An Agency-Based Epistemology of Modality

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Forthcoming in D. Prelević and A. Vaidya:
The Epistemology of Modality and Philosophical Methodology

1 Introduction

My aim in this paper is to sketch, with a broad brush and in bare outlines, an approach to modal epistemology that is characterized by three distinctive features.

First, the approach is *agency-based*: it locates the roots of our modal thought and knowledge in our experience of our own agency. Section 2 will argue that simply by being agents in the world, we possess a wealth of modal knowledge, more specifically: knowledge about our own abilities and dispositions as well as the dispositions and affordances of objects around us. Second, the approach is *ambitious* in that it takes the experience of certain modal properties in agency to be the sole distinctive feature of specifically modal thought and knowledge; everything that we know about modality beyond the experience of agency is a matter of applying standard methods of inquiry such as deduction, induction and abductive methods for choosing between theories.[1] Section 3 will sketch how this works for our ordinary modal thought; section 4 will turn to modal thought and knowledge in philosophical contexts.

A third feature of the account arises naturally out of the first two. Given that modal thought and knowledge starts with modal properties, and that our methods for expanding modal knowledge beyond the context of agency do not make a distinctive addition to it, it is natural that modal thought and knowledge in general is, first and foremost, about modal properties that are sufficiently like those encountered in agency. I call such modal properties "potentialities" and have provided a non-reductive metaphysics of them elsewhere (Vetter 2015), but for present purposes we can think of them as *de re* possibilities. A complete version of the account will have to specify how from there we get to knowledge of *de dicto* modal truths; in this

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[1] I prefer this term to the better-entrenched 'uniform', for reasons to be discussed below.

paper I will only be able to sketch an epistemology for *de re* modality, but unlike Roca-Royes (2017), I am optimistic that it can be extended.

What are the attractions of such an account? I take it that if the basic claim is correct and we do have a route to modal thought and knowledge in our experience of agency, then this constitutes a natural starting point for an empiricist account of modal thought and knowledge. Why make the account ambitious, and not allow for other distinctive sources of our modal thought and knowledge? Simply for reasons of theoretical parsimony: if we can do without other sources, then we should. But the present paper should be read as an exploration, rather than as a defense, of this ambitious approach. If it fails, then we will still have learned something about the role that the experience of agency can, and the roles that it can't, play in modal epistemology.

The remainder of this introductory section aims to locate the account to be explored in the landscape of modal epistemology more generally.

Modal epistemologies can be categorized along a number of dimensions; I will choose those which I believe best help to situate the present account.

First, *exceptionalism* vs *anti-exceptionalism*. An exceptionalist modal epistemology claims that our knowledge of metaphysical modality has an exceptional source, a source whose specific function is insight into questions of metaphysical necessity and possibility. An anti-exceptionalist claims the opposite: our modal knowledge arises, in some way or another, from cognitive abilities that we use for other, more mundane purposes, such as planning our actions. Following Williamson 2007, anti-exceptionalists will typically claim that an exceptionalist theory would have to endow us with cognitive faculties for which there is no plausible evolutionary explanation.

I will here simply assume that an anti-exceptionalist account is to be preferred if we can get one. In fact, it is not clear that anyone in the literature is a self-described exceptionalist; exceptionalism is generally attributed to a view by its opponents. But an account can be more or less obviously anti-exceptionalist. The view I will explore is very obviously an anti-exceptionalist one – what could be less exceptional than our experience as agents in the world?

Second, *monism* vs *dualism*. This distinction concerns the relation between metaphysical and some kind of epistemic modality, in particular, conceivability.[2] Monists believe that there is but one phenomenon, modality, of

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[2] "Epistemic modality" is ambiguous. In linguistics and the philosophy of language, it is typically used to apply to ordinary modals used to convey, roughly, that something is compatible or not with the contextually salient state of knowledge, as when a detective says "Jones must be the murderer"; see Kratzer 1981. In the literature on modal epistemology,

which metaphysical and epistemic modality are merely aspects; there is only one "space of possible worlds". This is particularly vivid in two-dimensional semantics, on which an epistemic kind of possibility ("primary possibility') and metaphysical possibility ("secondary possibility') are characterized by two perspectives on the one modal realm – by whether a given possible world is considered as actual or as counterfactual. (See Chalmers 2010, Chalmers 2012). Dualists, on the other hand, hold that there is a deep distinction between any epistemic modality on the one hand, and metaphysical modality on the other: the one concerns the extent of our knowledge, the other concerns objective features of reality itself. Dualists will, accordingly, develop their accounts of metaphysical modality with little or no regard to such epistemically modal phenomena.

In principle, these alternatives can be freely combined. In practice, those who put much weight on their modal anti-exceptionalism are typically dualists (Williamson 2007, Williamson 2016b), but an anti-exceptionalist can be a monist as well. The clearest statement that I know of of an anti-exceptionalist monism is Ichikawa 2016. Ichikawa's argument for monism starts from modal semantics, where objective modality (of which metaphysical modality is a species) and epistemic modality are typically considered merely different sets of restrictions on one space of possible worlds. For reasons given in Viebahn and Vetter 2016, §5.2, I doubt that this is the best account of our modal language: modals, I believe, are polysemous between epistemic and objective readings. Thus I take modal dualism to be encoded in modal semantics already (which is not, of course, proof of its truth, but merely a rejoinder to semantic arguments for its falsity). Hence my account will follow the more widespread combination of anti-exceptionalism and modal dualism.

A third distinction is that between modal *empiricism* and modal *rationalism*: while empiricism takes our modal knowledge to have its source in our empirical knowledge of the world (using perception, induction, and so forth), modal rationalism takes it to be non-empirical – be it a priori insight, conceptual knowledge, or linguistic understanding. The distinction is not exclusive: there are a variety of mixed views, which hold that our modal knowledge has both empiricist and rationalist sources. Full-blown modal empiricists are, of course, committed to anti-exceptionalism (what could be

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it is often used to apply to conceivability – compatibility, we might say, not with our state of knowledge but with any rational state of knowledge. The two phenomena are presumably related, but they are not the same. For present purposes, we can lump them together to contrast with objective modality, which is entirely independent from our or any potential knowledge.

less exceptional a source of knowledge than empirical methods?), but not vice versa; an anti-exceptionalist rationalist or defender of a mixed view might, for instance, locate the source of some or all of our modal knowledge in our ordinary understanding of language (Thomasson 2018). It goes almost without saying that my proposed account will be empiricist; but as we shall see below, it leaves room for the possibility of innate modal knowledge (albeit not of the kind that the rationalist typically appeals to).

Fourth, a modal epistemology may be *symmetric*, giving equal weight to our knowledge of different modalities (necessity, possibility and perhaps the counterfactual conditional) or *asymmetric*, starting out with one kind of modality and treating our knowledge of others as derivative (see Hale 2003). In the latter case, depending on which kind of modality it starts with, an account may be *possibility-based*, *necessity-based* or *counterfactual-based*.

The most prominent account which, like mine, combines anti-exceptionalism, empiricism, and modal dualism is no doubt the counterfactual-based account provided by Williamson 2007. My account differs from his in being possibility-based. Like Roca-Royes (2017), I take *de re* possibility to be a more natural starting point for thought about metaphysical modality (see also Vetter 2016).

In the recent literature, a distinction is also sometimes drawn between *uniformism* and *non-uniformism* (Vaidya 2015, Wirling 2020), where the former holds and the latter denies that 'there is only one single route to modal knowledge at the most fundamental level of explanation' (Vaidya 2015). In identifying the source of modal knowledge in agency alone, my account would seem to be a uniform one. But I am not committed to our using a single method or faculty in acquiring that modal knowledge; as we shall see, perception as well as introspective phenomenology may play a role, and some of the modal knowledge I argue for in section 2.1 might even be innate. Hence my preference for the label 'ambitious' over 'uniform'.

Having situated and motivated the view, let me now start to develop it. The view, as I have said in the beginning, will be painted with a broad brush; a detailed development would require more space than I have here (but I hope to give one in future work). I will not here argue that the view is superior to all or indeed any of its competitors. My aim is to lay it out as a serious although as yet underdeveloped option in the epistemology of modality.

2 Modality in action

2.1 Preconditions for action

When we perform an action – such as raising a hand, moving a cup on the table, or reading a paper – there are typically both internal and external preconditions for performing that action. On the internal side – internal, that is, to the agent – there is the ability to perform the action in question: to raise one's hand, move a cup, or read a paper. I am using the term "ability" here in the sense of an intrinsic property of the agent, what is sometimes called a "general ability" (Maier 2010) or a "narrow ability" (Vihvelin 2013, 11). On the external side – intuitively, outside the agent, in their environment – there are (*inter alia*) the corresponding properties of the objects on which the agent acts, or with which the agent interacts: the cup's being such that it can be moved, the paper's being such that it can be read. Those latter properties are often discussed under the label *affordances* (Gibson 1986): the cup affords moving, the paper affords reading. Affordances are generally taken to be relative to an agent and her abilities. Thus the cup is movable for me but not for a newborn, this paper is readable for you but not for someone not fluent in English. Affordances will generally have a basis both in the intrinsic properties of the object that has them (the cup's size, shape, and weight) and the relation in which it stands to an agent (the size relative to the grip of my hand, the weight relative to my bodily strength, the distance from me and its relation to my arm length). I will use the term "affordances" for such properties, but without thereby committing either to a full-blown metaphysics of them, or to the role they play in so-called ecological psychology, following Gibson. Affordances are simply part of what constitutes an opportunity for an agent to act.

In this section, I want to argue that not only are there such abilities and affordances when we act, but qua agents, we have rather basic knowledge of them. (See Strohminger 2015 for a similar point.) Note that I do not here aim to answer the question *how* we come to have such knowledge; some suggestions on answering that question will be made in section 2.2, but I hope to have more to say on this in future work.

Suppose that I want to drink some tea, and I know that the mug in front of me contains tea. It is the easiest thing in the world for me to extend my hand, grasp the mug, move it to my mouth and drink the tea contained in it. But now suppose that I had no knowledge (or otherwise true representations) of my own abilities and opportunities – of the options available to me. How would I know what to do to fulfil my desire for tea,

given the mug of tea in front of me – how would I know to extend my hand and grasp the mug, rather than try to extend my lips or to move the mug telepathically towards my mouth? How would I know to grasp the mug while lifting it rather than try to balance it on a finger, or merely touch it and pull it through adhesion? Of course, I could try to do those things and, seeing that they fail, try to extend my hand instead. But that, clearly, is not what we do. If it were, our simplest actions would be chaotic guesswork, not to mention a lot more time-consuming. In performing a simple action such as drinking a cup of tea, we are already guided by our awareness of our own abilities (I am able to extend my hand and grasp the mug, but not to extend my lips or move things telepathically) and of the opportunities that things offer to us (the mug can be grasped, but not pulled by merely touching it).[3]

From an evolutionary standpoint, too, it is unsurprising that our perception is geared towards properties that are relevant for our actions – what we can do to the things around us, what they can do to us, how we can interact with our environment (see Nanay 2011, 319). Thus we should know, without much time-consuming calculation, that we can eat the apple, that the tiger can eat us, that we can fit into the cave ahead while the pursuing tiger cannot, or that our friend can help us reach the apple on the high tree.

It is an interesting – and largely empirical – question exactly *how* such knowledge is acquired. I cannot go into this question here. What matters is that there is clear evidence, both empirical and reflective, that we do have access to the properties I have described – properties that concern what the objects in our environment can do, and what we can do to and with them – and that this access is related to our being agents in the world. Moreover, the processes that we use to acquire such access to particular properties, be it perceptual, inferential, or anything else, seem at least in some aspects hard-wired; we all learn about such properties, no matter the differences in the environments that we are brought up in (see Gibson and Pick 2000, 178). If we did not, then acting in the world would be practically (albeit not metaphysically) impossible.

Let me stress again that my considerations in this sections do not show *how* we have the modal knowledge required for agency. For all I am saying here, that knowledge – or a tendency to acquire it on the basis of very little evidence, very early on – may be innate. Rather than answering the

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[3]Infants may well start out with something like the 'chaotic guesswork' I have gestured at in the main text; it is known as 'exploratory activity'. Its function is precisely to acquire the kind of knowledge – of their own abilities and the affordances offered by their environment – that is needed for goal-directed agency. See Gibson and Pick 2000.

question, 'how do we get any modal knowledge?', the considerations of this section seek to dispel the idea that often underlies this question: that modal knowledge is something very surprising and difficult, something that must come on top of our more basic non-modal knowledge. If I am right, then we always (or, at any rate, at a very basic stage) already have (some) modal knowledge. The question how we get it is an interesting one, but not one to be answered from the armchair. (As Nolan 2017 recommends, we must go naturalist and look to developmental psychology for answers.) Another important question remains, however: how do we get modal knowledge beyond that which is required for agency? The next section will suggest that agency can play a role in answering that question too.

2.2   The phenomenology of action

We have seen, so far, that we need to have some knowledge of both our own abilities and the affordances or similar properties of the objects around us, in order to act in the purposive, coordinated way that we do.

In this section, I want to focus on slightly higher-level ways of gaining knowledge about our own abilities and opportunities, which are not preconditions for, but rather arise from, our agency in the world. I want to suggest that the very phenomenology of agency provides further routes of access to modal properties, such as abilities and dispositions. My first case concerns the experience of our own dispositions; the second case concerns the experience of our own skill; the third case concerns the experience of resistance and the associated practical impossibility.[4]

First: the experience of our own dispositions. This comes in two varieties: the experience of exercising a disposition, and the experience of resisting a disposition. The first is a way of accessing a modal property through its manifestation; the second provides access also to not or not fully manifested modal properties.

Character traits seem to involve, even if perhaps they are more than just, dispositions (see Alvarez 2017). In addition, agents possess various dispositions which may be too specific to qualify as character traits: the disposition to eat too much chocolate, to forget birthdays, to get angry, to whistle when nervous. Such dispositions, I suggest, can be experienced in two ways: as we exercise them, and as we resist their exercise.

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[4]The reader may wonder at this stage how my appeal to phenomenology sits with the claim that the proposed modal epistemology is empiricist. I respond that empiricism has always included inner experiences – Locke and Hume include 'reflexion' along with 'sensation' as a source of our impressions and ideas.

Take any such disposition – say, loquaciousness, the disposition to talk. When this disposition begins to manifest, there are two basic scenarios (and many gradations in between): the agent may "go along" with it, let it manifest, and start chattering along; or else, he may resist it (perhaps for fear of coming across as a chatterbox, or a mansplainer) and resist the urge to talk. Likewise for the disposition to eat too much chocolate, to get angry, to whistle, and so forth: in each of these cases, a self-reflective agent may notice the beginning of its exercise and go along with it, or else exhibit self-control and resist the full-blown manifestation.[5] In each case, there is again a distinctive phenomenology: the ease of going along with our dispositions is very much distinct and distinguishable from the effort of resisting them. Both ease and effort can be seen as an experience of the "pull" of the disposition towards one (kind of) behaviour; in the first case, one is being pulled along, while in the second one is opposing the pull.

It may be objected that these experiences of ease and effort, of going along and resisting, need not be experiences of dispositions. They might represent something actual, say, a desire or an exertion of willpower. Even if that represented event is in fact importantly related to the agent's dispositions, it need not be represented as such.

My response is most straightforward in the case of resisting a disposition: there seems to be a clear experience of the *directedness* of the disposition; its pull is a pull towards an (unactualized) manifestation. Desire may provide such directedness, but it is not always involved (think of the "pull" of irascibility); what I am after is the experience that is common to cases with and without desire. How else should the experience be understood than in modal terms? In the case of "going along" with a disposition, the disposition is, of course, typically manifested (unless something interferes). But that is not so from the start. The "going along" is also experienced as directed towards a manifestation which is not always desired, and not present from the start, and hence must be understood in modal terms. In short: it is the

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[5]I am here using the terms "manifestation" and "exercise" interchangeably. Since a disposition's manifestation or exercise typically consists in an extended process, I am also assuming that we can often distinguish between the partial and full manifestation of a disposition; in the former case, the relevant process is started but not completed, while in the latter case it is completed. Alternative views might take the relevant dispositions to be multi-track and say, for instance, that loquaciousness already manifests in a person's urge to talk, while the talking itself is just another manifestation of the same disposition. My point in the main text can be rephrased accordingly: the disposition manifests in one "track", and the agent notices the pull for manifestation in another "track", which she can then go along with or resist.

experience of directedness, which seems implicit in feeling the "pull" of a disposition, that supplies the modal content.

The second case I want to consider is the phenomenology of skilled action.

Compare, to start with, the following two scenarios, which most readers are likely to have experienced for themselves. Scenario 1: at the hospital, a physician tests your reflexes by knocking your right knee gently; your lower right leg kicks forward. Scenario 2: sitting on a bench, you idly kick your lower right leg forward. The two scenarios are clearly distinct even if the overt movement is identical: the second, but not the first, constitutes an action, an intentional movement of your leg. The two scenarios also clearly differ in phenomenology, even disregarding the knock of the physician's instrument: the second feels like a movement that is controlled and guided by you; the first does not.[6]

Now think of more complex cases of skilled action: playing a piece on the piano, swimming or cycling, drawing a picture, giving a talk. When we perform these actions with skill (and do not suffer from distorting amounts of self-doubt), there is a distinctive phenomenology to them: a feeling of having things under control, of knowing what we are doing, of being in the driving seat. Like before, we can compare the skilled action to its unskilled counterpart, though in this case the counterpart will involve intentional action too: hitting keys on the piano randomly or simply drawing lines on a paper can occasionally result in the same outcome as a skilled performance of piano-playing or drawing (this is perhaps more likely when the skilled performance intentionally imitates the unskilled one); but, self-doubts or hubris aside, the performances differ not only in such features as its repeatability. They differ in phenomenology as well, in much the same way as the two scenarios considered above.

I suggest that we have here, in the experience of skilled action, an experience *of* our own abilities in the course of their exercise. Note that this experience differs from that which we have seen at work with dispositions. In the case of an ability, there need be no "pull", since we can have abilities without having the least tendency to exercise them; hence what we experience is not related to giving in to, or resisting, a pull or urge. Instead, there is the experience of control, of selecting among different options, of guiding our own action towards an envisaged goal. (The phenomenology of skilled

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[6]Such cases play a role, of course, in the philosophy of action at least since Anscombe 1957, and in more recent debates about the phenomenology of agency (see Bayne 2008, Roessler and Eilan 2003, Mylopoulos and Shepherd forthcoming) or efficacy (Siegel 2005). But the emphasis here is typically on the actual agency, not on the ability; and the ramifications for modal epistemology have not, as far as I know, been noted.

agency is a special case of what is sometimes called the 'sense of agency'; see, e.g., Marcel 2002. It is also closely related to what Siegel 2005 calls the 'phenomenology of efficacy', which Siegel speculates may be experienced as an exercise of a power.)

Again, it may be objected that what we experience here is not the ability – a modal property – but merely a complex of actual goings-on. These actual processes may constitute the exercise of an ability, but the question is not whether they do, but whether they are experienced as such. Do we experience skilled action *as* the exercise of a modal property, or merely as a particular and complex kind of behaviour?

In response, we may again point to the modal element of directedness. In the case of dispositions, directedness comes in the form of a "pull" towards a certain outcome; in the case of abilities, it comes in the form of our own guiding our movements, or the movements of things we interact with, towards a certain outcome. In both cases the outcome is not yet realized. In experiencing the guiding directedness of our behaviour towards it, we are therefore plausibly experiencing a modal element of skilled behaviour. And I suspect that there is a great deal of other modal facts that we experience in exercising our skill: the various options (i.e., things that we can do) among which we select what to do; the dispositions and lower-level abilities that are drawn on, exercised or stopped from exercising, in skillful performance; and so on. Exactly how these are experienced, and how the relevant modal elements are characterized, deserves much more detailed consideration than I can give here, but I hope to have made it plausible that the exercise of skills provides us with one route of access to our own abilities.

My third and last case concerns not possibility, but impossibility, and relies on Schrenk (2014). (Note that Schrenk is concerned with the experience of causation, not modality; but causation, as he points out, requires a modal element.)

Consider, again, my desire to drink some tea, and the mug in front of me. It looks like I can lift it and drink the tea in it. But when I grasp the mug and try to lift it, I fail: it is glued to the table. Or imagine trying to lift a heavy weight, and failing; trying to run the last kilometre of a marathon when you are completely exhausted, and collapsing; pushing against a wall which won't move. In each of these cases, it is the world (including our own body) that resists our intentions and our attempts to act in it in particular ways. In these cases, we do not experience a disposition pushing or pulling in a particular direction; the direction is given by our intentions, but thwarted by the objects involved. What we seem to experience here is not what *can* be done, but rather what (in the situation) *cannot* be done: I cannot lift

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the mug, we cannot lift the heavy weight, run the last kilometre, or move the wall. This "cannot" is not metaphysical impossibility, of course; it is situational and relative to our own abilities, just like affordances are. We might think of it as the absence of an affordance, as the absence of an ability (an *in*ability), or instead as something more positive: as a disposition *not* to be lifted, moved, or used for running further, that is so strong as to amount to a practical necessity.

The three cases I have sketched here provide intro- and extrospective access to our own abilities and dispositions as well as those of objects around us that arises in, rather than being a precondition for, acting. Together with the, perhaps more basic, knowledge that section 2.1 argued we must have, this provides a rich basis for modal thought and knowledge in our experience as agents. I believe that this is a highly promising starting point for modal epistemology; but it is no more than a starting point. A first potential problem is that the properties that we have looked at especially in this section seem to be much richer than mere possibilities. How then do they provide access to just that: mere possibility? That is the issue to be addressed in the next section.

2.3   Towards mere possibility

In the previous section, I have argued that our experience as agents provides us with quite straightforward and easy access to certain modal properties: our own abilities and dispositions, as well as the affordances (and lacks thereof) of objects in the world around us. But does it thereby provide us with access to modality itself? The properties that I have pointed to are, of course, modal properties: they involve unactualized possibilities or, in the terms of my preferred metaphysics, potentialities. But they also involve more than mere possibility, or potentiality. To have an ability is not just to have a potentiality; it is to have a certain amount of control over its exercise. To have a disposition, too, is not just to have a potentiality; it is to have a certain tendency to exercise that potentiality. (The case of affordances is less clear, and I will take it up in a moment.)

In the philosophical literature, both dispositions and abilities are standardly linked with something much stronger than a possibility: a counterfactual conditional. To have a disposition, on this view, is not just to possibly behave in a certain way, but to be such that one *would* behave in such a way *if* certain conditions held. To have an ability, on a similar view, is not just to possibly do something, but rather to be such that one *would* do that thing *if* one intended, chose, or tried to do it. A similar analysis has

been extended to affordances (Scarantino 2003). I have argued against all three counterfactual views in different places (see Vetter 2013 and Vetter 2014 for dispositions, Vetter 2019 and Jaster and Vetter 2017 for abilities, and Vetter 2018 for affordances). But even if, as I have suggested, we think of these modal properties as more possibility-like than counterfactual-like, the problem remains that they seem to involve more than mere possibility; and that, for this reason, they do not conform to some basic principles that philosophers have taken to be constitutive of possibility. One such principle, which is often referred to in the epistemology of modality (e.g., Roca-Royes 2017, Hanrahan 2017), is the inference from actuality to possibility, known as axiom (T) in modal logic. But neither abilities nor dispositions seem to validate this inference.

For abilities, the case has been argued by Kenny (1976). As Kenny points out, "a hopeless darts player may, once in a lifetime, hit the bull, but be unable to repeat the performance because he does not have the ability to hit the bull." (Kenny 1976, 214). A one-off success does not entail ability, since ability requires a certain sort of control, which typically results in the reliability and repeatability of performances. And so, actuality does not entail ability.

With dispositions, the issue is not control but rather strength: a disposition is not just a matter of mere possibility, but of a certain positive probability or tendency. Thus things can break without being fragile, i.e. disposed to break: a sturdy bridge may break when coming under enormous stress, thus falsifying the inference from actuality to disposition.

Is this a problem for taking abilities, dispositions, and affordances to provide our entry point to metaphysical modality? I think not, for the story I have told in section 2 does put other modal properties at our epistemic disposal, properties that are akin to mere (albeit, of course, restricted) possibilities. These include some affordances, especially those related to risk: to see (or otherwise recognize) that a cliff "affords falling off" seems to involve the recognition of no more than a possibility, albeit restricted and situational, of one's falling off that cliff. And affordances that are related to opportunity rather than risk may exhibit the same structure: even an imcompetent darts player will be able to recognize that a dart board affords scoring a bull's eye to her, while the wall to which it is attached does not; and that recognition seems veridical. This may seem to suggest that affordances are not as closely related to abilities as I made it look in section 2.1. But in fact, we can question whether the observations concerning abilities and dispositions really hold with full generality. There is certainly a sense in which even an incompetent darts player has the ability to hit

the bull's eye, while a dolphin, say, does not. (This point is well-rehearsed; see Lewis 1976.) An ability in this more liberal sense plausibly satisfies the T axiom, and it is as important for action as the more demanding kind of ability invoked in Kenny's counterexample: we often find ourselves in situations where we attempt to perform actions without having reliable skill (not least in the course of practising to acquire the skill, or because there are no better options), and even there it will be useful to recognize what we can (in principle) and what we can't do. Likewise, there are certainly some cases that we may classify as dispositions, and which do not come with a strong tendency to manifest. Contrast "x is fragile" with "x is breakable": the former is not, but the latter arguably is, entailed by "x breaks" (though we may have to adjust tenses). Is breakability, then, not a disposition? I am not sure that we have circumscribed the extension of "disposition", a philosophical term of art, with sufficient precision to answer this question. What is more important is that such properties are relevant for action: a sturdy bridge's breakability, for instance, may well be relevant to the actions of the workers tasked with its demolition, and recognized by them as such for the reasons given in section 2.1.

Whatever exactly we want to say about abilities and dispositions, then, the story I have told so far does allow for properties that seem to correspond to mere, albeit of course restricted or relativized, possibilities. Some of the modal properties that we have access to qua agents involve more than mere possibility; and it was these additional features, the element of activity or control in (some) abilities, and the element of "pull" towards a manifestation in (some) dispositions, that I have appealed to in section 2.2. The considerations of section 2.1 made no such appeal, however, and we have now seen why – since no such additional elements need be present.

A question that remains is how it is that we manage to subsume all these different modal properties under a common concept of possibility (or potentiality), expressed by, say, "can". I suspect that this is a matter of recognizing the similarity between the mere-possibility cases that we are familiar with (as I have just argued), and the more complex cases encountered in the phenomenology of agency, and exercising our general capability for recognizing common genera among our concepts – abstracting away, in this case, from their differentiating features such as the element of control, the pull towards manifestation, and our activity or passivity in their exercise, and recognizing the shared element of (potentially) unmanifested possibility. But here, again, I venture into territory that will need a more empirical basis. What I hope to have shown is that there are no obvious principled

philosophical obstacles to a route such as the one I have envisaged, from our experience in agency to a concept of mere possibility or potentiality.

3 Modality beyond action

3.1 Projection

In the previous section, I have addressed one dimension of generalizing from the results of section 2, by abstracting from the more specific features of abilities, dispositions etc. to their common status as possibilities, or potentialities, thus also allowing for the inference from actuality to possibility. In this section, we will generalize in a different and more obvious dimension. The modal judgements that can be accounted for as either preconditions for, or implicit in the phenomenology of, action form an interesting but clearly a narrow subclass of our modal judgements in general. Starting as I have claimed we do from modal knowlege in the context of agency, how do we gain knowledge of possibilities that are not of direct relevance to our actions?

My general response to this question will be: in just the same ways in which we gain knowledge of other properties that go beyond the context of our direct interaction with objects. There is no special method to modal knowledge. What makes it *modal* knowledge is its starting point, as sketched in section 2. To use terminology from Vaidya and Wallner 2018, once we have entered modal space, we navigate it in the same way in which we navigate any epistemic space.

So much for the general gist of my response; now let me be a little more specific.

A first point to notice is that the access to modality that has been sketched in section 2 is not, of course, limited to contexts in which we do act. With the exception of those modal judgements that arise from experience of one's own action, the knowledge of modal properties that was argued for in section 2.1 will be present whether or not we act on it; one function of such modal knowledge is to provide us with knowledge of the options among which we can choose in our actions.

A second more wide-ranging point is that we naturally tend to project our experience of objects beyond the context of our interaction with them, i.e., to perform what can be rationalized as inductive reasoning. This is a familiar point that requires no argument in the case of perceptual knowledge. Having looked at an apple and seen that it is red, we will project this judgement beyond the situation in which we made the sensory experience (asked about the apple's color an hour later, I will respond without looking

that it is (now) red) and beyond the particular object of which we had sensory experience (having seen many red apples, I will take apples in general to be red). My point is simply that this same tendency naturally applies to our attribution of modal properties to objects as well. Having looked at a mug and recognized (perceptually or otherwise) that it can break, I will project this judgement beyond the situation in which I had the experience (asked about the mug an hour later, I will respond without looking that it can (now) break) and beyond the particular object of which I had sensory experiences (having recognized many mugs as breakable, I will take mugs in general to be breakable).

Such projections are presumably basic to our psychology, and most of the time happen unconsciously. Epistemologically, they will count as justified – and in the best cases as knowledge – if the ways in which we arrive at them correspond, explicitly or (more often) implicitly, to sound reasoning. Sound reasoning, in turn, is typically understood to be good inductive and abductive reasoning; reasoning by similarity, analogous reasoning, and the use of the imagination (to be discussed in more detail in a moment) will certainly also play a role.

Moreover, once we go beyond the context of our own actions, first-hand experience is of course not required for modal knowledge. We can learn what things can do by testimony, just as we can learn what things actually do by testimony. Children certainly acquire a great deal of modal knowledge in this way: they learn that the stove can burn them (no matter how harmless it looks), or that drinking the washing-up liquid can make them sick (no matter how drinkable it looks), all – ideally – without any first-hand experience of the respective properties.

3.2 Imagination

So far, I claim, there is nothing special about modal knowledge. We project properties from our experience of and interaction with objects to those and other suitably related objects in situations where we do not experience and interact with them.

But I have so far said nothing about what may well be the most prominent way of gaining modal knowledge, among rationalists and empiricists alike: the imagination. According to Tim Williamson, "[a]t least metaphorically, one might regard imagination as a form of attention to possibilities" (Williamson 2016a, 115).

Surely imagining is important to our gaining knowledge of possibilities. But the imagination has epistemic functions other than alerting us to pos-

sibilities.[7] We arguably use it to gain knowledge of other people's state of mind (see, e.g., Church 2016) – whether they are actually, not just potentially, happy or sad, jealous or nostalgic, anxious or angry. We use it to gain knowledge and understanding of the past: in order to know whether my son had lunch today, it will help to imagine what his day was like and whether there was enough time in it to sit down and eat; in order to understand the French revolution, it may be useful to imagine the life conditions in Paris in the second half of the 18th century; in order to better understand the intention of a text, it may help to imagine the historical situation in which it was written. We use it to gain knowledge and understanding of matters that are spatially remote or occluded from perception: in order to know where the stone that just flew past me has landed, when its destination is occluded from me, it is useful to imagine its trajectory relative to the environment that is being occluded; in order to know what to wear for a hike, it may be useful to imagine the conditions of the hiking path as well as the likely weather conditions.

In none of these examples would the knowledge to be gained with the help of the imagination qualify as modal knowledge. None of the examples are unusual. So it is clear that the imagination has epistemic functions that go beyond the attaining of modal knowledge. Before we turn to the use that it unquestionably has in attaining modal knowledge, two points about these non-modal case bear noting.

First: in none of the examples I have given does the imagination do the epistemic work on its own; imagining is merely one among several activities that are used to ascertain the truth or falsity of a proposition (such as that my son has had lunch today, or that the stone landed in the window).

Second: in each of the examples I have given, the imagination must be *constrained* in some way to do the work it does. It will be no help if I imagine my son's schedule differently from how it is, the living situations in 18th-century France as akin to those today, or the stone as bouncing off objects like a rubber ball. All of these seem to be imaginable, and may well be imagined in other contexts (thinking about improving the schedule at

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[7]I do not here assume any particular conception of imagination. What I say is so general that I believe it holds for any sense of 'imagination' that modal epistemologists have appealed to. Note, however, that I am here still concerned with the role of imagination for *ordinary* modal knowledge, not for knowledge of remote metaphysical possibilities. Thus my cases will be more relevant to the modal empiricist's ideas of imagination, which tend to start from such ordinary cases, than to the modal rationalist's, which tend to start with a priori conceivability. See Jackson (2016) for a useful clarification of the notions involved.

my son's school, writing an alternative history of France, etc.). Amy Kind and Peter Kung have taken considerations along these lines to give rise to a "puzzle of imaginative use": "How can the same activity that allows us to fly completely free of reality also teach us something about it?" (Kind and Kung 2016, 1) Kind and Kung suggest a solution to the puzzle which, they argue, has been widely if often implicitly accepted in philosophy: the imagination can teach us about reality *if and when* it is properly constrained, that is, guided by the right kind of facts (which they spell out in some more detail). How are we to understand that guidance? I suggest that, as a first approximation, x's imagining is guided or constrained by the fact that p iff the content of x's imagining either includes or is compatible with p *because* x knows (explicitly or implicitly) that p. This accounts for my examples above: my imagining that my son had enough time for lunch is guided by the fact that his schedule has a long enough lunch break, and that he generally has lunch if at all possible; my imagining of the stone's trajectory is guided by certain physical facts (of which I have merely implicit, "folk-physical" knowledge); and so on. It is plausible that the epistemic value of imagining in a given case increases with the amount of guiding knowledge that the imagining subject has.[8]

If this picture is right, then imagination plays a similar role to induction, abduction, etc.: given prior knowledge of some facts, it will generate new knowledge if all goes well.

With all this in place, let us now turn to the role of the imagination in modal knowledge.

I see you throw a stone, and I catch it. Holding it in my hand, I wonder whether it *could have* hit the window, breaking it in the process. My imaginative process seems hardly different than it was in the case above, when I wondered whether the stone *did* hit the window: I am guided by the stone's actual trajectory (up to the point where I caught it), size, and weight, as well as the actual position of the window and other objects in its surroundings. Only this time, there is an actual fact – a part of the "world as it is" – that I am ignoring: the fact that the stone did not actually land in the window because I caught it. Instead, what seems to guide my imagination is knowledge of certain modal facts: how things can or must behave when thrown in a certain way.

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[8]Perhaps we need to make some adjustments to the proposed account since some of the guiding assumptions, such as folk physics, are false and therefore don't qualify as knowledge at all (Williamson 2007, 145 ff). I will leave this complication aside here.

If we may generalize from examples like this, then the use of the imagination in ascertaining possibilities is not very different from its use in ascertaining actual truth, and the imagination is not a distinctive source of modal knowledge (as opposed to non-modal knowledge). Its role in acquiring modal knowledge, as well as non-modal knowledge, seems to be ampliative: like induction, abduction, and so forth, it merely helps us expand our basic modal knowledge beyond the confines of our direct experience. And thus the role of the imagination in gaining modal knowledge is not, at least *prima facie*, a threat to my ambitious, agency-based account. [9]

4   Modality in philosophy

4.1   Unrestricted modality

So far, this paper has been all about ordinary possibilities: the possibilities we recognize and reason about before (and whether or not) we have done any philosophy. But modal epistemology is done not merely to understand our ordinary modal knowledge, intriguing though it may be. It is typically done as part of philosophical methodology, and as such it is typically concerned not merely with our (ordinary) knowledge of ordinary possibilities, but with our (ordinary or extraordinary) knowledge of unrestricted, metaphysical possibility. What is the approach that I have sketched here to say about that kind of modal knowledge?

My approach, as I have said at the outset, is anti-exceptionalist. The possibilities envisaged in philosophical debates may well be extraordinary, but our way of knowing about them will not. Metaphysical modal knowledge is merely the continuation of ordinary modal knowledge.

Here is a picture of how we get from the more restricted ordinary possibilities (I can reach the mug, you can read this paper, the window can break) to the more "remote" cases that are of interest in much of philosophy. The picture is due to Edgington (2004); I have sketched my version of it already in Vetter 2016.

The idea is that we can implicitly recognize that our ordinary possibility claims are contextually restricted in some way (without, of course, thereby

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[9]There is an important disanalogy: when using the imagination to affirm the truth of *possibly p*, the content of the relevant imaginings will typically be not the proposition whose truth is being probed (possibly p), but rather the embedded proposition, p. I suggest that this can be explained by a full consideration of what it is to imagine a modal property, and might even help extend the account towards *de dicto* modality. But I I do not have the space to properly address this here.

committing to a precise view on how the restriction works – by selecting among the possible worlds, as in standard modal semantics, or perhaps among the potentialities, as I would prefer to say). When doing philosophy, we generally want to relax such contextual restrictions: we are interested not just in what qualifies as possible here, now, in this context, but in what qualifies as possible *simpliciter*. Compare: when we do ontology, we appear to implicitly recognize that our ordinary existence claims are contextually restricted in some way. When doing philosophy, we want to relax such contextual restrictions: we are interested in what there is not just here, now, and saliently for the present context, but in what there is *simpliciter*.

So far, of course, this is just a hypothesis of how we manage to talk about metaphysical possibility: by creating a context, in philosophical conversation, that imposes no restrictions on the possibilities expressed. But how can we know, or have justifying grounds for, any such unrestricted possibility claims?

The response to this question, much as my response to the similar question of how we get to ordinary but action-transcending modal knowledge in section 3, is very simple: we use whatever methods we have for building and comparing theories. What these methods are or should be is a question that is quite distinct from modal epistemology proper, and so in a sense I must remain somewhat unspecific here. The point, again, is that what's special about modal judgements is not how we get to the individual, high-level philosophical judgements. It is, rather, how we got "into" the subject-matter in the first place.

Vaidya and Wallner (2018) have distinguished between two questions in the epistemology of modality. The "access question" asks: "how is it that we gain access to or acquire epistemic standing for beliefs about modality, such as that it is possible for x to be F?" (Vaidya and Wallner 2018, 1). The "navigation question", on the other hand, asks: "how we can reason with justification from one kind of modality to another, say from logical to metaphysical to physical modality?" (Vaidya and Wallner 2018, 2) Within the context of the approach sketched here, the relevant navigation question is: how can we reason with justification from ordinary modality (as discussed in section 3) to metaphysical modality? My answer to the access question should be clear: we gain access to modality through our experience as agents in the world. My response to the navigation question is, in a sense, uninteresting: we do whatever we do when we start to think about things in metaphysics. The aim of this section is to further clarify and motivate this uninteresting response.

My approach is in effect a species of a popular kind of account of metaphysical modality, according to which metaphysical modality differs from ordinary modality by being "absolute", or the "broadest" kind of objective modality. Like other such views, however, it faces a challenge: how can metaphysical modality be absolute, or the broadest, or the widest, kind of objective modality, when it is more restricted than logical modality? How, in other words, would my 'unrestricting' of context not lead to something wider than metaphysical modality? My basis for modal thought and knowledge is very narrow, and we have to generalize a great deal if we are to get from there to metaphysical modality. How should we know to stop at the metaphysical possibilities? Why not generalize further, and include metaphysical impossibilities such as water's being XYZ? (See Clarke-Doane 2017, Clarke-Doane 2019, Mallozzi 2019b.)[10]

To begin responding to the challenge, let us reconsider the analogy with ontology. When we do ontology, I said, we drop contextual restrictions and ask what there is *simpliciter*. This is not to say that anything goes, of course: one can adopt my picture of what we do in ontology while still holding a very restrictive view on what there is *simpliciter*. We want to drop contextual restrictions, but not change the topic: we want to know what exists, in the same sense of 'exists' that we use when we contextually restrict our quantifiers. The same holds for modality: when we think about metaphysical modality, I suggest, we drop all contextual restrictions and ask how things could have been *simpliciter*. But again, this is not to say that anything goes. We drop contextual restrictions, but we do not change the topic. We want to know how things could have been, in the same sense of 'could' that we used when we were speaking with contextual restrictions. We are looking for the widest extension of that which we started from – modal properties of objects, as they were presented to us in agency – not for the widest extension of anything that one might want to call 'modality'.

In the next section, I want to argue that there are some natural boundaries for the extension of our modal concepts which are relatively (though not entirely) independent of specific theories. As it happens, these boundaries correspond nicely to some common views in the metaphysics of modality.

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[10]Clarke-Doane is concerned not just to argue that we cannot simply think of metaphysical modality as absolute modality, but also that it is a mistake to attribute to metaphysical modality "unique metaphysical significance" (Clarke-Doane 2017, passim). As should become clear in section 4.3, this is a point on which I may well agree with Clarke-Doane.

4.2 Boundaries

In this section, I want to consider three kinds of potential boundaries that we may face in extending our understanding of modality from the ordinary cases discussed in sections 2-3.

First: Meaning and analyticity. Without providing a theory of what it is exactly that we know about in paradigmatic cases, we can recognize that we are dealing with modal properties of some sort, and thus with (what seem to be) objective features of reality – and *not* a phenomenon that is conceptual, linguistic, or even logical in nature. Modality as we get to know it in agency is about things, not names; about how things are, not how we describe them. And if this is so, then modality should not be sensitive to how things are being described. If it's possible that *this thing* is *so-and-so*, then it's possible however we name the thing, and however we express being so-and-so.

This gives us referential transparency for directly referential expressions, i.e. expressions that contribute nothing but their reference to the truth conditions of a sentence. Proper names such as "Hesperus" and "Phosphorus" are plausibly such directly referential expressions. Thus if it is possible for Hesperus to host life, it is possible for Phosphorus to host life – because the possibility concerns the object referred to, Venus, and not the names used to refer to it. And if Hesperus couldn't fail to be Hesperus, then Hesperus couldn't fail to be Phosphorus. In other words: it is necessary that Hesperus is Phosphorus; and parallel reasoning leads us to the necessity of identity in other standard cases. The same reasoning holds when we insert natural kind terms, such as "water" and "H_2O", assuming a Kripkean semantics for them.

We also get the necessity of analytic truths (if there are any). If, say, "'vixen" just means "female fox", then any possibility that concerns being a vixen also concerns being a female fox, and vice versa. After all, the possibilities concern the properties ascribed with such expressions (or, more nominalistically speaking, they concern what things are like when they are vixens or female foxes); they do not concern the expressions we use to ascribe such properties. In particular, if nothing can be a vixen without being a vixen, then nothing can be a vixen without being a female fox. In other words: it's necessary that all vixens are female foxes; and similarly for other textbook analyticities.

Second: Essence. Some philosophers believe (and others don't) that there is such a thing as the essence of an object x, *what it is* to be x; and, perhaps, that there is such a thing as the essence of a property F,

what it is to be F. If that is correct, then essence, too, plausibly imposes certain boundaries on the extension of our modal thought beyond the initial paradigmatic examples.

Again, without providing a theory of what it is exactly that we know about in paradigmatic cases, we can recognize that we are dealing with modal properties of objects. And the modal properties of an object, x, are plausibly constrained by what it is to be x. If what it is to be Socrates involves being human, then anything Socrates can do or be must be compatible with his being human; otherwise it would not be *Socrates* being or doing it. How we precisify this informal consideration depends on the metaphysics of the modal properties in question. In possible-worlds terms, we will appeal to Socrates's identity across worlds; in potentiality terms, to the idea that a thing must manifest its own potentialities (see Vetter forthcoming). Either way, the arguments may not be decisive, but they are highly natural, and that is enough, I take it, to explain our inclination to let the attribution of modal properties be constrained by the thing's essence, *if* we are inclined to attribute an essence to it.

Likewise, if what it is to be F is to be G (if the essence of being F is that it is being G), then it would seem that any modal property that involves being F must likewise involve being G: since if it did not, it would not involve being F but something else instead. Thus, for instance, if what it is to know that p is to have a justified true belief that, and if one cannot know p without knowing p, then one cannot have a justified true belief that p without knowing that p. (And if one can, of course, then to know cannot just be to have a justified true belief.)

In this way, I suggest, reflection on the paradigmatic cases for our modal thought and knowledge – the modal properties encountered in agency – already yields some of the central philosophical claims about metaphysical modality: the necessity of identity, of textbook analyticities, and of any truths that are essential either objectually or generically.

How does this meet the challenge from section 4.1? It does so by showing how the phenomenon that we are interested in when we extend from the starting point sketched in sections 2-3 cannot be extended arbitrarily, but comes with certain natural boundaries. And given certain widespread assumptions, these boundaries can be seen to stop far short of logical or conceptual modality. If we were to drop those boundaries, I submit, we would no longer be generalizing on the phenomenon which we started out with. Rather, we would be changing the topic.

Note, however, that the boundaries I have drawn were not entirely motivated by the epistemology of modality alone, and to a certain extent are

therefore hypothetical: we can know certain modal truths by being implicitly guided by those constraints, *if* we can know the contents of those constraints. (That 'if' clause again decomposes into at least two elements: if the constraints hold, e.g. if there really are analytic truths or essential properties; and if we have the right kind of epistemic access to them.) Accordingly, being guided by these constraint requires knowledge of essential properties, analytic truths, and so forth. It is beyond the scope of the present proposal to provide the relevant epistemologies here, but of course there is a host of philosophical work on them.[11]

4.3 Metaphysical cases and moderate modal skepticism

In a recent paper, Amie Thomasson (2018) argues that modal empiricist accounts like the one presented here fail to give a full account of our knowledge of properly metaphysical modal claims. What makes these accounts attractive, she points out, is their integration of modal knowledge into our empirical knowledge of the world. Knowledge of dispositions, for instance, is inductively justified and yields testable predictions – a far cry from the scientifically suspicious methodology of questioning one's intuitions in the armchair. But, Thomasson points out, "the distinctively *metaphysical* modal features at issue in characteristic metaphysical debates are cases in which we have *the very same empirical information, and same physical laws and properties*, and yet come to different modal conclusions" (Thomasson 2018, 7). She concludes that within such empiricist approaches, "there does not seem to be the prospect of explaining how we could come to know these distinctively metaphysical modal properties" (Thomasson 2018, 8).

The approach I have developed here, at first look, seems to underwrite Thomasson's conclusion: starting from abilities, affordances, dispositions, and some generalizations from them certainly does not directly address such metaphysical modal claims as: the lump of clay can, while the statue cannot, survive squashing; my body can, but I cannot, survive a complete and irreparable memory loss (these are Thomasson's examples); there could be a molecule-for-molecule replica of me that lacked my conscious experi-

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[11]For knowledge of essence, see for instance Vaidya 2010, Mallozzi 2019a). – In Vetter forthcoming, I suggest that essence, understood in the Finean sense, is more closely related to grounding and dependence than it is to modality. Thus I take the epistemology of essence not to be a special case of the epistemology of modality. That is, of course, a controversial claim, and those who disagree with it will justifiedly ask for my proposed modal epistemology to be supplemented with an epistemology of essence.

ences; the universe could have consisted of nothing but two indistinguishable spheres; and so on.

One reaction that is not uncommon among modal empiricists (see Leon 2017, Kung 2017, Hawke 2017, Nichols 2006) is to adopt what van Inwagen (1998) has called "modal skepticism", a skepticism of a very moderate kind that allows us knowledge of reasonably close and everyday possibilities and necessities, as well as some straightforward cases such as the necessity of logical, conceptual and mathematical truths, but denies that we have any reliable capacity to acquire knowledge of the more remote metaphysical possibilities, such as those involving philosophical zombies, indistinguishable sphere-universes, and the like.

The approach that I have been exploring here is not committed to modal skepticism. It does, however, curtail the role that modal thought and knowledge can play in metaphysics (and other areas of philosophy).

The approach is not committed to modal skepticism because it poses no limits on the methods we can use to gain modal knowledge. Basic modal knowledge is empirical (in a broad sense), to be sure; but most modal knowledge is not basic, and can be highly theory-driven. Thus we can learn about the possibilities mentioned above by utilizing our best philosophical theories, along with the modal repertoire that has arisen from our experience in agency. This is what I have already suggested in section 4.2 that we do in judging such cases as the necessity of identity or of essential properties. In the cases mentioned above, we will have to use other philosophical theories, about artifacts, persons, and the nature of modal properties. If we do so in the right way, there is nothing that would in principle prevent us from gaining knowledge about such cases. For instance, if our best theories of what a person is tells us that a person is essentially tied to their memories, then we can justifiedly conclude (by the kind of reasoning sketched in the previous section) that I, a person, could not survive total memory loss. If our best theories of what a person is tells us that a person is *not* essentially tied to their memories, then we can justifiedly conclude that I, a person, could probably survive total memory loss (barring other considerations that would foreclose such a possibility). If our best theories tell us neither of these things, then we had better remain agnostic about the possibility question for the time being. (Here and in the next paragraph, I am very much in agreement with Fischer 2016, though he takes a different route to get to the same conclusion).

Thus the approach curtails the role that modal thought and knowledge can play in metaphysics (and other areas of philosophy): it makes our modal judgements about the relevant cases not unjustified, but dependent on ex-

actly the kind of theoretical choice that they are often thought to be used for or against. If my judgement on the possibility of my surviving total memory loss depends, and should depend, on what I think is the best theory of personal identity, then that judgement can hardly serve as evidence *for* such a theory, on pain of circularity. The same will hold for other cases: modal arguments, on my approach, generally get things backwards, using the modal judgement to argue for the theoretical judgement which it is and should be based on.

Or so it would seem; things don't look quite so bleak for modal arguments at second blush. For assuming that we implicitly use the kinds of considerations I have sketched in section 4.2, we can use our modal judgements as evidence – not so much for the truth of the underwriting theoretical judgement, but for our having already accepted it. Thus the fact that we all accept Gettier's counterexamples against the JTB analysis of knowledge is evidence for our already, albeit implicitly, having a different view about the nature of knowledge than the JTB analysis states. If you endorse Gettier's judgement about his cases constituting justified true belief without knowledge, you cannot then consistently go on to claim that knowledge is justified true belief. In this way, modal judgements can still provide a source of evidence for or against our implicit acceptance of the theoretical judgements that underwrite them. When a modal judgement is accepted unanimously, then it teaches us something about our (often pretheoretically held) commitments on the subject. But modal judgements cannot then be used in order to forestall revisions to those commitments, as long as we revise the modal judgements along with them. Nor are we entitled to think, on the present approach, that there is some sort of direct access, perhaps via conceivability, to modal truths that is theory-independent and can be used, like empirical data, to assess theories. The approach I have sketched does not vindicate the move from the fact that some of us can conceive of their own disembodied survival, or of their own philosophical zombie-twin, to conclusions about personal identity or about the nature of conscious experience; though it does vindicate conclusions about the conceivers' theoretical commitments, implicit or explicit, about personal identity or the nature of conscious experience (and whatever may follow from their holding those commitments).

Thus the present approach vindicates modal knowledge in metaphysics, while at the same time curtailing its usefulness. This, I take it, is the price we pay for modal empiricism.

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