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Modal Integration

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Résumé : Chris Daly défend « l'explicationisme », la position selon laquelle l'inférence à la meilleure explication constitue une façon acceptable de justifier une théorie. Il la défend en tentant de justifier la position explicationniste par ses propres ressources, c'est-à-dire par elle-même. Je soutiens que dans le contexte de la métaphysique, cette défense échoue. L'explicationniste échoue à se justifier par ses propres ressources et l'une de ses prémisses centrales ne peut pas être justifiée uniquement de façon externaliste.

Abstract: Chris Daly defends "explanationism", the view that inference to the best explanation is an acceptable means of providing warrant for a theory. He does so by attempting the bootstrapping operation of warranting explanationism by way of itself. I argue that in the context of metaphysics this defense fails. It fails to be a genuine bootstrapping operation and one of the key premises cannot be warranted by externalist means alone.

1 Introduction: The integration problem

There are two quite different focal points for the epistemology of modality. The first, perhaps narrower, focus is on the manner in which quite specific modal claims are warranted, if at all. If it is genuinely possible that I might have taken a plane rather than a train from Leeds to Nancy, how do I know this? Do I know it because I can conceive of taking a plane and not the train, because I have a modal intuition that I could have done so, because no contradiction is derivable from the claim that I took a plane rather than a train, or on the basis of principles of understanding that account for my grasp of the claim that I took a plane rather than a train, etc.? This focus clearly makes modal epistemology part of epistemology, as that philosophical specialty is normally understood.

A second focus is on the warrant for a theory of the modal. This is a big picture concern about our knowledge, if any, of the nature of the modal. Whether

we say that the modal is really a matter of cognition, of abstract linguistic facts, of “logical” form and consequence, of concrete linguistic conventions, of abstract mathematical models, or of a plurality of concrete worlds, any such claim about the modal has some normative claim on our assent only to the degree that it is sufficiently warranted.

There are obvious ways in which the results of one inquiry might relate to the other. An account of the nature of the modal might well have implications for the epistemology of particular first-order modal claims. If modality is fundamentally about the form of a claim and its implications, then the epistemology of specific modal claims is a matter of the epistemology of form and derivation. Indeed, having a ready-made epistemology for a perfectly respectable domain might well provide good grounds for attempting an account of the modal that permits the extension of that ready-made epistemology from a non-modal domain to the modal domain. Those thinking that we have a ready-made epistemology of form and derivation have theoretical motivations for attempting a theory of the modal to which that epistemology applies, thus taking the modal just to be matters regarding form and derivation.

The immediately obvious virtue of applying a ready-made epistemology to the modal is that tacitly it gives credence to, as well as an answer to, the “integration problem” that confronts all philosophical claims. In its general form the integration problem is this: all philosophical claims should be integrated into a larger framework of both philosophical and non-philosophical beliefs.¹ Integration into a larger framework of beliefs involves many things, such as producing no inconsistency and resulting in a coherent intellectual framework. The coherence of that framework might involve many things, but the one that interests us here is the following epistemological principle: if things are as I say they are, it should be no mystery that I am warranted in saying that things are as I say they are. This principle should strike us as so obvious as to be a platitude. The platitude, though, obscures the distinction of the two epistemological focal points for philosophers of modality.

Metaphysicians are notorious for ignoring the fullness of the integration problem. They have their metaphysical views but they are often less explicit about the general nature of the warrant they possess—or even could possess—for their peculiar claims. Arguments used to warrant specific metaphysical claims fail to address the integration problem. For example, one might argue for an ontology of universals on the basis of the semantics for abstract nouns in the context of true sentences. Agreeing that ‘Justice is a virtue’ is true and that ‘justice’ appears to play a referential role in that sentence leads some to think that ‘justice’, like other abstract nouns, has a referent which is itself a genuine article in the ontology of reality. None of the philosophical argumentation used

1. This is essentially the same as what Christopher Peacocke calls ‘the integration challenge’. I broaden it slightly to include non-philosophical claims. Christopher Peacocke, [Peacocke 1999, chap. 1].

to warrant the claim that there are universals, though, reduces any puzzlement regarding how, given that ‘justice’ has an abstract referent, we manage to know that justice is a virtue. We have grounds for thinking that ‘justice’ and ‘virtue’ have referents on the basis of the argument sketched. Other arguments tell us that justice and virtue are related in familiar ways that we can represent using Venn diagrams or sets. If justice and virtue, though, are what platonist philosophers say they are, it is still a deep mystery how we manage to figure out what started it all, i.e., that justice is a virtue. Since the proponents of universals tend to be satisfied with the conclusion that ‘justice’ has an abstract referent and before they address the integration problem, they quit too soon.

Philosophers of mathematics, on the other hand, have been somewhat more sensitive to the integration problem. Paul Benacerraf famously discussed a dilemma confronting philosophers of mathematics [Benacerraf 1973]. They can have either a satisfactory account of the nature of mathematical truth but thereby be doomed to have no satisfactory epistemology of mathematics or else they can have a satisfactory epistemology of mathematics but then be fated to have an unsatisfactory account of the nature of mathematical truth. Truth iff no epistemology would, indeed, be a problem for any systematic philosopher.

Benacerraf’s presentation of this problem relied upon the causal theories of knowledge and justification that were in vogue at the time, but the problem can be generalised. Hartry Field did so by focusing on the fact of mathematical reliability—that mathematicians are reliable regarding mathematical claims—without tying the nature of warrant to causal connections between knower and known. [Field 1989]. The integration problem is more general still, since it fails to make integration a matter of even reliability. For our purposes, we can remain silent on the specifics of adequate integration, save for this: successful integration of the modal should address both the specifics of our knowledge of individual modal claims as well as the warrant for the theory itself. Warrant for the theory absent, even a skeleton of a theory for the integration of specific modal claims with our wider epistemology constitutes grounds for rejecting the theory itself. The remainder of this paper concerns David Lewis’s attempt to solve the integration problem with respect to his theory of the modal.

2 Lewis’s integration: The narrow issue

David Lewis is not terribly interested in the narrow version of the integration problem. For the most part, he thinks that it arises out of some failure on the part of his critics. They fail to understand that the plurality thesis is a thesis about a plurality of other, self-contained worlds and not merely a theory of how much more actuality contains. Or, they fail to understand that while it is contingent whether there are (actually) any talking donkeys, it is not a contingent matter that there might be some. Or, they fail to have any usable grasp on

the concrete/abstract distinction, of which they think Lewis runs afoul [Lewis 1986, 108–115]. His concern in that section, “How Can We Know?”, is wholly defensive. He provides no account of modal knowledge, save that we can have knowledge of his theory of the modal, which will be the concern of the following two sections of this paper.

In his own defense, however, he does propose an *ad hominem* argument urging humility [Lewis 1986, 109]. The *ad hominem* argument is that Lewisian worlds resemble mathematical objects in one crucial respect: *ex hypothesi* each is spatio-temporally isolated from us. We all (have we not?) made our peace with mathematical objects in the absence of any illuminating treatment of the “mathematical integration problem”, so no one is in a position to object to Lewis’s modal metaphysics on that basis. Whatever problems afflict modal knowledge due to the spatio-temporal isolation of worlds, those very same problems afflict mathematical knowledge no less. Lest, however, you be tempted to rethink the nature of the mathematical, you should not. Mathematicians know what they are doing and they know whereof they speak. Only the most foolhardy philosopher would stray from the world of intellectual controversy, strife, and discord that is philosophy to the world of rigor, proof, and agreement that is mathematics to declare that there are no mathematical objects or that those objects are not what mathematicians think they are [Lewis 1991, 58]. To do so would be to exhibit “hubris” [Lewis 1986, 109].

The analogy with mathematics, however, has positive *ad hominem* force for Lewis only on the assumption that we do and should defer to mathematicians in their *platonistic* accounting of their subject matter. Otherwise, there is no good reason to think that mathematical and modal objects share the quality of being spatio-temporally disconnected from us. How peculiar, though, for philosophers to defer to mathematicians regarding the *philosophical* accounting of mathematics. Whether Peano Arithmetic is provably consistent relative to *ZFC* set theory is something on which philosophers should happily defer to mathematicians, being the straightforward mathematical issue that it is. Lewis asks philosophers to defer to mathematicians, however, regarding the philosophical accounting of arithmetic. If we defer to practitioners of a given discipline regarding the most fundamental philosophical claims pertaining to their discipline, philosophers really are of use to neither man nor beast. If we have indeed made our peace with *mathematicalia*, it should not have been on the basis of deference but on grounds subject to normal philosophical scrutiny, even were mathematicians rather than philosophers to produce them.² To the degree that the warrant for believing in *mathematicalia* is based on deference, there is no good philosophical warrant behind the *ad hominem* component to Lewis’s dealing with the integration problem. Unwarranted mathematical platonism is no basis for the claim that there is no special problem regarding our modal knowledge.

2. For an extended treatment of deferentialism and in particular Lewis’s deference to mathematics, see [Daly & Liggins 2011].

3 Lewis's integration: The wider issue

Deference may be more appearance than substance, however.

So mathematics will do as a precedent: if we are prepared to expand our existential beliefs for the sake of theoretical unity, and if thereby we come to believe the truth, then we attain knowledge. In this way we can even attain knowledge like that of the mathematicians: we can know that there exist countless objects causally isolated from us and unavailable to our inspection. Causal accounts of knowledge are all very well in their place, but if they are put forward as *general* theories, then mathematics refutes them. [Lewis 1986, 109]

As best we can, I think by seeking a theory that will be systematic and devoid of arbitrariness, we arrive at a conception of what there is altogether: the possible worlds, the possible individuals that are their parts, and the mathematical objects, even if those should turn out to be pure sets not made out of the parts of the worlds. This conception, to the extent that it is true, comprises our modal and mathematical knowledge. [Lewis 1986, 111–112]

This is Lewis on the wider issue of integration. Assuming that 'explanation' is sufficiently close to its use in the context of scientific inferences, the overall structure of Lewis's warrant for his modal metaphysics is an inference to the best explanation or an argument from theoretical utility [Divers 2002, 151–158]. There are things we want a metaphysical theory to do; Lewis's does them; his does more of them better than do alternatives; and his does so in a unified fashion. Thus, his theory is preferable to competitors, so say his defenders.

The very use of inference to the best explanation is one small step in solving the wider integration problem. The form of argument is the very same as one we use in ordinary and scientific contexts. If one hopes to show that philosophy is continuous with science, this is one way of showing differences to be those of degree rather than of kind. More importantly for our purposes, this permits Lewis to integrate his modal metaphysics with philosophy more widely and if successful it promises to yield sufficient grounds for his modal metaphysics. This is not really a well-developed ready-made epistemology, but it is a mode of argument that both philosophers and non-philosophers recognise and most countenance as valuable.

Elsewhere, I have cast some doubt on the appropriateness of inference to the best explanation in the context of metaphysical theories [Shalkowski 2010]. The short version of that critique is this. First, forms of inference are treated as good only if there are grounds for thinking that form of inference is sufficiently reliable. Deductive arguments are to have grounds for their guarantee of the conclusion, given the premises. Non-deductive arguments are to have grounds for thinking the conclusion more likely, given the premises. These grounds for

reliability are unavailable for inference to the best explanation in the context of metaphysics. There is no way apart from uses of the inference in question to determine whether the inference leads us to the truth. All we *can* have in this situation is that uses of the inference lead where they lead, not whether they lead to correct conclusions about how things are.

Adequate grounds cannot take the following form: pragmatic virtues of the theory confer on it truth-indicative virtues such as warrant. If we work with the distinction between using a theory and taking it to be true, the pragmatic virtues warrant using a theory but not taking it to be true. Simplicity is an oft-cited theoretical virtue. Simple theories are easier to work with than are more complicated theories. There are, however, no *a priori* grounds for thinking that reality is simple and without some grounds or other for thinking that the reality in question is simple, there are no grounds for thinking that a simple theory is a better candidate for truth than are its more complex competitors. So, for example, it may, be “simpler” to think of propositions as sets of worlds instead of *sui generis* entities, but there are none of the usual grounds for thinking that there is a connection between this fact and the natures of things.

The word ‘simple’ is used to describe both a virtue that some theories possess and also some characteristic of some system that some theories purport to describe. There is no obvious connection between these two quite different attributes of simplicity that warrants the inference of, say, metaphysical simplicity from theoretical simplicity. Yet, this is precisely what one must have whenever one infers the truth of some metaphysical theory based, even in part, on the simplicity of the theory itself. If the appeal to simplicity does not involve an inference of this kind, then the inference merely masks the *assumption* and the tacit statement that reality is simple and we have no inference at all, much less an inference to the likely truth of any theory based on its character, i.e., its theoretical virtues. We have, then, merely a conflation rather than an inference.

Worse, we are here talking about metaphysics and the usual inductive grounds for thinking reality is simple are unavailable. To the degree that those inductive grounds warrant some claim expressed by ‘reality is simple’ the reality that is said to be simple is our small portion of modal reality, not the totality of Lewis’s modal reality. All possibilities are supposed to be contained within that plurality of worlds. Some are simple; some are not. Indeed, all possible degrees of worldly complexity are realised within the plurality. So, not only is Lewis’s reality not simple, it is as complex as any reality could be.³ If this last remark is thought to misunderstand the kind of simplicity the metaphysician has in mind—which has something to do with a relatively few distinct kinds of entities along with many and deep explanatory relations among those kinds—we have merely

3. Strictly speaking, this use of ‘could’ is an instance of “advanced” or “extraordinary” modalising. It is innocent in this context, since I pose no problem for Lewis that makes this use unavailable to him, given his theory of ordinary modalising.

come back to my initial complaint: there are no grounds for thinking that the character of the appropriate reality answers to these theoretical niceties.

4 Daly and explanationism

Chris Daly defends Lewis on this count [Daly s. d.]. We can set aside the concern that the “best explanation” is merely the best of a bad lot. In simple terms, being the best theory available is perfectly consistent with it possessing a probability of a good bit less than 0.5. The evidence might warrant the belief that our best theory is most likely false. Lewis might be able to claim superiority over all extant rivals without being able to make a claim on our rational belief. Perhaps this explains the seemingly common phenomenon that metaphysicians judge Lewis to have won sufficiently many of the specific and general arguments that pertain to his plurality thesis while they fail also to advocate that plurality thesis.⁴

Daly argues for a rehabilitation of inference to the best explanation in metaphysics. Call the doctrine that inference to the best explanation can be a form of inference that yields warrant for believing the conclusion of that inference “explanationism”. A criticism levelled against explanationism by van Fraassen [van Fraassen 1995] and me [Shalkowski 2010] is that abductive arguments, unlike deductive arguments, require independent access to the facts, i.e., access to the relevant facts independent of the form of inference in question. Van Fraassen is concerned about observable entities countenanced on the basis of explanatory claims for scientific theories. I was concerned with typical metaphysical entities, most notably Lewisian worlds. Van Fraassen’s concern arises out of his constructive empiricism; mine arises from a general feature of the justification of inferences. According to each of us the consequence seems to be that inferences to best explanations can never warrant their conclusions on their own, because there can be no grounds for judging those inferences to be reliable. Whether quarks or Lewisian worlds, the items in question are not observable and regarding worlds, Lewis proposes no other means of access, having dismissed the need on the basis of the non-contingency of the plurality. Consequently, there is no prospect of checking the results of our inferences to determine when, if ever, we go from assessments of the theoretical virtues of theories to conclusions about the matters that are the concerns of those theories. Daly seeks to undermine this “independence” criticism.

4. It is hard to acquire useful data on the point, but if this does explain the apparently puzzling phenomenon of defending Lewis on sufficiently many counts but failing to follow him in his metaphysics, it marks out an exception to most other philosophical positions adopted by philosophers. Satisfying conditions similar to those said to be satisfied by Lewis’s theory is nearly always taken to warrant adopting the theory, not the cautious hedging of commitments in apparently probabilistic terms.

The explanationist may adopt some form of externalist epistemology. As Daly does, let us make our lives easy and frame matters in terms of reliabilism. He takes the following claims to be important for the defence of explanationism:

- 1) Reliability is sufficient for knowledge,⁵
- 2) No independent justification needed,
- 3) Knowledge of reliability by track record.

1) is the externalist position to show that explanationism stands in spite of the independence criticism. 2) follows from 1), because reliability is silent on the existence of multiple reliable methods. Reliability is not a function of checks on that reliability. A method is (sufficiently) reliable or it is not, regardless of whether anyone is convinced that it is or whether there are any independent means of coming to know the facts in question. Furthermore, the lack of independent evidence is precisely what makes reliability relevant to warranted perceptual belief, say reliabilists, and there are no independent checks on our most basic perceptual mechanisms or at least none that are both relevant and at least as good at generating warrant for beliefs. Knowledge iterates, so 3) follows as well, so long as there are reliable methods by which I arrive at the conclusion that inference to the best explanation is reliable for metaphysical conclusions. Moreover, one can know that a particular process is reliable by repeated use of that very procedure. Circularity is avoided because the items known differ with each iteration. In the first instance it concerns, perhaps, non-epistemological facts. Track record inferences are about epistemological facts, in particular that the process used at a previous level is reliable.

Externalism is the right test for explanationism, even if explanationism is not especially externalist in character. In fact, explanationism looks quite friendly to the internalist. We self-consciously examine a theory, determine its virtues, rank its virtues, compare its virtues with those of other theories, and then on the basis of this analysis we infer the ([most] likely) truth of the most theoretically virtuous candidate.

The primary feature of externalism that the explanationist must rely upon is the inaccessibility of the knowledge-making features of some beliefs. At issue are the merits of *accessibility* internalism not *mental* internalism. The issue is not whether matters of justification are mental; what matters is whether a knower has the right kind of access to the conditions that make for knowledge to judge that they have been satisfied in all instances, whether those conditions are mental or not. This is the kind of externalism that operates in plausible accounts of basic perceptual knowledge. This knowledge is not inferential, so some conditions other than the standards of good inference constitute warrant in these cases. If the reader disagrees, treat my claims as conceding for the sake of argument that some form of externalism has some appropriate application. It will be

5. Truth of the belief is assumed. Sufficiency here is merely sufficiency to account for the difference between true belief and knowledge.

enough if I can show that such externalism is not the entire story of epistemic justification, especially if I can show that externalism cannot be the entire story when warrant for using inference to the best explanation is at issue. If it is not, then this particular defence of explanationism fails.

Let us distinguish Three Grades of External Involvement, reflecting the degree to which one's account of epistemic warrant is framed in terms of external factors:

- A) None (Internalism)
- B) Some (Partial Externalism)
- C) All (Complete Externalism).

Internalism is quite obviously a nonstarter for Daly's argument. For the philosophical enterprise, we should probably reject complete externalism. The activity we are engaged in at the moment shows that we should admit room for internal factors that produce warrant. Engaging in philosophical activity requires it. This activity is largely about the giving and assessing of reasons and the giving and assessing of reasons is the paradigmatic example of when there must be transparency regarding the weight of considerations for or against some claim. This requires that we give up complete externalism. My critique of Daly's defense of explanationism relies only on uncontroversial metaphysical and epistemological assumptions.

Metaphysics, for our purposes here, is realist, truth-telling metaphysics of the "fact of the matter" variety. Standardly, realists separate evidence from fact. This separation is not that controversial among metaphysicians, since it is merely the admission of the possibility that weighty evidence warrants an ultimately false claim. Conditions of adequate warrant for knowledge are not constitutive of conditions of truth. That is the metaphysical assumption I require, since it is the assumption of metaphysicians who take inference to the best explanation to provide grounds for belief in the best explanation. Applying this to our discussion of inference to the best explanation, theoretical virtues do not entail the correctness of the most explanatory theory. In this context, 'explanatory' is not permitted to be code for 'is (likely to be) true'.

Epistemologically, I assume only that knowledge does not entail infallibility. Knowledge entails correctness but not cognitive perfection. This is implicitly conceded in our externalist example, in which warrant is given by merely *reliable* means. It is a cognitive virtue to recognise one's own fallibility in acquiring knowledge and reliabilism requires only the regular—not uniform—tendency to acquire correct beliefs by way of the warrant producing mechanism(s) involved in knowledge.

Assuming, then, a realist, fallibilist reliabilism, what is the correct answer to a query about whether one knows something? I ask not what answer is correct, but what is the correct answer *to give* to such a question. Consider my belief that the cat is on the mat. Assume that the cat is, indeed, on the mat. Assume also

that I acquire this belief by way of reliable perceptual mechanisms in contexts appropriate for those mechanisms and that I am thoroughly convinced of my externalism. Consider three different questions:

- I) What is on the mat?
- II) Is the cat on the mat?
- III) Do you know that the cat is on the mat?

When asked what is on the mat, I reply “the cat”. The question assumes the existence and appropriate placement of the mat so that something may be on it and it queries only what resides on the mat. In good externalist fashion, I answer with no thought to sufficient evidence in favour of my answer that is accessible to me. I hear the question, I look toward the mat and I call things as I see them. Similarly, when I am asked whether it is the cat that happens to be on the mat.

The third question is different. Each component of the externalist position we have before us gives the sensible externalist a reason not to answer III) in the same way as I) and II). The realist component simply means that things can seem so without being so. Affirmative answers to I) and II) are done, at most, on the basis of things seeming a given way, with no requirement that one perform any inference from the way things seem to the way things are. One may not even be conscious of how things seem, but conscious only of the cat being on the mat. Nevertheless, the assumed—and assumed to be known—“gap” between seeming and reality is sufficient to require a more careful answer to III).

The fallibilist component warrants a more careful answer similarly. With no implication regarding the relations between seeming and being, the fallibilist is aware of making mistakes, even when things seemed so on the basis of reasonable care and attention.

Most important is the external character of reliability—the opacity of warrant for the warranted believer. *The* distinguishing feature of externalist epistemologies is that I may be warranted unbeknownst to me. Put another way, when things seem to me to be a certain way as the result of the functioning of reliable belief-forming mechanisms in suitable contexts, I may be both unaware that those warranting conditions obtain and I may be unable to determine whether they obtain even when I try to examine my warrant. Since Complete Externalists know that their warrant is never transparent, they cannot now insist that the answer to III), which asks after warrant, can be answered straightforwardly. Partial Externalists can do no more, since the proposal before us is that some external facts about inference to the best explanation are to do the work of defending explanationism.

Insisting that answering III) affirmatively is just another case of re-applying the externalist’s standard of warrant is to say that the warrant is, after all, transparent to me. To what would the opacity of warrant amount, if it does not make possible that I am warranted unbeknownst to me? If I may be warranted unbeknownst to me, and if we assume that my belief is correct, then this can mean only that I can have the warrant sufficient for knowledge without knowing that

I do. This is merely a version of the rejection of the KK principle, the principle that knowledge entails knowledge of that knowledge, i.e., $Kp \Rightarrow KKp$, for arbitrary claim, p . This is just to say that I am not entitled to answer “yes” to the third question in the same way I am entitled to answer the others, i.e., in a way that takes no notice of whether the warranting conditions for that belief obtain. I) and II) ask about the occupier of the mat and the cat. III) asks about warranting conditions for a claim about the cat and the mat. It is not appropriate for me to ignore the relevant conditions of warrant when the question is about those very conditions. How can I answer the question unless the conditions of warrant are sufficiently transparent to me?

This much follows straightforwardly for the externalist. It constitutes a problem for the externalist because of the context of questions like III). Recall the general history of the controversy that led us here. Some philosophers endorse explanationism. Our example was Lewis in defense of his plurality thesis. Other philosophers object that explanationism is false because a condition for the warranted use of a good non-deductive inference cannot be met. The reliabilist defense of explanationism is set in the context of philosophers disputing whether there is sufficient warrant for the use of one form of inference. That context is like the context of III) and unlike the contexts of I) and II). That context is one of premises, inferences, objections, and replies. Our context is one that requires the transparency of warrant, if what we philosophers manage to do some of the time when we engage in our peculiar intellectual activity is to assess the merits of grounds for conclusions. When we are disputing the merits of inference to the best explanation for metaphysical claims, we are not in K contexts; we are in KK contexts. Consequently, for the externalist defender of explanationism, the sad fact may be that they are both warranted and correct in embracing explanationism, but that warrant and correctness are no use to them. Correctness is *accessible*, if at all, by way of warrant and it is warrant that is opaque to those who possess it in the case at hand, given Daly’s defense of explanationism. Since the defenders of explanationism engage in the project of convincing others of the merits of explanationism, they place themselves in a context that requires transparent warrant, not opaque.

Thus, Complete Externalists have no hope of engaging in the philosophical enterprise, as it is normally understood. They may be right that standard uses of inference to the best explanation reliably yield correct results, even in metaphysics. They may be right that such reliability is sufficient for knowledge and they may even be right that independent access is neither part of what constitutes that reliability nor a necessary condition on that reliability. All of that, however, is useless to them. Their task in normal philosophical contexts is to put us not into a K position, but into a KK position and for that they require transparency of warrant, to which they are not entitled.

Partial Externalists can engage in projects of defending positions as those projects are normally understood, but they cannot do so by way of a distinctively

externalist defense of explanationism. That defense demands that the warrant for explanationism be inaccessible (even if warrant for other things may be accessible) while at the same time the philosophical context demands sufficient transparency of warrant, making the philosophical enterprise of exhibiting and assessing warrant possible.

As to specifics, we must reject Daly's third component: knowledge of reliability by track record. His gloss on that condition is: "you can know by process R that you know by process R that p " [Daly s. d.]. The first reason for rejecting this we have just seen from the general demands of the project of providing a philosophical defense. There is a second. Our knowledge that we are reliable by way of track record is supposed to permit us to bootstrap our way to knowledge of reliability as follows. From premises to do with the successful use of a given reliable procedure, R , I use R to determine that I have come to know things by the use of R and that R is reliable. If on sufficiently many and varied occasions I use R to have beliefs when the world is the way I believe it to be and if R fails to lead me astray on sufficiently many and varied occasions, then R is reliable.

Bootstrapping works, however, only if R is the only procedure relevant to my possessing warrant in the specific instances cited and also in my possessing warrant for believing that R is itself reliable. This uniformity is lacking in this kind of defense of explanationism. It may be that some reliable belief-forming mechanism is at work in all cases, but they will be distinct mechanisms. The premises of any case for the reliability of inference to the best explanation would be of the form:

E) In Case C_i I inferred that the best theory T_k was true and T_k was true.

If I have sufficiently many cases to cite, the argument goes, we have adequate grounds for maintaining that inference to the best explanation is reliable.

First, this is not, strictly speaking, a case of bootstrapping inference to the best explanation because while the premises concern instances of that form of inference and the truth of the theory inferred, the argument for the reliability of that form of inference is an enumerative induction. Even if both inference to the best explanation and enumerative induction as carried out by the explanationist are reliable, we do not have justification of a single reliable procedure, R , in terms of itself. At best, we have the justification of one reliable procedure in terms of another. That is not nothing, but it is not yet something that satisfies the third component of Daly's defense, which is knowing that one mechanism is reliable by way of that very mechanism.

Second, the imagined enumerative induction exhibits the characteristic of philosophical disputes uncovered earlier: the transparency of warrant. Only if the warrant for believing that inference to the best explanation can be discerned by the examination of the relevant premises taken together would we have any basis for recognising the explanationist to be correct. The explanationist case in externalist terms is, therefore, self-defeating. That speaks to the overall structure of the externalist defense.

Third, we should not overlook a problem with the premises. Any cogent argument must have not only sufficiently reliable structural features, its premises must individually possess sufficient warrant. The warrant for each premise concerning successful instances of inferences to the best explanation must depend on memory and/or testimony, not inference to the best explanation, but that is a small matter. More importantly, what is the basis for the second conjunct of each of the key premises in the enumerative induction? The first conjunct we may not cavil about since both explanationists and their critics acknowledge that philosophers have used inference to the best explanation. All instances in which there are grounds for embracing the second conjunct of any premise will be instances in which there is independent access to the relevant facts of the case, i.e., independent of the inference to the best theory T_k . Each assertion of the relevant instance of E) is like our III) above. That each conjunct of each instance is true is insufficient to make each instance properly assertible as a premise in a defense of explanationism. We can know by memory or other grounds that we inferred to T_k . We can know that our inference did not lead us astray, however, only if we have some memory or other grounds that T_k was true. If this fails to go beyond the memory or other grounds for thinking that we *took* T_k to be true or that we inferred T_k , the defense of explanationism does not go beyond the initial assertion of explanationism. It cannot constitute its defense. Each premise in the enumerative induction would, under those circumstances, amount to no more than the claim that we inferred the best theory from the conditions of its being the best theory, not that the inference was correct. Without a basis for the correctness of sufficiently many of those inferences in instances of E), there can be no defense of explanationism in reliabilist terms. In effect, the premises in the enumerative induction beg the question that divides the explanationists and their critics. The critic says that without something besides inference to the best explanation operating in the relevant domain, there is insufficient basis for thinking that any of the instances of E) is true precisely because there is insufficient basis for thinking the second conjunct of each is true for the cases that interest the critic. Merely asserting instances of E) is just asserting that in all of those cases, the critics are wrong.

5 Conclusion

The problem of modal integration remains unsolved by the defender of Lewis's plurality of worlds as a general metaphysics of modality. The narrow form of the problem cannot be set aside by way of a deferential *ad hominem*. The wider form of the problem cannot be solved by way of inference to the best explanation. Chris Daly's defense of explanationism in terms of externalism is as good as it is likely to get for those who wish to conduct metaphysical inquiry by way of inference to the best explanation. The critics of the use of this abductive inference in this kind of context, however, should stand their ground. Epistemic

warrant might well be the kind of thing that is opaque to us in many important contexts. Many of the deliverances of sense perception and memory might well be warranted without the details of that warrant being accessible to the one warranted. Nevertheless, it cannot be externalism all the way up. Philosophers, of all people, must recognise that philosophical contexts demand a great degree of transparency of warrant, if philosophy is to be a going enterprise at all. This defense of explanationism fails because in order to undermine the independence objection it must be thoroughly externalist in character about the case at hand, but in order to warrant one in embracing explanationism, it must be at least somewhat internalist in character about that very case. However metaphysicians are to ground their theories, inference to the best explanation is not a reputable way to do so.

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