, “Intention and Commitment.”}

So, if I go ahead and eat the brownie for this reason, I would be acting irrationally on this occasion, irrespective of whether I end up succeeding or failing to have an overall healthy diet. According to PAM, however, as long as I succeed at carrying out my long-term project of eating healthily

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure8-2.png}
\caption{Figure 8-2}
\end{figure}
nonaccidentally, there could be no failure of rationality with respect to this long-term project.6

This leads to the second consequence: PAM is committed to the possibility of long-term activities that are what I call top-down independent. We can define this notion roughly as follows:

The rationality of a long-term activity A is top-down independent if and only if the following obtains: If an agent engages (or ought to engage) in A, there is a set of possible choices S for the agent such that:

1. No particular choice in S would be irrational.
2. If the agent were to make all of the choices in S, she would be for that very reason irrational.

For instance, my failing to execute a policy of exercising regularly could be irrational, without any particular action being irrational. It is possible that the only failure that we can identify in the pattern of my activity is that it failed to instantiate a pattern of exercising regularly; each particular action considered in isolation might not manifest any kind of irrationality. Since, for instance, a policy of exercising regularly might not demand that I exercise on any particular occasion, I might fail to exercise regularly while being rationally justified in each action in which I fail to exercise. My view is not only that the existence of long-term activities that are top-down independent is a conceptual possibility but, rather, that most policies, plans, and projects are like that. Moreover, I will argue that there are particular virtues and corresponding vices of rationality that relate to an agent’s capacity to execute top-down independent policies; my claim is that procrastination is one of these vices.

THE CENTRAL CASE

I will start with a central case of procrastination that can be described as “long-term procrastination”;7 I will generalize this account later. Although I don’t claim that the account ultimately covers everything that we might want to call procrastination, I do argue that it covers a large and interesting part of the phenomena that fall under this rubric. But at first, I will be concerned with cases with the following structure. There is a certain end (E) that an agent wants to bring about, and E can be brought about only by repeatedly engaging in a characteristic activity (A). Moreover, the following are true of E and A:

1. Opportunities for engaging in instances of A stretch potentially indefinitely through time or through an indefinite time period (at least, as far as the agent is aware).

7. But, as will be clear later, the sense in which I use “long-term procrastination” does not exactly match what O’Donoghue and Rabin discuss in their paper “Procrastination on Long-Term Projects.”
2. At certain points in time, one can assess whether E has been properly brought about or not.

3. If the agent engages in A at every opportunity, E will be brought about (or at least, the agent expects that E will be brought about).

4. The agent’s momentary preferences, those that the agent has regarding the objects of his (nearly) instantaneous choices, are such that:
   a. At various times, when the agent has an opportunity to engage in an instance of A, the agent prefers to engage in some other activity.
   b. Were the agent always to choose according to these momentary preferences, he would not bring about E.
   c. At every time, the agent prefers always to choose to engage in A when there is an opportunity to engage in A over not bringing about E.
   d. At every time, there are some sets of choices over time such that:
      i. The agent does not engage in A at every opportunity, and E is brought about; and,
      ii. The agent prefers any of these sets to the set of choices in which the agent engages in A at every opportunity.
   e. There is no precise weak ordering known to the agent of all sets of choices in which the agent has an opportunity to engage in A; that is, there is no ordering of the agent’s preferences that satisfies the axioms of decision theory and that the agent would recognize as the single correct ordering of his preferences. The agent can at most identify certain acceptable and unacceptable sets of choices.

It might be worth looking at an example that has all of these features. Suppose I want to write a novel that is about as good as I can write (for short, I will just refer to the project as "writing a decent novel"). That is, I do not want to end up not writing a novel or writing a novel that is significantly worse than the novel I would have written had I spent significantly more time on it. There will be a loosely classified characteristic activity in which I engage in order to achieve this end—namely, the actions constitutive of writing a novel, such as typing, reading over the manuscript, and so on. As long as I am in close proximity to a computer, I can invest time in writing the novel. Leaving aside the possibility of knowing the time of my death, I know of no specific point in time by which the writing of a

8. David Gauthier contrasts the momentary preferences of an agent with what he calls her "vanishing point" preferences (see Gauthier, "Resolute Choice"). As will be made clear below, I am using "momentary preference" in a slightly different sense.

9. A weaker version of this condition will do just as well, but the stronger version makes for ease of presentation.

10. I will say more on the notions of acceptable and unacceptable sets below.
novel must be finished in order for me to have achieved the end of having written a decent novel.\textsuperscript{11} And leaving aside also the possibility of my untimely death and some bizarre circumstances, if I take every opportunity that I am near my computer to engage in writing a novel, at some point, I will have written a decent novel (it might not be a great novel, but it will be as good a novel as I can write).

It is also plausible to suppose that my momentary preferences will be such that, even though I would in some rare moments choose to engage in writing a novel independently of my concern with achieving my end of having written a decent novel, I would almost always much prefer engaging in some other activity, as long as engaging in such activities would not prevent me from writing a decent novel. And given that in all such cases, it might be true that engaging in some other activity just this once does not undermine the general project, if I choose to write a novel only when my momentary preferences dictate writing a novel, I will never achieve my end of writing a novel.

However, the worst-case scenario for me is not to write a decent novel, and I would rather always be engaged in writing a novel till the end is brought about than to end up not writing the novel.\textsuperscript{12} But, finally, this is obviously not my most preferred long-term policy from any point of view in time; I would rather have a more balanced life in which I write enough to complete a novel in a reasonable amount of time while still pursuing other interests. Although not many of us engage in writing a novel, many important projects in our lives have this structure, such as saving for retirement, investing time in a career, spending enough time with the children, and staying fit.

A couple of things will be important for our discussion later. First, the temptation to procrastinate is intrinsic to the nature of this kind of project. Not only does the agent have momentary preferences that, if jointly satisfied, would conflict with her long-term preferences, but her long-term preferences also favor the satisfaction of the momentary preference, as long as we hold fixed all of the other choices the agent makes.\textsuperscript{13} In fact, “momentary preference” is a bit of a misnomer here, since it is not essential that the agent shifts her preference over time in any way to generate the problem. It would be more precise perhaps to call these preferences “preferences for momentary actions,” but since this is a mouthful, I will leave the terminology intact.

\textsuperscript{11} I might have a deadline to write a novel, but this could be understood as a further end that I have. And even if I incorporate the deadline to my end, if the deadline is not specific enough, it will still satisfy condition (1).

\textsuperscript{12} This might make me more fanatical about writing than the typical novelist, but it does simplify the example.

\textsuperscript{13} Chrioula Andréou has identified a similar structure in a number of choice situations, including procrastination-prone situations; see Andréou, “Environmental Preservation” and “Understanding Procrastination.”
Second, the temptation to procrastinate is generated, at least in part, by the vagueness of the ideal outcome. The vagueness is, in fact, multilayered, and its elements include the following: there is no precise time by which the novel must get written (or no precise amount of time that constitutes spending enough time with my children, investing in my career, and so forth); there is no precise number of occasions in which I need to engage in the characteristic activity in order to achieve the end; there is no precise start time to engage in the characteristic activity; and there is no precise characterization of the end (of what counts as “as good a novel as I can write”). Based on the vagueness of these various aspects of my choice situation, we can understand better what will count as “acceptable” and “unacceptable” sets of choices in condition 4(e). Given the structure of the choice situation that I face, there are many sets of choices through time that are clearly unacceptable, sets of choices that the agent thinks are significantly worse than other options available to her. I would find, for instance, any set of choices in which I do not end up writing a decent novel unacceptable.

More controversially, I will assume also that there are many sets of choices that are clearly acceptable. To briefly explain why this is a controversial assumption, let us take a candidate for being an acceptable set of choices S, in which I write a decent novel, and I have spent $x$ amount of time engaging in activities that my momentary preferences favor over writing a novel. Assuming that there is no precise amount of time that is the minimum amount that I will need to write a decent novel, I could have achieved the same result by having spent $x + \varepsilon$ amount of time engaging in other activities. Let us call $S'$ the set of choices in which I spend $x + \varepsilon$ amount of time engaging in other activities. Now, by hypothesis, $S'$ is preferred over S, so it seems that we should conclude that S is not acceptable. Since this is perfectly general, and given that by stretching enough the time that I spend in other activities, I will end up never writing a book, it seems that, there is no acceptable set of choices. In other words, given that the sources of vagueness identified above seem to generate an intransitive ordering, there will be no acceptable set of choices.

I do not want to delve into the issue of whether we should characterize the agent as having, in fact, an intransitive preference ordering. I simply want to point out that even if the agent in this case does have an intransitive preference ordering, we can think of a weaker notion of acceptability, such that it does not follow from the fact that S is an acceptable set of choices that there is not an $S'$ that the agent strictly prefers to S. Since the precise contours of the notion of acceptability are not important for my purposes, I will just use a very loose idea to capture the notion of acceptability.

Suppose, for instance, that I choose S and end up writing a decent novel. Let us now look at how I might evaluate the choice once the novel is written. I might remember a Sunday morning when I was reading the newspaper and decided to stop and work on writing my novel. I realize
that I probably would have written just as good a novel if I had spent five more minutes reading the newspaper. However, I am unlikely to regret having picked the choice set I actually did on the basis of such a consideration alone. After all, I realize that given the vagueness and uncertainty in my situation, I needed to strike a reasonable compromise, and stopping when I did might seem to me (and might also in fact be) a reasonable enough compromise. I will assume thus that for any situation in which all of the above conditions (1 through 4) obtain, there are a number of sets of choices such that no rational agent who chose one of these sets would regret having made this choice; these sets of choices are clearly acceptable. Similarly, a set of choices that any rational agent would have regretted picking would be clearly unacceptable.

I will also assume that there are sets of choices that are neither acceptable nor unacceptable, sets of choices that some, but not all, rational beings would regret even when we hold everything else equal. The fact that there are such sets of choices is exactly what allows agents to procrastinate; we procrastinate when we move imperceptibly from a clearly acceptable set of choices to a neither acceptable nor unacceptable set and then to an unacceptable one. And, as we will see, this generates various problems for limited rational agents faced with these kinds of temptations to procrastinate.

**PRACTICAL JUDGMENT AND CORRESPONDING VICES**

Suppose that an agent engages in the project of writing a novel and makes choices through time as illustrated in figure 8-3.

As explained above, according to PAM, the action of writing a novel controls not only the necessary steps in writing a novel but also the actions such as “playing soccer” and “having lunch” which I perform while writing the novel. Also according to PAM, as long as the ordered set (typing on computer, playing soccer, typing on computer, having lunch) is an acceptable set of choices, the agent acted rationally. However, in executing the project of writing a novel, the agent might also have engaged in intermediate activities, activities that stand between the “top” action of
writing a novel and the “bottom” actions of typing on computer, revising the manuscript, and so on. For instance, the agent might have settled on a policy of writing at least a page a day. Of course, the agent might also have had no need of any such intermediate policies in order to successfully write a novel. In fact, we can think that the ideal rational agent will not need any intermediate steps; an ideal agent just makes sure that the chosen set is an acceptable set.

We can use our central case to characterize the basic form of irrationality involved in procrastination. Any time the agent’s choices form a pattern such that she starts engaging in a long-term activity but does not properly complete the long-term activity without ever changing her mind about choosing to engage in it and without ever encountering unexpected obstacles, the agent exhibits a basic form of irrationality. In such cases, the agent chooses the end but fails to take the necessary (instrumental or constitutive) means to bring it about. Procrastination will be exactly a case of this kind of instrumental irrationality. In our example, we would have a case of this kind if the agent were to write a few sentences or a general plan for the novel but then seldom took any further steps to complete the novel despite the fact that no unexpected circumstance prevented her from working on her novel (such as breaking her typing hand, for example).

Notice that the project of writing a novel can be top-down independent irrational, and our characterization of procrastination so far is exactly a case of top-down independent irrationality. Since for any pattern of activity in which I fail to write a decent novel there is no momentary action that prevented me from writing the novel on its own, when I procrastinate, none of my momentary choices is irrational (at least, in respect to this project) when considered in isolation. This, of course, generalizes to any long-term activity that satisfies constraints (1) through (4). However, this characterization of the irrationality of long-term procrastination does not take into account the possibility of adopting intermediate policies and how this possibility might affect our assessment of the rationality of an agent in a situation in which she is prone to procrastinate.

I will examine the significance of intermediate policies by looking at how they could be introduced as we revise our strategies in trying to carry out a long-term activity. If we look back at our example of the ordinary

14. A couple of caveats. First, this is just a first approximation; I add to this account of the vice of procrastination below. Second, we could characterize the irrationality more generally as cases in which the agent forms the intention of engaging in a long-term activity rather than actually starting to engage in the activity. I have nothing against this kind of emendation. However, I am skeptical that we can attribute to the agent the intention to engage in a long-term activity if the agent does nothing that counts as an instance of engaging in this activity.

15. Of course, I could engage in momentary actions that will immediately prevent me from writing a decent novel; I could, for instance, shoot myself in the head. However, the failure of rationality in this case would obviously not be a case of procrastination.
action of baking a cake, we can imagine that as I am baking the cake, some things turn out badly. As I beat the eggs, I notice that they are not getting the texture I expected. I might then check the egg beater, see if there’s anything stuck in it, or change my plans for how to move my hands. Part of being a rational agent involves, of course, that we check the progress of our actions and revise the actions undertaken as means to other actions or ends in light of what we learn in the course of acting. And the same thing will go for projects and policies, and the complications and difficulties introduced by the vagueness of what counts as an acceptable set will spill over to complications about how a rational agent revises the actions undertaken as means to more general projects and policies.

Suppose that I decide to write a decent novel, and after a while, I look back at my actions and see the pattern I have exemplified, as shown in figure 8-4.

I might have two distinct attitudes in relation to these actions. I might think that this is an overall slow start, but it is to be expected given that the Euro Cup was on, people were sending me scamming e-mails when I was a bit drunk, and so forth. Since there are many acceptable sets that include those initial choices, I might think that I am engaging in the appropriate actions toward my goal of having written a decent novel. But it is unlikely that this kind of judgment is warranted. More likely, I should realize that I cannot write a novel without further planning; I will not write a novel unless I adopt intermediate policies such as “write at least two pages a day,” “do not go online before writing at least one page,” and so on. Cases in which I recognize the need for further planning seem to allow us to locate failures of rationality more precisely than just in the general pattern of activity; if I can’t expect to write a novel without an intermediate policy, the failure to adopt the intermediate policy is itself a failure of rationality. However, I want to argue that even in those cases, the irrationality is top-down independent; even in those cases, the

![Figure 8-4](image-url)
The ultimate source of irrationality resides entirely in the fact that I failed to write a novel. And even in those cases, it is possible that none of my momentary actions was irrational. In order to make this argument, we need to examine more closely the process of revising intermediate policies.

Suppose that I recognize the need to have an intermediate policy. This conclusion must lead me to revise my view of what the feasible sets of choices are and, consequently, of the acceptable sets of choices. Given that our menu of options has shrunk, we might find acceptable now what we previously thought should be ruled out, just as someone who has weight-control problems might end up reluctantly adding a life without chocolate desserts to the list of acceptable sets of choices. Let us start by thinking that I take a very conservative strategy and choose to have a very rigid schedule, which I would not at first have thought to be an acceptable choice. I decide to, say, work continuously from 9:00 A.M. to 7:00 P.M. on my novel; in other words, I adopt what I will call a 9-to-7 policy. To simplify matters, I will look first into the unlikely possibility that this is an absolutely strict policy. Figure 8-5 shows how my writing a novel leads me to act so far.

As I engage in this new intermediate policy, I do make good strides toward finishing my novel. However, the policy is obviously too strict; it does not allow me to eat, to have coffee breaks, or to go to my best friend’s wedding. There are at least two ways I can react to this. I can just allow certain exceptions from time to time and transform my 9-to-7 policy into a loose and vague policy. In the case of a loose and vague policy, I expect to be writing my novel most of the time between 9:00 and 7:00, but I allow that from time to time, I take a break to do other things. Or I can form a different strict policy that is essentially like my 9-to-7 policy, but I also now incorporate into the policy precisely specified conditions under which breaks are acceptable.

Note that the vague intermediate policy leaves us with a problem much like the original project of writing a novel. I might be quite good at managing a few exceptions here and there, but it is also perfectly possible...
that my actions controlled by my loose policy are identical to the ones that were directly controlled by the project of writing a book (see figure 8-6).

But notice that, again, none of these momentary choices on its own is instrumentally irrational; after all, each exception on its own is compatible with my 9-to-7 policy. Just as in the case in which the agent does not adopt an intermediate policy, the irrationality of the agent consists solely in the fact that these choices do not constitute an acceptable set. So far, adding intermediate policies to the picture does not change in any significant way our understanding of the irrationality of procrastination.

In the second strategy, rather than allowing for exceptions, I choose a less strict but still precise policy. I could cut down on the hours I expect myself to be writing a novel or incorporate clearly laid-out exceptions to my plan. And here one might think that I move from a vague policy that allows unspecified exceptions to a precise but less strict policy for the same reason that an intermediate policy was adopted in the first place; that is, the agent suspects that the vague policy is not a feasible one. But even a less strict but still precise policy will probably not be ideal. Not all exceptions can be thought out in advance, and even habits and dispositions must be flexible enough to allow some wiggle room in unexpected circumstances. A policy whose system of exceptions is part of the policy itself or is limited only by preexisting rules and regularities is almost always a second best; the flexibility of leaving open when and how many exceptions are permitted is likely to be advantageous to the agent, as long as this is a feasible option for the agent. In fact, most of our strict policies are either policies that we think are intrinsically choiceworthy or rather desperate reactions to powerful temptations. Avoiding extramarital affairs
and not betraying friends fall under the first category, while quitting smoking completely and becoming a teetotaler fall under the latter.\textsuperscript{16}

At any rate, as I find out that the direct implementation of a vague policy proves difficult to me, I might tweak it either by revising how to carry out my policy one level up or by implementing it with further policy one level down, which could be more or less precise. Of course, excessive tweaking or fine-tuning might be itself a failure of the will. But here, too, it seems correct to say that whether all of this tweaking and fine-tuning resulted in any case of irrationality (and whether some aspects of my fine-tuning should count as procrastination) depends solely on the result. If I ended up with an acceptable set of choices, then there is no room for any accusation of irrationality; every sin is forgiven. Given that I nonaccidentally ended up in a desirable outcome guided by my end, then my behavior is rationally unimpeachable, at least insofar as we are concerned solely with instrumental rationality. Similarly, it is worth noting that if I do now adopt and carry out a successful policy, there is no reason to think that I engaged in any kind of irrational activity, and, perhaps more controversially, there might also be no reason to think that I had not already engaged in writing a novel before adopting the intermediate policy. My initial engagement might have not contributed much to the final product, but it is part of the overall pattern of activity, much as my missteps in baking a cake are part of the process of baking a cake. If my adopting of an intermediate policy delivers a decent book after a certain time, I ended up hitting on an acceptable set of choices, one that happens to include these seemingly procrastinating actions in my first days at the job of writing a novel. In fact, if anything, the set that includes those early misdeeds can only be better than one that replaces some of these early misdeeds with more instances of A; it is certainly not worse. Since the outcome was good, and it was nonaccidentally brought about by my acting with the goal of writing a novel, there is no room for any accusation of (instrumental) irrationality to stick.

We are now in a better position to gain a more precise understanding of the nature of the rational failing involved in procrastination. This structure reveals an important executive virtue. There has been much debate in the philosophical literature about the importance of resolution for carrying out our plans.\textsuperscript{17} Resolution can be roughly described as the executive virtue that ensures that we will carry out our plan in the face of temptation and shifting preferences. One can show resoluteness or lack thereof in a momentary action; if I give in to the temptation to have a cigarette despite my intention to quit, I fail to exhibit this virtue. Procrastination is not typically thought of as the same as irresolution, since

\textsuperscript{16} See George Ainslie’s discussion of the need for bright lines in trying to overcome addictions in Ainslie, \textit{Breakdown of Will}, chap. 6.

\textsuperscript{17} See, for instance, McClennen, \textit{Rationality and Dynamic Choices}, and Gauthier, “Resolute Choice.”
procrastination does not seem to involve (at least, not necessarily) any change of mind or rejection of a previously accepted plan. Resolution, insofar as it is a virtue, can be classified as one of the executive virtues—the virtues we need in order to bring about our ends. If we are too fickle with regard to our plans, many long-term projects that require commitment will be beyond our reach. However, if my view is correct, we must conclude that in order to carry out vague policies and projects, one needs more than resolution; one also needs the executive virtue that I will call practical judgment.

Practical judgment is a dual-aspect virtue, involving both the capacity to carry out vague plans and projects (and long-term actions in general) in the absence of an intermediate policy and the capacity to adopt and revise intermediate policies that are effective but not overly inflexible. Ideally, rational agents would exhibit only the first aspect of the virtue; not needing any intermediate policies or plans, they would simply engage in the long-term activity by choosing an acceptable set. But a lesser than perfect degree of virtue will require both that one can execute well fairly vague policies and that one can choose well among intermediate policies when direct execution of long-term activity is not feasible.

If the structure of one of our plans bottoms out in a vague policy, we will need the virtue of practical judgment in order to act well. In a classical Aristotelian fashion, I want to argue that there are two correlative vices to this virtue. The vice of inflexibility is the vice of performing the characteristic actions of a project too often or in the wrong times. For instance, if I hear that my friend has been suddenly hospitalized, but I do not visit him or call his family because my schedule requires that at this moment I should be writing a novel, I certainly exhibit the vice of inflexibility. And it should come as no surprise that the opposite vice is, in my view, the vice of procrastination. We procrastinate when our attempt to execute a vague plan fails because we engage in the characteristic activity on too few occasions or we engage in noncharacteristic activities on the wrong occasions. This account also explains an intuitive feature of procrastination: it seems to be a vice of inaction, in that we succumb to temptation when we do something that we have conclusive reason not to do, but we procrastinate when we fail to do something we have conclusive reason to do. But in many accounts of value and reason, this distinction is spurious; values are comparative, and decisive reasons are all-things-considered reasons. So, by failing to do something that I had decisive reason to do (or by choosing the option of greater value), I thereby did something that I had no decisive reason to do (or I thereby chose the option of lesser value). But if my account is correct, we can understand the sense in which procrastination is indeed a vice of inaction; procrastination must be primarily characterized as a failure to have chosen the characteristic action on enough occasions (or at the right times). Given that the irrationality of procrastination does not apply to any momentary action, there is no particular action in which we can say that the agent
“fell into temptation” and chose the lesser option. We can only say, for instance, that I acted irrationally given that I did not write a decent novel; my procrastination consists not in any of the actions that I undertook when I could have been writing but in not having written a novel.

GENERALIZING THE ACCOUNT

Obviously, procrastination is not restricted to cases that satisfy conditions (1) through (4). In fact, it is not even clear that one cannot procrastinate with respect to a strict policy. Even if I have a strict policy to start writing my novel at 9:00 A.M., I might put off getting out of bed until 9:30, and this does seem to be a case of procrastination. So, it is worth starting by trying to extend the account to strict policies. We must notice first that even a strict policy needs to be implemented through various steps. So my 9-to-7 policy might need a first step such as “Begin writing at 9:00 A.M.” But this first step has the same structure as a vague policy; it does not determine a precise moment in which my finger needs to hit the keyboard, but it can be executed by a number of different choices (idle finger drumming from 9:00:01 to 9:00:05, finger hits keyboard at 9:00:07, and so on). And here, too, we will need the virtue of practical judgment to avoid frittering away time until, without my noticing, my choices clearly are not within an acceptable set (i.e., it is already 9:01, and my fingers are still drumming). This also allows us to generalize this account to short-term procrastination. Suppose that I want to bake a cake for my wife, and I want it to be a nice cake, not put together at the last moment. However, as the day goes by, I check the Internet, I go out to buy coffee and bagels, and so forth. By the end of the day, I only have time to bake a cake from a boxed mix, an outcome that surely was not one that I considered acceptable.

Ordinarily, we would think that I begin to engage in the action of baking a cake when I take the first ingredient out of the cupboard. But if we consider the plan to bake a cake also an action, then we can stretch ordinary language and call “baking a cake” the long-term action that begins with the planning of the cake and ends (or, at least, aims to end) with a cake coming out of the oven. And now we can see that the same structure applies to the action of baking a cake as applies to my writing a novel. In particular, we can think of the plan to bake a cake as a vague plan that I try to implement without the help of any intermediate plans. It is vague, since, again, there are clearly acceptable sets of choices (such as the set of choices in which I got coffee and bagels and still managed to bake my spectacular Black Forest cake), clearly unacceptable ones (such as the one that describe my actual choices in our example), and some that are borderline cases (some cases in which my cake fell somewhere between the boxed mix and my spectacular Black Forest cake). In order to end up in an acceptable set of choices, I must be capable of making momentary
choices that will strike the right balance between baking the cake and doing other things that might also be important. Here, too, insofar as I failed to end up at an acceptable set of choices, I failed to exhibit the virtue of practical judgment, just in the same way that I failed to exercise the virtue when I did not end up writing a decent novel.

It is important to notice that this account of procrastination does not depend on any kind of discounting or preference reversal for greater rewards in the present. This might be considered a disadvantage of the view, but I think not. Suppose that I actually enjoy writing more than performing household chores. However, every time before I begin to write, I decide to engage in the household chores so I will not forget to do them, or I just think that it is better to do the things I do not enjoy before I engage in something I do enjoy. If I keep thinking, “I will just get this one more thing out of the way, and then I will start writing,” I do exhibit procrastination. After all, I put off a valuable project, and as a result of putting it off in this way, I fail to achieve an important end. Of course, this is not to say that often what causes procrastination, what prevents me from displaying the virtue of practical judgment, is exactly the kind of hyperbolic discounting described by Ainslie (and others). However, procrastination on its own does not require preference shifts, let alone hyperbolic discounting; one can procrastinate even if one is a perfect Sidgwichian agent who counts every good the same way irrespective of its temporal location.

Notice also that on this account, one can be very strong-willed (capable of resisting temptation) and yet be a serious procrastinator. Of course, at some point, one will expect that if one is strong-willed enough to move to a precise enough policy, one will not have trouble in executing the policy without the help of further policies or habits or dispositions. But there is at least the theoretical possibility that this is not the case; it might be possible that without a more specific policy that makes my starting time more precise, I cannot execute an intention to start working at 9:00 A.M. As the milliseconds pass by, I can see no reason to start working right now rather than at the very next moment; I can continue on this path of inaction until I realize that it is already 9:01 without at any time having succumbed to any specific temptation.

One might argue that certain cases we ordinarily describe as procrastination will not be covered by this account. Suppose, for instance, that I need to get my grading done by the end of the week. I keep putting it off, but I do finish it on time, even though I waited till the last minute to do it. Does this count as procrastination? Ordinarily, we would think that

18. Andreou makes a similar point in “Understanding Procrastination.”
19. One might think that this shows a preference for household chores. But suppose that my coauthor were to offer this: “I can either do your household chores or write the book for you.” I would always ask him or her to do the household chores.
20. See Ainslie, Breakdown of Will (as well as his chapter 1 in this volume).
someone who leaves things to the last minute is a paradigmatic procrastinator, but it seems that my account would not count such action as procrastination. After all, it seems that it follows from the fact that the grading was completed that I did nothing irrational, and it follows from the fact that I did nothing irrational that I did not manifest any kind of vice of irrationality.

However, this account classifies at least some cases of putting off a task to the last moment as irrational. Suppose, for instance, that during the week I chose to forgo various activities in the hope that I would finish my grading. Suppose, for instance, that on Wednesday, I turned down an invitation to go for dinner at my favorite restaurant, thinking that I should do my grading instead. However, rather than doing my grading, I spent the evening aimlessly browsing the Internet, deleting old files from my computer, nibbling, or in any set of activities that I find much inferior to fine dining. Suppose that Thursday goes by more or less the same way. We might think that on Saturday, as I look back at my week and what I did accomplish (a slightly less cluttered desktop, all of the comments on a cantankerous political blog having been read, and, of course, the grading), I might think that nothing other than my own pattern of choice was responsible for my ending up with an outcome that I find unacceptable. This will be a case of procrastination under our account.

I do not mean to deny that I might put off my grading in such a way that I can look back at my week as pleasant and stress-free up to the fated Friday evening of grading. Absent any further relevant circumstances, no plausible view would classify this behavior as irrational; in this case, the account I present here would certainly return the verdict that I had not procrastinated. I must confess that I do not have settled intuitions about whether this is something that in ordinary parlance we would call procrastination. But even if such cases are ordinarily classified as procrastination, these are cases in which procrastination is not a vice. So, I am happy to restrict my ambition: I hope to have provided an account of the vice of procrastination or of procrastination insofar as it is a vice.

**PROCRASTINATION AND INSTRUMENTALISM**

There is a further important implication of this understanding of procrastination. In “The Normativity of Instrumental Reason,” Christine Korsgaard argues for the incoherence of a view according to which the only principle of practical reason is the principle of instrumental rationality.

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21. Again, this is assuming that my ends are rational and I know them to be so.
22. I am also assuming that there are no unexpected irrelevant circumstances. If the fact that I had enough time to finish my grade turned out to be sheer luck (say, there were a number of exams that were just blank), my procrastination would still have been irrational.
I do not count myself among such instrumentalists, so it saddens me to say that I bring good tidings for those who do. Korsgaard’s argument against the instrumentalist is complex, and I do not claim to address it here in its entirety (and I certainly do not claim that I am about to refute it). However, one aspect of her argument loses some of its force in view of our account of procrastination. Korsgaard argues that an instrumentalist will ultimately be unable to account for the possibility of violating the principle of instrumental reason. Let us take a seemingly typical case of violating instrumental rationality: an agent refuses to undergo a lifesaving operation out of fear. However, as we explain why the agent violated the principle of instrumental rationality, we at the same time identify an end of the agent that is furthered by such an action—namely, the end of avoiding pain (or avoiding certain procedures). But if this is the case, why shouldn’t one say that the agent did not violate the instrumental principle; she efficiently pursued a different end. It seems that the instrumentalist faces a dilemma: either she will have to identify certain things as the “real ends” of the agent (and claim that violations of the instrumental principle are failures to pursue the agent’s real ends), or she will have to treat any apparent violation of the instrumental principle as adoption of a different end that is, in fact, furthered by the agent’s actions. In either case, instrumentalism turns out to be false; in neither case is it true that the principle of instrumental reason is the sole principle of practical rationality. The first strategy amounts to accepting implicitly a second principle of instrumental rationality, that one ought to pursue one’s real ends. The second amounts to rejecting the normativity of the instrumental principle: if no action, or combination of actions, could count as a violation of the principle of instrumental rationality, then the principle does not prescribe anything.

When we look at momentary actions, this argument seems persuasive. Suppose that I spend the bonus I earned on Monday on a nice watch, instead of saving it to procure nourishment on Sunday as I had planned to do before I cashed my bonus check. When the instrumentalist looks at my action on Monday, it seems that she has only two options. She could say that given that I chose the watch, my end (or my most preferred option) on Monday was to buy the watch rather than to have a proper meal on Sunday; in other words, I must have changed my mind when I cashed the check. But if the instrumentalist always reads off my ends from my actions in this manner, no violation of the instrumental principle seems possible. On the other hand, the instrumentalist might not want to say that all cases in which I choose to buy the watch are cases in which my end (or my most preferred option) is to buy the watch. The instrumentalist might insist that at least in some such cases, for the purposes of assessing my

24. I do, however, have some doubts that it is ultimately persuasive even in this case; see Tenenbaum, “Speculative Mistakes.”
rationality, my real end on Monday is to eat properly on Sunday. But then the instrumentalist must distinguish between the end I actually pursue (buying the watch) and the real end (eating properly on Sunday) and claim that I ought to pursue the latter rather than the former. But in this case, the instrumentalist has smuggled a new principle of rationality, the principle that prescribes the pursuit of those ends that the instrumentalist identifies as my real ends.

However, this problem for the instrumentalist disappears when we look at cases of procrastination. It is worth focusing again on the case of my writing a decent novel. Suppose that I procrastinate and never finish writing the novel. Here we seem to have a simple case of adopting an end without taking the necessary means that were available (and known to be available) to me. In order to understand this failure of instrumental rationality, we need not ascribe to the agent a real end hidden behind the ends he actually pursues. My end of writing a novel is revealed precisely by my pursuit; despite the fact that I fail to achieve my end of writing a novel, I do engage in its pursuit. Notice that, unlike the case of my buying a watch, saying that I changed my mind at a certain point in time will not make the charge of irrationality go away.

This point is easier to see if we think I have a deadline to write a novel. I might need to have it sent to the publishers by a certain date (say, one year from today). Given the vagueness of acceptable plans, it is likely that I will still be trying to write a novel when it is no longer feasible to finish it in time. But now let us look at two points in time in which one can say that I changed my mind: before I stopped writing and after (or exactly at the point that) I stopped writing. If one chooses to locate the change of mind before I stopped writing the novel, if I no longer had the end of writing a novel when I stopped, then I was instrumentally irrational by engaging in the characteristic activities of writing a novel without having any end that was furthered by this activity. If, more plausibly, one locates the change of mind after (or exactly at the point that) I stopped writing, then at the moment before I changed my mind, I would have been instrumentally irrational. It was true then that I had the end of writing a novel but had taken insufficient means to bring it about.

Of course, one could claim that the instrumentalist must attribute to me in this case a certain gerrymandered end rather than the end of writing a novel. Perhaps one can argue that the instrumentalist is for some reason committed to saying that I did not (ever?) have the end of writing a novel but only had ends such as typing the words “It was a dark and stormy night” on the paper or engaging a number of times in the characteristic activities of writing a novel. But since these ends would not be capable of explaining my actions as well as the simpler end of writing a novel, there is no reason to think that the instrumentalist must stop short of attributing to me the end of writing a novel. And obviously, what I say about the case of my writing a novel extends to many, if not all, cases of procrastination. According to the account presented here, procrastination is a failure
of instrumental rationality, and we can attribute this failure to an agent without presupposing any further norms of rationality.

**FINAL WORDS**

By saying that procrastination is a vice in virtue of being a specific failure of instrumental rationality, I do not mean to imply that every such failure is vicious. If I procrastinate in my plans to assassinate my neighbor, my procrastination might be neither vicious nor irrational. If my account is correct, practical judgment is an instrumental virtue, and whether such virtues still count as virtues when manifested in the pursuit of bad ends and whether their corresponding vices are still vices (or instances of irrationality) when manifested in the pursuit of bad ends is something on which the account presented here remains neutral. My aim here was simply to understand how procrastination could count as an instrumental vice. The more precise demarcation of which instances of procrastination are, in fact, vicious or irrational will depend on a more general understanding of the role of instrumental virtues in assessing the practical rationality of an agent.

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