

Learning to Imagine

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Underlying much current work in philosophy of imagination is the assumption that imagination is a skill. This assumption seems to entail not only that facility with imagining will vary from one person to another, but also that people can improve their own imaginative capacities and learn to be better imaginers. This paper takes up this issue. After showing why this is properly understood as a philosophical question, I discuss what it means to say that one imagining is better than another and then discuss the kinds of imagination training and techniques that might be employed in an effort to get better at imagining. The discussion of these techniques draws insight from consideration of other skills-based activities, as well as from consideration of the creation of art and our engagement with literature and poetry. Over the course of this discussion, we also gain further insight into the nature of imagination.

These days, it seems that there are wikiHow entries for just about anything you might think of—and even for things you almost surely would never have thought of. Want to know how to survive a lion attack? How to cast a love spell? How to become a tattoo model? Or how to calculate pi by throwing frozen hot dogs? There are wikiHow entries on all of these. So it's probably not surprising that there is also a wikiHow entry on how to improve your imagination.¹ The instructions come in two parts. First, there are suggestions designed to help you find your imagination. This involves both clearing space for imagining and seeking out imaginative inspiration: turn off the television and try to do nothing and then engage with creative literature, creative films, or music without lyrics ('Let music without lyrics arouse your creativity, and use it as a blank slate for your imagination to write on.') Second, there are suggestions designed to help you utilize your imagination: Engage in home decorating projects, plan out an ideal trip, and have stimulating conversations. The site even suggests that you might deliberately do something boring, the thought being that dull tasks force you to use imagination 'to add spice to life'.

Whether these are helpful instructions or not—and I'll return to this issue later—I outline them here primarily to highlight a basic assumption about imagination that seems to be underlying the wikiHow entry and, more generally, that seems to be woven into our folk conception of imagination. In short: imagination is a skill. Some people are much better at it than others, but it is something that we can improve with practice.

In recent work, I've argued that this folk conception is right, and I have developed a rough framework for taking a skills-based approach to imagination (Kind, 2020). But the claim that imagination is a skill is often met with some raised philosophical eyebrows. In particular, a set of related questions stubbornly arises. What does it mean for one person to be better at imagining than another? How can we tell when we're imagining well and

1 <https://www.wikihow.com/Improve-Your-Imagination>

when we're imagining poorly? And notwithstanding the wikiHow instructions, how can someone get better at imagining? How can we learn to imagine?

It's this last question that motivates this paper. If someone wants to take up running, or ballroom dancing, or juggling, they can take a class, or hire a trainer, or buy an app. More generally, there are very specific training regimens out there that they can adopt. But what does someone do if they want to become a better imaginer? What kinds of things can they do for imagination training?

Upon hearing these questions, some may worry that this line of inquiry—however interesting—does not really fall within the domain of philosophy. I take up this worry in Section 2, and I show how it can be defused by way of a comparison with the meliorative tradition in epistemology. In Section 3, I prepare the way for answering the question of how someone can become a better imaginer by taking up a prior question: What does it mean for one imagining to be better than another? This enables me, in Section 4, to turn to the main issue at hand, that of showing how one might learn to imagine. As I argue, though there may initially seem to be good reasons to be sceptical about the possibility of genuine training with respect to imagination, such reasons arise only from the imposition of an inappropriately high standard. Once we have a better sense of the range of techniques and training possibilities that enable individuals to learn new skills, we can see how such possibilities can be applied to imagination.

To begin this discussion, however, we first need to understand more fully what it means to say that imagination is a skill. It is to this issue I will now turn.

1. Imagination as a Skill

There are various places throughout the philosophical literature where one encounters the claim that imagination is a skill. To give just one example, Paul Taylor notes that exercising imagination is 'to engage a particular mental skill' (Taylor, 1981, p. 206). There are also places where one encounters the claim that imaginative capacities vary from person to person or that imaginative tasks vary in difficulty from one to another. Alan White, for example, claims without elaboration that 'To imagine that p ... requires the exercise of a power, which some people may possess in greater degree than others.' (White, 1990, p. 138) Relatedly, Jennifer Gosetti-Ferencei has recently suggested that, though imagining is 'remarkably easy' at times, different imaginative tasks will require more or less effort and 'the degree of effort will vary according to the degree and complexity [of the task] and the facilities of the imaginer' (Gosetti-Ferencei, 2018, p. 86).

But while one occasionally finds comments such as these, philosophers of imagination have only just recently started to attend to the question of how one might take a skills-based approach to imagination or the implications of taking such an approach (see, e.g., Kind, 2020). The relative neglect of this topic undoubtedly connects to the general neglect of skill within the philosophical literature more broadly. As Jason Stanley and Timothy Williamson have noted, 'analytic philosophers have shown little or no interest in the analysis of skill' (2017, p. 714). Carlotta Pavese makes a similar assessment, noting that the topic 'has been marginalized' in analytic epistemology (2016, p. 642). Perhaps the tide on this has recently started to turn, with several notable discussions of skill appearing within

the last few years.² But it's probably still fair to say that there is no general philosophical consensus on what exactly skill is.

Even in the absence of such a consensus, however, we can at least note some features typical of skilled activities. Here I'll focus on three of them. First, when an activity is a skill, that activity is something that can be done more or less well. Second, skilled activities are under the rational control of the person engaged in the activity. And third, skills can be improved via practice or training. This list seems to do a good job of capturing at least some of the commonalities among the vast array of activities that are typically classified as skills, activities as varied as juggling, ballroom dancing, oil painting, solving Rubik's cubes, throwing javelins, and folding origami figures. Moreover, this list also seems to do a good job of excluding activities that are usually not classified as skills, activities such as blinking or taking out the trash cans or flipping a light switch. In the case of each of these activities that don't seem appropriately thought of as skills, at least one of the three features seems to be missing.³

When it comes to imagination, it strikes me as immensely plausible that all three of these features are present. But here's exactly where those stubborn questions mentioned earlier start to arise. In particular, we have the following quandary: although on first thought it seems to make sense that imagination should be improvable by practice, on deeper reflection it is hard to make out exactly what imagination practice would be like. Recall the wikiHow entry. Several of the items on their instruction list, items like turning off the tv and refraining from engaging in any other activities, function more as *pre-cursors* to imagination practice than as imagination practice itself. That's not to say that the inclusion of these kinds of pre-cursors in the list is inappropriate. Compare, for example, the entry on how to paint a brick fireplace, which begins by noting that the first step is to move all furniture and knickknacks out of the way. But while the entry on how to paint a brick fireplace goes on to give concrete instructions for the painting process itself (start with the back wall of the interior, always move from top to bottom, etc.), the entry on how to imagine never really gets concrete about the imagining process itself. Many of the other items on the instruction list, items like learning a musical instrument, decorating your home, and having stimulating conversations with friends, provide suggestions for ways that one can become involved with activities that often draw upon imagination. Although this advice may be important to the learning process, maybe even essential to it, it doesn't address the issue head on.

How, then, does one get better at imagination? One can learn how to become a better juggler or a better origami folder. But how exactly can one learn to be a better imaginer?

2. What Kind of Question is This?

Before I attempt to address this question, it will be helpful to pause for a moment to think about what kind of question it is that we're asking. In particular, I want to reflect on

2 One might also expect that this conversation will be jumpstarted by the recent publication of [Fridland and Pavese \(2020\)](#) a comprehensive edited collection dedicated to philosophical treatments of skill and its application across a wide range of philosophical contexts.

3 I develop these points in more detail in [Kind \(2020\)](#).

whether and to what extent this question is appropriately viewed as a philosophical one. Some might worry that this kind of how-to question isn't really the kind of question that philosophers should be in the business of addressing. However, as I want to suggest in this section, it *is* a philosophical question or, at least, it's a question that's appropriately viewed as part and parcel of a philosophical inquiry into imagining.

To see this, it will be helpful to consider parallel questions about knowledge: How can one get better at acquiring knowledge? How exactly can one learn to be a better knower? Insofar as epistemologists address these sorts of questions in their work, we would find support for the claim that how-to questions of this sort fall within the philosophical domain. But *do* epistemologists really take up these questions? And if so, in what ways do they do so?

As a first stab at an answer, we might note that epistemologists address these questions at least indirectly by addressing the question of what knowledge is. In providing us with an account of the nature of knowledge, an epistemologist tells us something about how we can get better at acquiring knowledge and how to be a better knower. But while it does seem plausible that having an understanding of what knowledge is would help one to be better at acquiring it, if this indirect route is the only way that epistemologists shed light on how-to questions then the analogy to epistemology will not really be a useful one for my purposes. The how-to questions I have raised about imagination aren't meant to be questions about the conceptual analysis of the notion of imagination, and asking them is not meant to serve as a disguised way of trying to get at the nature of imagination. While there is a lot of work on the nature of imagination, and while understanding the nature of imagination may be helpful to someone who aims to become a better imaginer, one would expect that if imagination is a skill then we should be able to discover a more direct sort of approach to the how-to questions before us.

Fortunately, a second stab at an answer proves more promising. When we consider what's referred to as the *meliorative* tradition in epistemology, we see that epistemologists are often motivated by prescriptive as well as descriptive aims. Discussing this aspect of traditional epistemology, Patrick Rysiew notes that 'epistemology is in the business of offering useful advice, and so as having "an important meliorative dimension"' (Rysiew, 2020; quoting Kitcher, 1992). This meliorative dimension seems to date back at least to Descartes, who began his *Meditations* by developing a procedure for the attainment of knowledge: 'demolish everything completely and start again right from the foundations' (Descartes, 1641/1986, p. 1). As Philip Kitcher has described it, philosophers like Descartes and Bacon were 'moved to epistemological theorizing by their sense of the need to fathom the ways in which human minds can attain their epistemic ends' (Kitcher, 1992, p. 64; cf. Goldman, 1978).

Taking Kitcher's description as a way of framing the meliorative project within epistemology, its central question becomes: *How can human minds attain their epistemic ends?* By way of analogy, this paper can be seen as proposing a meliorative project within philosophy of imagination. Its central question becomes: *How can human minds attain their imaginative ends?*

It's here worth noting that there are good reasons to think that a meliorative project within philosophy of imagination can be even more profitable than the comparative one

in epistemology. Advice involving our epistemic ends will likely involve matters relating to belief formation. Since belief is standardly seen as non-voluntary, as not being subject to the will, epistemic advice on this score can only have limited value. If we are unable to control what beliefs we form, then advice about how we should form beliefs can be only so successful. In contrast, many philosophers view imagination as at least typically a voluntary activity, as being subject to the will.⁴ Thus, any advice issued by the meliorative project in philosophy of imagination is likely to have significantly more payoff. Clearly this project is one deserving of philosophical attention.

It's also worth noting that the meliorative project applies no matter what kind of imaginative act we're engaged in. In previous work I have distinguished two distinct uses to which imagination is put: *transcendent* uses and *instructive* uses (Kind and Kung, 2016). In transcendent uses, we aim through our imaginative exercises to transcend the world in which we live. Paradigmatic instances of transcendent imagining involve the production or consumption of fiction, games of pretence, and daydreaming. In instructive uses, we aim through our imaginative exercises to learn about the world in which we live. Paradigmatic instances of instructive imagining involve mindreading, problem-solving, and thought experimentation. As should be clear, the question of how we can best achieve our imaginative ends applies in both transcendent and instructive cases. Of course, there may be some contexts in which being a good imaginer doesn't matter very much. When parents are playing games of pretend with their very young children, for example, there will be many instances in which they don't need to be particularly skilled imaginers to keep the children busy and entertained. But in a wide variety of contexts—when someone is writing fiction, for example, or is trying to put imagination to use in a problem-solving or decision-making context—the better they are at imagining, the more likely they are to be successful.⁵

3. Better vs. Worse Imagining

The analogy to epistemology drawn in the previous section helps to elucidate the nature of the how-to questions before us. It also helps us to see why these questions are rightly considered to be squarely within the province of philosophy. But there is one more preliminary matter that I want to address before I attempt to start answering them. In order to tackle the question of how someone can become a better imaginer, it will be helpful to have before us a sense of what counts as imagining better. What elements underlie judgments of imaginative quality?

To answer this question, it helps to think more generally about what it means to be better or worse at a given skill. In general, what it means to be skilful at a particular activity will depend in part on the aims of the activity or on our aims in pursuing the activity. Being skilful at running usually involves doing the activity more quickly. Likewise

4 See, e.g., McGinn (2004, pp. 12–17, 131–132); Wittgenstein (1948/1980, §80).

5 Here it's also relevant that Goldman invokes imagination as a way we might be better able to achieve our epistemic ends (Goldman, 1978, p. 513).

for solving Rubik's Cubes or crossword puzzles. Being skilful at running also sometimes involves running for longer distances, but this isn't relevant for solving Rubik's Cubes or crossword puzzles, nor is it relevant for many other physical activities, as we see when we consider ballroom dancing or ballet. Reflection on the activity of dancing also suggests that speed isn't always a relevant factor in skilfully executing a task. Being skilful at ballet need not involve completing the moves more quickly, and being skilful at painting doesn't usually require painting more quickly. When we think about a larger variety of skilled activities, we see that sometimes what matters is grace and balance, sometimes strength, sometimes beauty, and so on. Sometimes what matters is the complexity of the task you're able to accomplish.

What makes for better or worse imagining will thus vary to some extent depending on the imaginative project involved. As we saw in the previous section, imagination is put to very different kinds of uses with very different kinds of aims. Moreover, just as some people are very good at marathon running without being good at sprinting, and vice versa, it seems plausible that some people are very good at putting imagination to transcendent use without being good at putting it to instructive use, and vice versa.

Perhaps what's most important for succeeding at transcendent uses of imagination is one's ability to remove constraints imposed by the structure, laws, and facts of the real world. The better one is at removing these constraints, at breaking the connection with reality, the better one will be at putting imagination to this kind of use. Although real-life elephants don't fly, they can in imagination. Although real-life humans don't have the strength to lift elephants, they can in imagination. Although a real-life briefcase can't be bigger on the inside than it is on the outside, in imagination it can. In fact, in an imagined scenario a normally sized briefcase might contain a normally sized flying elephant within it. And so on.

Matters are different when it comes to instructive uses of imagination. Here, more important than the ability to remove constraints is the ability to impose constraints, or at least to abide by the constraints imposed by real-world facts. If you're briefcase shopping and you're trying to figure out via an imaginative exercise whether your laptop and textbooks can all fit into a particular model, you won't be able to achieve your imaginative ends if you imagine that the briefcase is bigger on the inside than on the outside. Thus, the better one is at constraining one's imagining, at maintaining an appropriate connection to reality, the better one will be at putting imagination to this kind of use.

Of course, transcendent imaginings also require one to impose constraints and instructive imaginings also require one to remove constraints. When we are engaged in transcendent imaginings about flying elephants, at the same time that we are releasing certain constraints about aerodynamics, we also want to maintain certain constraints about elephant features. We probably want our imagined flying elephants still to look like elephants and thus want them to have trunks, for example. When we are engaged in instructive imaginings about the future, while we want to maintain constraints relating to the laws of physics, we might want to remove certain constraints about currently existing technologies. But while the removal and imposition of constraints play a role in both kinds of imaginative uses, the ability to remove constraints seems more central to transcendent imaginings and the ability to impose constraints seems more central to

instructive imaginings. (Compare: speed and endurance are important in both sprints and marathons, but speed seems more central to sprints and endurance seems more central to marathons.)

Some dimensions of imaginative quality are common to both uses to which imagination can be put. As psychologist Lev Vygotsky has put it, the operation of imagination ‘depends on combinatorial abilities and practice in exercising them’ (1967/2004, p. 29). We will return to the issue of practice below. But for now, let’s focus a little on the combinatorial abilities themselves. Hume’s discussion in the *Enquiry* of what we can do with ideas provides us with some insight into these abilities. On his view, the ‘creative power of mind’ consists in ‘compounding, transposing, augmenting, or diminishing the materials afforded us by the senses and experience’ (1777/1977, p. 11). Likewise, in his discussion of imagination in ‘What is it like to be a bat?’, Nagel notes that our imaginings proceed by way of a combination of additions, subtractions, and modifications of our own experiences (1974, p. 439).

Exercising these kinds of combinatorial abilities requires one to have adequate materials to combine. To be a better imaginer, one thus needs to have a store of experiences. As Vygotsky notes, the operation of a child’s imagination will be more productive the more that child sees, hears, and experiences (1967/2004, p. 15). Moreover, it’s precisely because children have considerably less experiential material to operate with than adults do that Vygotsky claims children can generally imagine ‘vastly less’ than adults can (1967/2004, p. 34).

Our discussion thus far in this section has revealed three different elements that matter for imaginative quality:

- appropriate manipulation of constraints (in instructive uses of imagination, this primarily involves the imposition of constraints; in transcendent uses of imagination, this primarily involves the removal of constraints);
- exercise of combinatorial capabilities;
- experiential resources.

But before we close this section, it will be useful to note one more element that also seems relevant for evaluating acts of imagining as being better or worse. Since imagining is often associated with mental imagery—indeed, some philosophers take mental imagery to be required for imagination—the quality of an imagining will often be linked to the quality of mental imagery involved in it.⁶

There are various different dimensions along which we may judge the quality of mental imagery. Moreover, the relevant dimensions will likely vary among the different modalities of mental imagery; what makes for a better visual image will likely differ in important ways from what makes for a better auditory image, or a better gustatory image. But there are still some dimensions likely to be shared across different modalities. One such dimension concerns the clarity of the mental images. Another concerns their level of detail or fine-grainedness. Following Hume, these two dimensions are often referred

6 For defences of the claim that imagination always involves imagery of some sort, see Brann (1991) and Kind (2001). For denials of this claim, see Walton (1990) and White (1990).

to in terms of the notions of vividness or vivacity.⁷ But Hume did not only speak of images' vivacity; he also spoke of their force. Although it's not entirely clear exactly what Hume had in mind with the notion of force, one way to understand it is in terms of the steadfastness of mental imagery. This gives us a third dimension to imagery quality. We might also think that the controllability of mental images is importantly related to their quality. The more finely someone can control their mental imagery, the better an imager they are. A fifth dimension concerns how well mental imagery succeeds in representing what it aims to represent. We might think of this fifth dimension of imagery quality as an accuracy condition.

While there are undoubtedly other dimensions of imagery quality that could be specified, especially when we turn to specific modalities of mental imagery, this brief discussion nonetheless gives us a sense of at least some of the key factors in play. Adding all of this to our previous list, we now have four different elements relevant to imaginative quality:

- appropriate manipulation of constraints (in instructive uses of imagination, this primarily involves the imposition of constraints; in transcendent uses of imagination, this primarily involves the removal of constraints;
- exercise of combinatorial capabilities;
- experiential resources;
- quality of mental imagery (e.g., clarity, level of detail, force/steadfastness, controllability, accuracy).

This list is meant only as a starting point; it is not meant to be exhaustive. But having fleshed out these four elements relevant for imaginative quality, we are now in a better position to answer the how-to question that motivates this paper. Doing so will be the task of the next section.

4. Imaginative Training and Techniques

Suppose you wanted to learn how to ballroom dance. You might read some books, watch instructional videos online, or sign up for a group class or private lessons. At the class or the lessons, the instructor demonstrates certain movements and steps and then watches you as you try to perform the same actions. Perhaps they break the movements into smaller segments to make them easier to learn. They might come over and correct your form, or your arm or leg placement, perhaps by physically adjusting your arm or pulling your hips into a different position. They might also offer you some advice on how to maintain the proper form or they might suggest analogies that help you understand how to better corral your body into the appropriate position. At the end of the lesson, they might assign you homework to do in the time before you return for your next lesson. This homework will likely involve practising some of the manoeuvres you learned in class, but it also might involve other activities. They might ask you to spend time using a hula hoop

⁷ For concerns about this way of speaking, see [Kind \(2017\)](#).

in an effort to learn how to work your hips, or they might ask you to count the beats as you're listening to music in an effort to get you to attend to the rhythm of different songs.

Unfortunately, very few of these methods of instruction seem possible with respect to imagination. It's hard to see how an instructor could usefully demonstrate what to do, or watch you as you try to do it. It's also hard to see what kinds of exercises or homework could be assigned. Consulting the existing philosophical literature on imagination also wouldn't prove particularly helpful, as this isn't really an issue that philosophers have directly addressed.

There are some places outside the philosophical literature where we see this topic discussed, but even here, people seem to come at the issue sideways. For example, we see some gestures toward the need for imagination training in the mental rehearsal literature, that is, literature addressing the use of imagination in athletic performance (see, e.g., Rodgers, Hall, and Buckolz, 1991). Numerous studies have shown benefits to athletes who engage in mental rehearsal exercises—who visualize themselves making the basket or hitting the shot, for example, or who run through their routine in imagination prior to taking to the ice or the floor.⁸ But in this context, the authors are primarily interested in the improvement of the athletic performance, not the improvement of imagination. Other than claims about the need for repetition and practice, the issue of how one can get better at imagining is not really taken up.

Something similar happens in various other contexts in which we see reference to imagination training—contexts in which imagination (often visual imagination) is invoked in the service of some other overarching goal. For example, the performance of imagination exercises is discussed in the parapsychology literature (e.g. George, 1982), the literature on guided imagery in health (e.g. Tusek, Church, and Fazio, 1997), and the literature on shamanism/visionaries (Noll, 1985). In each case, engaging in certain acts of imagination is thought to prove helpful to achieving a desired outcome, whether it be cultivating one's powers of ESP/psychokinesis, improving patient outcomes, or achieving religious visions. Also in each case, though imaginative practice is discussed, we don't see much direct discussion of how to go about it.

Perhaps the most helpful context is the literature on meditation practices, where imaginative exercises are invoked in an effort to help one refine one's meditative abilities. But even here, the advice tends to be indirect. We get various suggestions about the need to approach the imaginative task with the proper attitude and to be in an appropriate setting—suggestions reminiscent of the stage-setting instructions we earlier encountered in the wikiHow entry on improving imagination.

Consider, for example, this advice offered in a website associated with the meditation app *Headspace*. In response to a query from a user who expresses difficulty with a particular visualization exercise, meditation and mindfulness expert Andy Puddicombe suggests the following:

8 Visualization exercises are widely used by Olympic athletes across a variety of sports. The US Olympic team brought nine sports psychologists with them to the Sochi games in 2014 and the Canadian team brought eight. For discussion see <https://www.nytimes.com/2014/02/23/sports/olympics/olympians-use-imagery-as-mental-training.html>

The usual difficulty with this exercise is the attitude toward it. ... By ‘attitude’ I mean expectation, effort and so on. These are common themes which impact all meditation exercises, but visualization techniques seem to be particularly sensitive to them. The way to avoid this is to approach the visualization in the same way as we might imagine a kind old friend. It doesn’t take any real effort, we simply picture them in our mind and it makes us smile.⁹

As Puddicombe goes on to suggest, difficulties of the sort the user describes are quite normal, and we should remember that all the visualization techniques take time. But while this advice may be reassuring to the user who had written in, it’s hard to see exactly what one is meant to do except to try again. The advice may sound somewhat dissatisfying. Certainly, for someone sceptical about the possibility of imagination training, this kind of advice is unlikely to overcome their scepticism.

As a first answer to the sceptic, we might note that when we think again about the kind of advice we get with respect to the acquisition and improvement of other skills, we find that there are some ways that the advice offered here is not really all that different. Slow down. Try again. Keep a positive attitude. Keep working at it. These are the kinds of suggestions that we often get no matter what skill we’re trying to master. This suggests a certain diagnosis for the dissatisfaction just mentioned: perhaps the sceptic is adopting too high a standard for what we’re looking for with respect to imagination training, asking for something that we wouldn’t ask for with respect to other activities. Perhaps it’s only because the sceptic has an unrealistic sense of what kind of answer would be appropriate that the question of how one can learn to imagine seems so difficult to answer.

Here the sceptic has an easy reply. As we saw at the start of this section, there are all kinds of instructions that are available in skills-learning contexts like ballroom dancing that aren’t available in the context of imagination. And the context of ballroom dancing is by no means a singular one. Consider another skill, like playing the piano. When my son is struggling with a difficult section of a piece that he is learning, his teacher does tell him to try again and to keep working at it. But that’s not all that she does. She might also play the section for him, giving him an exemplar against which to match his performance. She might also suggest different fingering. She might give him other exercises to try that will help him master the fingering sequences in the piece that he’s struggling with. In short, there’s more for the instructor to say and do than simply offer exhortations about repetition and attitude. In the case of imagination, however, these exhortations are all that seem to be available. We can’t watch an expert at work and we don’t have an exemplar to guide our practice.

But while the first answer to the sceptic is not successful, there does seem to be something importantly right about the thought that we might be demanding too much in our search for imagination training techniques, and reflection on what’s right about it leads us to a more satisfying answer. The key is to notice that not every skill is learned in the same kind of way, and there are many other contexts of skill-learning in which explicit step-by-step instructions are unavailable. Piano playing and ballroom dancing may be the

9 Available at <https://www.headspace.com/blog/2017/04/24/visualization-technique-struggle/>

wrong kinds of paradigms on which to focus, and as we saw above, the kinds of things that count as skills are varied and multitudinous. Shifting our attention to other kinds of skills thus proves helpful.

Consider culinary talent or artistic creation. When we watch the chef at work, we can observe her combining ingredients, but we can't really observe her culinary skill. Something similar would happen if we were to watch a composer or an artist at work. Of course, in each of these cases, there are some subskills that we can develop via observation. If you're learning to become a chef you can learn how to get very good at chopping and knife handling, you can learn chemistry so that you have a better understanding of the combination of ingredients, you can collect more gustatory experiences in an effort to refine your palate, and you can slow down and reflect on your gustatory experiences while you are having them. Importantly, however, none of these suggestions is really any more direct than the general suggestions about imagination that we saw earlier: adopt the right attitude, clear your mind, break the task down into smaller components, repeat ...

The same will be true for many other skills. Consider wine tasting or artistic appreciation. Granted, as you are trying to learn these skills there will be a worldly object—the glass of wine, or the piece of art—to which you and your instructor can jointly attend. But when you drink the wine and try to learn to better identify and appreciate the different flavours, your instructor cannot really point to a particular flavour and guide your attention to that aspect of your experience. Ultimately, you'll be on your own—just as you are when you are trying to learn to imagine better.

Here perhaps there's an even better comparison at hand than the comparisons just invoked, and it is one that places imagination in pretty good company. Consider Gilbert Ryle's description of how one might learn to do philosophy:

To teach a student to philosophise, one cannot do much save philosophise with him. The notion of a well-trained philosopher or poet has something ludicrous in it. But philosophising and composing are largely without prescribable techniques not because, like panting, perspiring and digesting, they go on so automatically as to be below the level even of being easy; but because to be successful in them is to advance ahead of all the beaten tracks. They require not manuals but practice, stimulation, hard work and flair. (Ryle, 1953, p. 194)

Imagination, like philosophy, also doesn't require a manual. But perhaps unlike in the case of philosophy, where one can keep reading and re-reading texts and one can keep writing and re-writing essays, it can be hard to see exactly what one could do to practise imagining. As I want to suggest, however, when we think about this more carefully, and when we think about some of the suggestions that we have encountered in passing throughout the discussion of this paper, we can see that there are ways to make the admonition to engage in imagination practice more comprehensible and more concrete.

As we saw in Section 3, one thing that's important for instructive imagining is the ability to impose worldly constraints. When we focus in on this, we can think of various activities that would help one to develop this ability. Consider what we might think of as imaginative matching activities. How might these matching exercises go? Suppose you had a children's picture book of dinosaurs or sea creatures or construction vehicles, and that

you had a friend describe one of the pictured dinosaurs (or sea creatures or construction vehicles) in as much detail as they can. While they are giving you the description, you would try to imagine the object described. When you think you've done it, you could then have your friend show you the picture. How well did you do? In this kind of exercise, you won't be able to get corrective feedback from your friend, since they won't have access to the imagining you produced. But you will be able to make judgements for yourself about how close your imagining matched the object described. By the time you've worked your way through all of the pictures in the book, you will have given your imagination quite a workout. Of course, the usefulness of this exercise depends, at least in part, on the quality of the descriptions that your friend is giving you. But this is no different from any kind of training. As a general matter, the quality of training exercises rests on the quality of the trainer.

In contrast to instructive imagining, what's important for transcendent imagining is the ability to remove worldly constraints. Here too we can think of various activities—both cooperative and individual—that would help one to practise doing so. One example comes from the 1950s radio and television personality Art Linkletter, who suggests that one's imaginative 'muscles' can be strengthened in the same way that one's biceps can be strengthened. To help demonstrate this, he describes a game that his own family likes to play:

we make up 'whoppers' and try to leave the story dangling in some impossible crisis for the next narrator to solve. Aviators, with ticking bombs manacled to their body, float earthward from burning airplanes with starving moths eating the parachute silk, while below him is an endless vista of gaping crocodile jaws in the quicksand of the jungle. This sort of 'cliff-hanger' is calculated to improve the imagination, quicken the mind, and get the growing child to bed with a head start on a rip snorting nightmare. (Linkletter, 1957/2005, p. 101)

We can find similar imagination-stretching techniques in the kinds of games and warmups used in classes and workshops on improv comedy. These kinds of activities help one to break out of a set mentality, to improve receptivity to new ideas, and to think quickly on one's feet.¹⁰ All of these subskills prove useful to an aspiring imaginer in just the way that the subskills of knife handling prove useful to an aspiring chef.

Another useful subskill—one that's useful for both transcendent and instructive uses of imagination—is the collection of ideas and experiences. In giving advice to aspiring artists in his book *Steal Like an Artist*, August Kleon instructs his readers: 'Your job is to collect good ideas. The more good ideas you collect, the more you can choose to be influenced by' (Kleon, 2012, p. 14). Relatedly, filmmaker Jim Jarmusch advises: 'Devour old films, new films, music, books, paintings, photographs, poems, dreams, random conversations, architecture, bridges, street signs, trees, clouds, bodies of water, light and shadows' (quoted in Kleon, 2012, p. 14). These instructions are reminiscent of Vygotsky's claim that the productivity of imagination is tied to the vastness of one's experiential

10 Although his focus is on creativity and not imagination Al Hajek offers several useful heuristics along these lines in his (2018).

reservoir. When we initially encountered this point, it appeared to be specifying a background condition for the operation of imagination. But now we can see that collecting experiences is not just a precondition for imagination. A kind of experience collection can also serve as an integral part of the training of imagination. In order to employ and develop one's combinatorial capacities, one needs to have sufficient material to combine.

In connection with this notion of experience collection, we are led to another suggestion for a way to engage in imagination practice: engagement with literature. One person who has developed this idea in at least some detail is Martha Nussbaum. On Nussbaum's view, literature is especially important for its ability to give us a window into the minds of other people. In fact, not only does she think that it reveals certain facts about the contents of other people's inner lives but she also thinks that it helps us to develop our very understanding that other people have inner lives. Early nursery rhymes encourage the child to start pondering the nature of others, as for example in 'twinkle, twinkle little star, how I wonder what you are'. As Nussbaum goes on to argue:

A child deprived of stories is deprived, as well, of certain ways of viewing other people. For the insides of people, like the insides of stars, are not open to view. They must be wondered about. And the conclusion that this set of limbs in front of me has emotions and feelings of the sort I attribute to myself will not be reached without the training of the imagination that storytelling promotes. (Nussbaum, 1997)

A similar suggestion regarding imagination practice comes from poet Percy Bysshe Shelley in his nineteenth-century essay, 'A Defence of Poetry'. Shelley argues that imagination plays a central role in the achievement of moral goodness. In order to be morally good, we must 'imagine intensely and comprehensively' and put ourselves 'in the place of another and of many others; the pains and pleasures of [our] species must become [our] own'. Poetry can thus contribute to moral goodness by contributing to the development of imagination:

Poetry enlarges the circumference of the imagination by replenishing it with thoughts of ever new delight, which have the power of attracting and assimilating to their own nature all other thoughts, and which form new intervals and interstices whose void forever craves fresh food. Poetry strengthens the faculty which is the organ of the moral nature of man, in the same manner as exercise strengthens a limb. (Shelley, 2012, p. 37)

Surprisingly, perhaps, this discussion of literature and poetry, and more generally of the collection of experiences, brings us full circle, back to the wikiHow entry with which we began. On first reading the wikiHow instructions, they don't seem to be as helpful as one would want. When one wants advice for how to get better at imagining, it seems a bit like changing the subject when one is told to listen to music or read books. After the discussion of this section, however, we can now see why that kind of advice is important. 'Just practise imagining stuff' isn't the kind of advice that's going to cut it on its own. In contrast to lots of other skills, when it comes to imagination it may be difficult to know how to go about practising or what imagination practice would consist in. It may also be difficult to know how the activity of imagination practice can be usefully sustained over

time. Concrete suggestions for ways to engage one's imagination might thus be exactly the kinds of things that we need.

5. Concluding Remarks

The question motivating this paper—how can we learn to imagine?—is a deceptively tricky one. The answer to this question seemed, at least initially, to be frustratingly elusive. But in the end, it has turned out that the answer is considerably more accessible than it had initially appeared. The problem arose, at least in part, from a certain expectation about what the shape of the answer would have to be. When we think about various physical skills like ballroom dancing, it is difficult to see how there could be analogous training routines with respect to imagination. But not all skills are developed in the way that ballroom dancing skill is developed. More importantly, although the notion of imaginative practice initially seems to be opaque, our investigation has revealed that there are many activities that could give us opportunities for imagination practice. These activities are ones that we can repeat, and by way of repetition, we can make any needed adjustments in what we are doing. We may not have an exemplar against which we can measure ourselves, and we may not have an instructor who can give us explicit suggestions for how to improve our performance. But there are nonetheless a variety of things that we can do in order to get better at imagining.

Interestingly, the problem that arose here—the difficulty of seeing what imagination training could consist in—is analogous to a problem that arises in many other contexts of discussion about imagination. Philosophers have long tended to hold imagination to a different, often higher, standard than is used with respect to other mental activities. To give just one example, in discussions of the epistemic value of imagination, it often seems that imagination is being held to a higher standard than perception. The fact that perception is fallible doesn't prevent perception from being able to play a justificatory role with respect to beliefs, so why should the fact that imagination is fallible prevent imagination from being able to play this kind of justificatory role? Here, the fact that it was difficult to see how the usual kinds of training instructions would apply to imagination—instructions like practise, repeat, and so on—made it tempting to ask for something *more*. But in the end, it's not really that we needed something more. Rather, what we needed was a more nuanced understanding of what it would be to practise engaging in imagination.

Now that we have an appropriate standard in place, we see that we are well-positioned to account for the ways that one might work to become better at imagining. That's not to say that it will be easy. Mastering a skill rarely is. The famous standard associated with the work of psychologist Keith Ericsson suggests that it can take 10,000 hours of deliberate practice at a given activity to become an expert at it—20 hours a week for 50 weeks a year for 10 years (see, e.g., [Ericsson et al., 1993](#)). But the goal in this paper wasn't to outline a procedure by which one could become expert at imagining. Rather, it was simply to defend the claim, important to seeing imagination within a skills-based framework, that there are procedures and practices in which one can reasonably engage in an effort to become better at it.

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