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De re modality, essentialism, and Lewis's Humeanism

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1. Introduction

Modality is standardly thought to come in two varieties: *de dicto* and *de re*. While it is a *de dicto* necessary truth that all bachelors are unmarried, it is not (we may suppose) true of a particular bachelor – call him Jack – that *he* is necessarily unmarried; for surely Jack – that very same particular man – *could* have been married. By contrast, we might hold that it *is* true of Jack that he is necessarily human: he could not have been the very object that he is and yet failed to have been human. *De re* modality concerns the attribution of modal features to *things* or *individuals*.

W. V. Quine was notoriously sceptical about *de re* modality, holding that it enshrines a commitment to Aristotelian essentialism – a position he professed to find utterly bewildering. In §2 of this chapter, we explain how Lewis’s earliest (1968) account of *de re* modality is an attempt to answer Quinean scepticism about *de re* modality. However, we argue in §3 that his later, developed view, according to which facts about essences are context-relative, provides a decidedly sceptical solution to Quine’s sceptical problem. As Lewis himself puts it: “The true-hearted essentialist might well think me a false friend, a Quinean sceptic in essentialist’s clothing” (1983a, 42). For example, whether or not Jack is essentially human depends upon the context within which we are asking the question: there is no absolute, context-independent fact of the matter.

In §§4-6, we consider how Lewis’s conception of *de re* modality fits into his overall metaphysics. Our hypothesis is that the driving force behind his metaphysics in general, and his adherence to counterpart theory in particular, is the distinctly Humean thought that necessary connections between distinct existences are literally unintelligible. In §4, we show how Lewis’s appeal to counterpart theory in his account of truthmakers is explicitly aimed at delivering a truthmaker principle that

eschews necessary connections. In §5, we argue that Lewis’s attitude towards several well-rehearsed debates in contemporary ontology – and the reasons underlying that attitude – closely mirror Hume’s incendiary verdict on “divinity and school metaphysics”. Finally, in §6, we connect his account of *de re* modality with his adherence to the doctrine of “Humean supervenience”, and argue that his adherence to a Humean worldview runs considerably deeper than mere commitment to the contingent truth of this thesis. Rather, Lewis upholds Hume’s insight that necessary connections between distinct existences are unintelligible, and not merely alien to worlds like ours. Lewis’s counterpart theory is one of the key elements of his overall metaphysics that allows him to uphold this insight.

2. *De re* modality and counterpart theory

Quine’s avowed bewilderment about *de re* modality is expressed in the context of his hostility to quantified modal logic (QML): a modal logic that deploys the box (necessity) and diamond (possibility) operators within the scope of quantifiers (see e.g. Quine 1963). Thus while “ \Box (all mathematicians are rational)” can be seen as a relatively harmless expression of *de dicto* necessity, a sentence such as “ $(\exists x) \Box$ (x is rational)” must, if it is to make any sense at all, be given a *de re* reading. But Quine simply cannot see how to make any sense of such a *de re* reading, and concludes that QML is fatally flawed.

What, then, is wrong with *de re* modality, according to Quine? the answer is that he takes it to enshrine a commitment to what he calls “Aristotelian essentialism”:¹ the doctrine that “[a]n object, of itself and by whatever name or none, ... [has] some of its traits necessarily and others contingently, despite the fact that the latter traits follow just as analytically from some ways of specifying the object as the former traits do from other ways of specifying it” (1963, 155). And he has no time at all for Aristotelian essentialism; as he says, ‘the way to do modal logic, if at all, is to accept Aristotelian essentialism. To defend Aristotelian essentialism, however, is not part of my plan. Such a philosophy is as unreasonable by my lights as it is by Carnap’s or [C.

¹ We henceforth drop the scare quotes from “Aristotelian essentialism”, without intending to imply that what Quine means by the term has anything much to do with Aristotle.

I.] Lewis's. And in conclusion I say, as Carnap and Lewis have not: so much the worse for quantified modal logic' (1963, 156).²

And why the hostility to Aristotelian essentialism? Quine sheds some light on this question in *Word and Object*:

Perhaps I can evoke the appropriate sense of bewilderment as follows. Mathematicians may conceivably be said to be necessarily rational and not necessarily two-legged; and cyclists necessarily two-legged and not necessarily rational. But what of an individual who counts among his eccentricities both mathematics and cycling? Is this concrete individual necessarily rational and contingently two-legged or vice versa? Just insofar as we are talking referentially of the object, with no special bias towards a background grouping of mathematicians as against cyclists, or vice versa, there is no semblance of sense in rating some of his attributes as necessary, and other as contingent. Some of his attributes count as important and others as unimportant, yes as enduring and others as fleeting; but none as necessary or contingent. (1960, 199)

Quine's basic complaint, then, is that Aristotelian essentialism requires us to talk "referentially of the object, with no special bias towards a background grouping". To put it another way, Aristotelian essentialism commits us to *de re* modality: it commits us to thinking that a given object *x* is such that *it* is necessarily or contingently thus-and-so. And Quine is simply bewildered by this thought: it contains "no semblance of sense". Consider Gavin, the cycling mathematician. Is *he* necessarily rational and only accidentally bipedal, or rather necessarily bipedal and only accidentally rational? Or is he, perhaps, necessarily both rational and bipedal? If Aristotelian essentialism is to make any sense then these questions must have determinate answers. The only possible way of giving them determinate answers, Quine thinks, is by adopting a "special bias towards a background grouping"; and that, Quine thinks, is incompatible with talking purely referentially of the object, which is what is forced on us by Aristotelian essentialism and hence by QML.

² Quine is not exactly sympathetic to *de dicto* modality either. He continues: "so much the worse for quantified modal logic. By implication, so much the worse for unquantified modal logic as well; for, if we do not propose to quantify across the necessity operator, the use of that operator ceases to have any clear advantage over merely quoting a sentence and saying that it is analytic" (1963, 156). Nor is he keen on analyticity itself (Quine 1951).

In his “Counterpart Theory and Quantified Modal Logic” (1968), Lewis offers a radical alternative to QML. Whilst QML adds modal operators – the box (necessity) and diamond (possibility) – to our existing first-order logic, Lewis’s “counterpart theory” simply extends the domain of quantification of first-order logic, so that it quantifies over not just the actual world and its inhabitants but all possible worlds and their inhabitants – related by the counterpart relation. The result is a logic into which the sentences of box-and-diamond modal logic can be translated, but which is stronger than QML (since there are sentences of counterpart theory that cannot be translated into QML).

Counterpart theory is constructed out of standard first-order logic by the introduction of four primitive predicates (*x is a possible world*, *x is in possibly world y*, *x is actual*, and *x is a counterpart of y*) whose behaviour is governed by a set of axioms (“nothing is in anything except a world”; “nothing is a counterpart of anything else in its world”, “some world contains all and only actual things”, etc.; 1968, 113-4). The translation from QML into counterpart theory takes sentences deploying boxes and diamonds and translates them into the language of counterpart theory, so that “ $\Diamond Fa$ ” translates as “*F* holds of some counterpart *c* of *a* in some world *w*”, “ $\Box Fa$ ” translates as “*F* holds of every counterpart *c* of *a* in any world *w*”, and so on. A sentence with no modal operator is translated into counterpart theory by restricting the domain of quantification to the actual world.³

For the purposes of this chapter, the most important element of Lewis’s counterpart theory is the counterpart relation itself. And the crucial feature of the counterpart relation is that *it is not identity*. The basic idea is that individuals, such as Barack Obama, or the table in the Oval Office, are “world-bound”: no individual exists in more than one possible world. However, individuals do have *counterparts* at other possible worlds. Many possible worlds have counterparts of Obama (and indeed his table) in them – individuals that resemble Obama sufficiently to count as counterparts of him. So for example, the sentence “Obama might never have become President” is true not because there is some possible world in which *Obama himself* never becomes President: Obama, being world-bound, only exists at the actual world, and so there is no such possible world. Rather, the sentence is true because there is

³ For some recent objections to counterpart theory, see Merricks 2003 and Fara and Williamson 2005.

some possible world in which a *counterpart* of Obama never becomes President. Similarly, “Fraser is essentially human” is true (if indeed it is true) not because Fraser *himself* is human at every world at which he exists; that claim is trivially true, given that Fraser is located in the actual world and is, actually, human. Rather, it is true because all of Fraser’s other-worldly *counterparts* are human. According to counterpart theory, then, no individuals are “modal continuants”. Neither Obama nor his desk is an object that is “spread out” across, or exists in, many different possible worlds; they are both firmly located in the actual world. Lewis thus denies the thesis of “transworld identity”, about which we say a little more below.

What determines whether some object in some other possible world is or is not a counterpart of, say, Obama? Lewis’s answer is: *similarity*. If there is an object *o* at some possible world *w* that is sufficiently similar to Obama, then *o* is Obama’s counterpart at *w*. If there isn’t, then Obama lacks a counterpart at *w*. As Lewis points out, the counterpart relation is therefore “problematic in the way all relations of similarity are: it is the resultant of similarities and dissimilarities in a multitude of respects, weighted by the importance of various respects and by the degrees of similarities” (1968, 115).⁴

How exactly does counterpart theory engage with Quine’s worry about the senselessness of Aristotelian essentialism? Well, Lewis notes Quine’s warning – and Quine’s claim that “Aristotelian essentialism should be every bit as congenial to [the champion of quantified modal logic] as quantified modal logic itself” (Quine 1966, 182; quoted in Lewis 1968, 119). Lewis’s tongue-in-cheek response is: “Agreed. Aristotelian essentialism is congenial” (*ibid.*). He then proceeds to address Quine’s doubts about the intelligibility of Aristotelian essentialism by defining essence in terms of the counterpart relation. Thus “*a* is essentially *F*” translates as “all of *a*’s

⁴ There is a good deal of debate between Lewis and his opponents over the question of whether we should think of individuals as “worldbound” or “transworld” – that is, whether we should couch *de re* modality in terms of the counterpart relation (so that Obama is wholly located at the actual world) or in terms of transworld identity (so that the actual Obama is identical to various election-losing Obamas at other possible worlds) or in terms of mereology (so that the actual Obama is merely the actual-world part of the sum of all the Obamas, as it were, in something like the way his current self is merely a temporal part of the temporally extended object that came into existence in 1961). See for example Kripke 1980 (p.45), Plantinga 1973, and Lewis 1986 (ch. 4). However, as will become clear, it is the keen-eyed appreciation of the phenomenon of inconstancy that ultimately drives Lewis towards counterpart theory

counterparts are F ”, and “ a is accidentally F ” translates as “ a is F , but not all of a ’s counterparts are F ”.

Does counterpart theory really make *sense* of Aristotelian essentialism? Well, Lewis says:

Whereas the obscurity of quantified modal logic has proved intractable, that of counterpart theory is at least divided, if not conquered. We can trace it to its two independent sources. There is our uncertainty about analyticity, and, hence, about whether certain descriptions describe possible worlds; and there is our uncertainty about the relative importance of different respects of similarity and dissimilarity, and, hence, about which things are counterparts of which. (1968, 116-7)

We take this to be an indication that, according to Lewis, counterpart theory at least makes *some* progress on the issue of Aristotelian essentialism. Quine could not see any glimmer of a way of determining what the essential and accidental features of an object, considered in and of itself, might be, and counterpart theory provides – at least in principle – a method for doing so. For our way of figuring out whether, say, Gavin is essentially rational is to figure out whether all of Gavin’s counterparts are rational; and we do *that* by figuring out whether all of the inhabitants of other possible worlds that are similar enough to him to *count* as his counterparts are rational. And while all this may yet prove extremely difficult to figure out, Lewis does appear to think that the problem is tractable; after all, if he did not think this, he would have made very little progress at all in answering Quine’s concern. Note that whilst he here says that we are “uncertain” about the relative importance of different respects of similarity, he appears to regard disputes about “which things are counterparts of which” as resolvable at least in principle.

Note that a commitment to transworld identity, rather than the counterpart relation, would not deliver any progress when it comes to Quine’s worry. If our question about whether or not Gavin is essentially rational is to be answered by whether or not some possible irrational individual *is* Gavin, we are no further forward. In particular we cannot answer the question whether a given possible individual *is* Gavin by appealing to similarity because similarity is neither necessary nor sufficient for identity (See Kripke 1981, 43).

Further textual evidence that Lewis (1968) does indeed take his appeal to similarity to address Quine's bewilderment comes from his reference (1968, 115, n.4) to Michael Slote's "The Theory of Important Criteria" (1966). The gist of Slote's argument is that the meanings of many general terms are determined by the "Principle of Important Criteria" (PIC): " x is (an) f if and only if x has all the important criteria of f -ness" (1966, 215). So disputes about, say, whether a whale is a fish or a mammal arise from a difference of opinion between biologists and those ignorant of biology of what the "important" criteria for fishhood or mammalhood are, with the ignorant folk thinking that scales and living in water are important and biologists favouring other criteria. Similarly, a dispute about whether Buffalo is a city might arise because one party thinks that population size is the only important criterion, while another thinks that "the possession of a rich and varied cultural life and the possession of a sophisticated, cosmopolitan, urbane atmosphere" are also important (1966, 217). In the case of the whale, Slote thinks, the biologists are right: the biologists criteria, which classify the whale as a mammal, really are more important than those of the ordinary person, since they "are important for disinterested knowledge about and understanding of animals, that to learn whether some animal x has or lacks one of these characteristics is to learn something important for our disinterested understanding of x , i.e., for our knowledge of the sort of thing x is" (1966, 219). In the case of Buffalo the issue turns on matters of taste, and may therefore not be resolvable.

While the appeal to Slote may provide some textual evidence that Lewis, c.1968, took "our uncertainty about the relative importance of different respects of similarity and dissimilarity" – and hence our uncertainty about which features of an object are essential and which accidental – to be resolvable in principle, it is unclear why he would think that Slote's view really gets us anywhere when it comes to counterpart relations (and hence essences). For Slote's view is a view about *general* terms, while the counterpart relation is a relation between individuals. Even supposing that we grant that the dispute about whales is resolved, so that, necessarily, nothing that is a whale is a fish, this does not, just by itself, help us decide whether any *particular* whale – Moby Dick, say – has any fish as counterparts, and hence whether being a mammal is part of Moby Dick's essence, since Slote's principle is silent on whether anything that is a whale is necessarily a whale. This is a question primarily

for the metaphysician, and one that Lewis himself shows no inclination towards addressing here.

Considered as a response to Quine's concern about the intelligibility of Aristotelian essentialism, then, counterpart theory at best only gets us part of the way. We know what determines facts about essences according to Lewis, namely facts about the similarity relations that obtain between possible individuals. But we are no closer to actually addressing Quine's bewilderment about the cycling mathematician. Indeed, Lewis's appeal to Slote looks suspiciously like sidestepping that question. Quine is (relatively) happy to grant that there are necessary truths such as "all mathematicians are rational" and (to use Slote's example) "all whales are mammals". But these are *de dicto* rather than *de re* modal truths, and hence tell us nothing about the essence of any particular whale, any more than they tell us anything about the essence of any particular cycling mathematician.

3. Counterpart theory and the inconstancy of *de re* modal predication

Here's a slightly different way of summing up the point we've reached. Quine was sceptical about Aristotelian essentialism because he could see no means of drawing a distinction that isn't invidious between the essential and accidental attributes of a thing. Lewis's initial response to Quine's scepticism was to say that actually there is such a distinction to be drawn, *viz*, between the attributes of a thing x that are shared by all its counterparts (a.k.a. the essential attributes of x) and the attributes that aren't (a.k.a. the accidental ones). But unless we are already equipped with a distinction that isn't invidious between the things that are counterparts of x and the things that aren't, Quine's scepticism will be nowise answered. Lewis's initial development of counterpart theory assumes that appeal to similarity would provide the basis for such a distinction. But since Lewis's original version of counterpart theory fails to provide a principled means for weighting the relative importance of different respects of similarity when it comes to individuals and their counterparts, it can hardly be deemed a satisfactory response to Quine's scepticism.

In his original formulation of counterpart theory (1968) Lewis assumes that the counterpart relation is unique. But he was soon to jettison this assumption. His "Counterparts of Persons and Their Bodies" (1971) draws explicit attention to this change of heart: "it seems necessary to revise my counterpart theory by providing for a multiplicity of counterpart relations" (1971, 203). Lewis's immediate concern in this

paper is to address puzzles about personal identity. But his recognition of a multiplicity of counterpart relations also tells us something about character of the far deeper response to Quine's scepticism that runs through Lewis's subsequent philosophy. It tells us that Lewis agrees with Quine that we have no determinate counterpart relation; so to this extent Lewis agrees with Quine's misgivings about essentialism, i.e. insofar as the target notion of essence presupposes the availability of such a unique relation.

It will help us get clearer about the subtle relationship between Quine's scepticism and Lewis's counterpart theory if we expose ourselves once more to Quine's efforts to evoke bewilderment about the difference between essential and accidental attributes. About the concrete individual, Gavin, who (we like to imagine) proves whilst he pedals, Quine writes, "Just insofar as we are talking referentially of the object, with no special bias toward a background grouping of mathematicians as against cyclists or vice versa, there is no semblance of sense in rating some of his attributes as necessary and others as contingent" (1960, 199). Now it is indeed the case that Quine is making in this passage the negative (sceptical) claim that when we disregard a "special bias towards a background grouping" there is no sensible answer we can give to the question, "is this concrete individual necessarily rational and contingently two-legged or vice versa?". But what is less often noticed is that Quine is also making a positive suggestion in this passage, *viz*, that when we do pay regard to a background grouping there *is* a semblance of sense in rating some attributes as necessary, others contingent. If the focus of our inquiry is mathematicians then the question whether they are essentially rational will receive one answer ("yes"), whereas if the focus of interest is cyclists another answer will be appropriate ("no"). Quine elaborates upon this suggestion in "Intensions Revisited" (1977), where he maintained that the notion of essence makes "sense in context": "Relative to a particular inquiry, some predicates may play a more basic role than others, or may apply more fixedly; and these may be treated as essential. The respective derivative notions, then, of vivid designator and rigid designator, are similarly dependent on context and empty otherwise" (1977, 121).

How does this square with Quine's die-hard scepticism about essentialism? What these passages show us is that Quine only rejects the idea of *de re* necessity insofar as it is understood to rely upon a notion of essence that isn't context-relative. It is against this absolute conception of *de re* necessity that Quine inveighs when he

denies the intelligibility of the question, which traits of a concrete individual are essential, which accidental. Of course, Quine also deemed contextually sensitive idioms that were “sources of truth-value fluctuation” ultimately dispensable for scientific purposes, i.e. for an “austere canonical form for the system of the world” (Quine 1960, 228). But let’s keep this last point in abeyance. What’s important for now is that so far from disagreeing with Quine about the intelligibility of *de re* necessity conceived independently of context, Lewis concurs entirely with him. In fact Lewis picked up the ball and ran with Quine’s idea that *de re* modal predications only make “sense in context”; his developed counterpart theory is the result.

We have already taken note of one key revision that separates Lewis’s original version of counterpart theory from his subsequent elaboration upon it: the recognition of a multiplicity of counterpart relations. According to Lewis, “the” counterpart relation is a relation of comparative overall similarity and comparative overall similarity is a vague or indeterminate notion (Lewis 1971, 211; 1983a, 42). The notion is vague because there is no absolute standard that settles whether certain respects of similarity and difference count or not, whether one respect counts more than another, what minimal standard of similarity is required, and so on: “as with vagueness generally, the vagueness of the counterpart relation – and hence of essence and *de re* modality generally – may be subject to pragmatic pressures, and differently resolved in different contexts” (1983a, 42). In one context we may favour the counterpart relation that (e.g.) weighs being two-legged more heavily than being rational, but in another context we may reverse the relative weighting of these respects of similarity, and so on. Thinking along these lines we recognize an extraordinary multiplicity of counterpart relations corresponding to all the different possible resolutions of the vagueness inherent in the notion of comparative overall similarity. It is only context that makes one or some of these relations salient to our assessment of (e.g.) whether our mathematician-cyclist is essentially two-legged. Once a context *C* has enabled us to fix upon a sufficiently determinate counterpart relation *R*, we are then in a position to raise the significant question of whether all and only the individuals that are *R*-related to him are two legged; if so, then, relative to *C*, he is essentially two-legged. But absent the pressure of context to resolve the indeterminacy of the counterpart relation, the question of whether some or other attributes of a thing are essential or accidental to it, isn’t really asking anything. Without the determining strictures of context the language of essence just goes on

holiday. Lewis brings his case home by inviting us answer the following questions: “Could Hebert Humphrey have been an angel? A human born to different parents? A human born to different parents in ancient Egypt? A robot? A clever donkey that talks? An ordinary donkey? A poached egg?” (1986, 251). Whilst Lewis thinks that given “some contextual guidance these questions should have sensible answers”, he also predicts that our immediate response will be one of bewilderment. Why so? He explains: “Your problem is that the right way of representing him is determined, or perhaps underdetermined, by context – and I supplied no context” (*ibid.*).

Why does Lewis think we are compelled to think along these lines?

Wittgenstein famously argued against essentialism on the grounds that when we pay attention to the complicated network of different ways in which we use (e.g.) the term “game”, we will see only a “family resemblance” between the things we pick out when we use this term (Wittgenstein 1953, §§65-6). Lewis was no less impressed by what he described as the “inconstancy” of the language of essence. In *On the Plurality of Worlds*, Lewis asks us to “[a]ttend to the variety of what we say about modality and counterfactuals *de re*” (Lewis 1986, 252). What he thought we would find there, if we only took care to inspect, is “abundant evidence that we do not have settled answers, fixed once and for all” about which attributes of a thing are essential, which accidental: “different answers are often right in different contexts”. With the benefit of hindsight we may interpret Quine’s scepticism about modality as flowing from an inchoate appreciation of the inconstancy of modal discourse that Lewis draws to our attention. Quine’s instinct was to recommend that we dispense with such unruly discourse for scientific purposes. But Lewis’s response was to insist upon the respectability of ordinary discourse. What he provides—and what Quine only hinted at—is a way of understanding how it is possible for inconstant discourse to be rule-governed. It can be rule-governed, even though inconstant, because the fluctuations in the truth-values of modal constructions are merely a symptom of our resolving the indeterminacy of comparative overall similarity in different ways in different contexts. Hence: “Inconstancy in representation *de re* is exactly what we should expect under the hypothesis that it works by comparative overall similarity of complex things” (1986, 254). The inconstancy of representation *de re* accordingly counts in favour of Lewis’s thesis that it is only relative to a context that the distinction between the essential and accidental attributes of a thing makes any sense.

We have so far emphasized the extent to which Lewis' counterpart theory emerges out of Quine's scepticism about *de re* modality. But it will help bring the different aspects of our discussion together if we focus on an important difference between them. Recall once more Quine's original attempt to evoke bewilderment about Aristotelian essentialism. He pointed that we are unable to determine once and for all whether an attribute of our mathematician-cyclist is essential or accidental without privileging one description of him at the expense of the other. Quine took this fact to betoken our failure to refer *de re* to the concrete individual in question when we distinguish between the essential and accidental attributes it bears. But Lewis took the fact differently: the context-dependence of essence and accident no more betokens a failure of representation *de re* than does the fact that we cannot settle whether Tian Tian is small without having a description of her as (e.g.) a Giant Panda rather than as a mammal in mind. Obviously this doesn't show that we fail to refer *de re* to Tian Tian when we say that she's small: *she* is small relative to the class of Giant Pandas even though *she* isn't small relative to the class of mammals.

Of course the Aristotelian essentialist against whom Quine originally inveighed is unlikely to find Lewis's relativism satisfactory. The suggestion that there is no absolute answer to the question which of a thing's attributes are essential, which accidental, is likely only to induce a sense of metaphysical vertigo in such a character. L. A. Paul expresses this sense of felt dissatisfaction with Lewis's counterpart theory when she reflects: "What objects *are* is determined by their modal properties, and these are determined in a context independent manner ... If the essential and accidental properties of an object are not absolute, then there are no absolute facts about what an object has to be like in order to exist. And this seems wrong" (2006, 345).

Lewis anticipates this response to the use he has made of counterpart theory: "The true-hearted essentialist might well think me a false friend, a Quinean sceptic in essentialist's clothing" (1983a, 42). We are now in a position to appreciate why Lewis is unmoved by the accusation. In order to understand how there could be an absolute fact of the matter about which of a thing's attributes are essential, which accidental, we should have to conceive of the counterpart relation itself as completely determinate, thereby obviating the need to rely upon context to resolve the indeterminacy. But what the inconstancy of modal language forces upon us is the recognition that the counterpart relation *is* indeterminate—otherwise the inconstancy

of our language would betoken nothing but its failure to be rule-governed. And once we have recognized this we appreciate that it makes no more sense to ask whether something has an attribute essentially or accidentally independently of context than it makes sense to ask whether something is large or small without having a comparison class in mind.

4. Truthmaking and counterpart theory

In the preceding section we showed how Lewis's counterpart theory allows him to acknowledge the force of Quine's scepticism about Aristotelian essentialism whilst also enabling him to make sense of QML in particular, and *de re* modal language more generally. Indeed one might think of Lewis as offering a "sceptical solution" to the problems that Quine poses for *de re* modality: there are no absolute facts about the modal profile of a thing. There had better not be otherwise we would be unable to accommodate the inconstancy of modal discourse; nonetheless, the pressure of context allows us to discriminate, without being invidious, between the attributes of a thing which are essential and those which are accidental. This already suggests one sense in which Lewis may be cast as a Humean—compare Hume's "sceptical solution" to the problem of induction. Of course Lewis is well known for his commitment to the doctrine of Humean supervenience: "the doctrine that all there is to the world is a vast mosaic of local matters of particular fact, just one little thing and then another" (1986b: ix). But, we will argue in the rest of this chapter, Lewis's world-view is far more thoroughly Humean than his commitment to this doctrine suggests. We base our case upon Lewis' use of counterpart theory to serve a much broader and more radical agenda, to eschew necessary connections between distinct existences and to avoid the idle disputes of "school metaphysics".

Recognising the inconstancy of modal discourse and appreciating its true source – the vagueness of the counterpart relation, not only enables us to validate what we ordinarily say about modality and counterfactuals *de re*. If Lewis is right, doing so also enables us to dissolve a variety of metaphysical puzzles. Consider a statue, Goliath, and the lump of clay, Lumpl, from which it is composed (Gibbard 1975). The lump remains in that shape until it is destroyed. So Goliath and Lumpl entirely coincide in their spatio-temporal extent. This makes it tempting to conclude that they are identical, that Goliath *is* Lumpl. But Lumpl could have survived squashing whereas Goliath could not; the attributes that are essential to Goliath are

only accidental to Lumpl. How could this be the case if Lumpl and Goliath are one and the same? It appears that we are committed to an unwanted multiplication of entities, distinct things that coincide at all times of their existence, distinguished only by their modal and counterfactual attributes. According to Lewis, the appearance of such an unwanted multiplication of entities is generated only by a failure to factor in the inconstancy of modal discourse (1971). When we say (i) that Goliath is essentially the shape of a statue of Goliath, our use of the name “Goliath” evokes the counterpart relation for statues. Whereas when we say (ii) that Lumpl isn’t essentially but only accidentally so, our use of the name “Lumpl” evokes a different counterpart relation, one for lumps. Because they evoke different counterpart relations, what (i) affirms of Goliath isn’t what (ii) denies of Lumpl. It follows there is no incompatibility generated by supposing that one and the same subject is represented *de re* by both (i) and (ii). So there is no need to distinguish Goliath from Lumpl after all.

Appeal to the multiplicity of counterpart relations thereby provides Lewis with a mechanism for avoiding the multiplication of entities. It also enables him to avoid the need to explain what he describes as the “strangely intimate relationship of constitution” that would have obtained between Goliath and Lumpl (and other lumps and statues) if they had been distinguished. It is to serve this latter role, the avoidance of such connections, that Lewis deploys counterpart theory in “Things *qua* Truthmakers” (2003).

Lewis was a long-term critic of the idea that a proposition P is made true by a thing T whose mere existence necessitates the truth of P , and the Truthmaker Principle that says every truth has a truthmaker in this sense (1992, 1998, 2001). His main complaint was that a commitment to such truthmakers generates a wake of unwanted necessary connections between wholly distinct existences. Lewis accordingly rejected the demand for truthmakers “[b]ecause, sadly, the demand for truth-makers just *is* a demand for necessary connections” (1998, 219).

One way to appreciate how the unwanted connections are thrown up by the churning of the Truthmaker Principle is to focus on the fact that with respect to many of the true things we say, ordinary objects are incapable of discharging the role of making those things true. Suppose an object A has an intrinsic property F , but only accidentally: A could have lacked the property F . Then A cannot make it true that A has F , because it has just been granted that the mere existence of A fails to necessitate its being F . Nor can A and F together make it true that A is F because A could have

existed whilst something else was F instead. The only entity that has the relevant truthmaking potential is the *state of affairs* that A is F —because this is an entity that cannot exist unless A is F . But Lewis refuses to admit states of affairs. His rejection of them relies upon his finding “unmereological ‘composition’ profoundly mysterious”; so far as Lewis was concerned mereology is the only kind of composition (1991, 57; see also 1986b, 39; 1986c). Now the state of affairs that A is F , Δ , is not composed mereologically from its “constituents” A and F . So it follows from Lewis’s assumption that mereology is the only kind of composition that Δ isn’t composed from A and F but is entirely distinct from them. But even though Δ is entirely distinct from A and F , it is necessarily connected to them: necessarily if Δ exists then A does, F does, and so on (1998, 49). Subsequently Lewis was to admit that he could understand unmereological composition after all—but only by defining it in terms of necessary connections! “To say that the state of affairs is unmereologically composed of F and A is to say nothing more or less than that, necessarily, it exists iff A has F ” (2001, 113). But he still complained that by describing the composition of Δ as unmereological “a necessary connection between seemingly distinct existences has been in no way explained, or excused” (*ibid.*). Since his Humean suspicions of necessary connections have been nowise appeased, Lewis refuses to acknowledge states of affairs and rejects the Truthmaker Principle that requires them (2001, 113).

Lewis is especially suspicious of the necessary connections thrown up when we posit truthmakers for negative existentials. He declares such posits “bad news for systematic metaphysics” (2001, 111). Why so? Suppose there is a truth maker Γ for the negative existential truth P : there are no unicorns. Since Γ is a truth maker for P , it cannot co-exist with any unicorn. Γ , so to speak, is a unicorn-replacement. It is the capacity of Γ to exclude the existence of things entirely distinct from it, namely unicorns, that makes it eligible to be a truthmaker for P . But it is exactly this feature of Γ that makes it unacceptable from Lewis’s point of view:

in order to do its job as a truthmaker, the unicorn-replacement must be involved in necessary connections between (mereologically) distinct existences; and it is the Humean prohibition of necessary connections that gives our best handle on the question what possibilities there are. (2001, 111)

Can the mystery surrounding these necessary connexions be cleared up? Lewis came to recognise that if he availed himself of counterpart theory then he could adopt the Truthmaker Principle without compromising his eschewal of necessary connections. His key insight was the appreciation that to describe something as a truthmaker for a proposition P is to ascribe to it an essential attribute. It's important to keep clearly in mind the conception of truthmaking that Lewis adheres to when he says this. A truthmaker for P is something the mere existence of which suffices for the truth of P . So a truthmaker for P could not have existed without P being true. In other words, a truthmaker for P is essentially such that P is true.

Now the need to posit (e.g.) the state of affairs Δ as truthmaker for the claim that A is F was forced upon us because of what seemed an innocent assumption, *viz*, that A doesn't have the essential attribute of being F . After all, how could A conceivably have this essential attribute when it is only contingently true that A is F ? We concluded that A couldn't be a truthmaker for the claim that A is F . But once we have taken on board the inconstancy of *de re* modal discourse, this assumption no longer seems so innocent. There is no absolute fact of the matter about whether A is essentially such that A is F ; it depends upon which counterpart relation is evoked when the claim is made. If it is one that tolerates counterparts of A that fail to be F then the claim is false, whereas if it is a more demanding relation that includes only F things amongst the counterparts of A then the claim is true.

Lewis's strategy for avoiding states of affairs—and their concomitant necessary connections—whilst adhering to the Truthmaker Principle was to introduce a novel “*qua*” locution that can be used to evoke the more demanding kind of counterpart relation relative to which A is essentially such that A is F (2003, 30-1). For example, the phrase “Tian Tian *qua* hungry” evokes the counterpart relation whereby every one of Tian Tian's counterparts is guaranteed to be hungry. So Tian Tian *qua* hungry does have the essential attribute of being such that she is hungry (because every one of her counterparts is). Hence Tian Tian *qua* hungry is a truthmaker for “Tian Tan is hungry”. Does this mean that Tian Tian *qua* hungry is a novel and peculiar kind of thing, perhaps even a state of affairs in disguise? Not at all. Whilst Tian Tian *qua* hungry makes it true that she's hungry, Tian Tian doesn't—it's only one of her accidental attributes that she's hungry. But it doesn't follow that Tian Tian *qua* hungry isn't Tian Tian. Because the names evoke different counterpart

relations, what we affirm when we say (iii) that Tian Tian *qua* hungry makes it true that Tian Tian is hungry isn't what we deny when we say (iv) that Tian Tian doesn't. It follows that there's no incompatibility in supposing that it is one and the same subject represented *de re* by (iii) and (iv).

We might extend Lewis's account at this point by adding the speculative suggestion that the "state-of-affairs" idiom is simply a more familiar version of Lewis's "*qua*" construction.⁵ Then even though the state of affairs that *A* is *F* is a truthmaker for "*A* is *F*", whilst *A* isn't, it doesn't follow that the states of affairs that *A* is *F* isn't *A*. In this way the appeal to the multiplicity of counterpart relations enables us to avoid a multitude of states of affairs, and obviates the need to understand the "necessary connections" that obtains between states of affairs and their constituents, just as it enabled us to avoid distinguishing Goliath from Lumpl and the "strangely intimate relationship" that supposedly unites them.

A further application of counterpart theory supplies truthmakers for negative existentials too (Lewis & Rosen 2003). Suppose, to take the simplest case, that there are no *F*s whatsoever. Then *F*s are entirely absent from the world. Does the world then make it true there are no *F*s? Hardly. The world has counterparts to which *F*s have been added. But take the world *qua* unaccompanied by *F*s. It essentially lacks *F*s. So it is a truthmaker for the claim that there are no *F*s. But this doesn't embroil us in necessary connections because the world *qua* unaccompanied by unicorns is just the world by another name.

5. Lewis vs. school metaphysics

In the famous closing paragraph of the first *Enquiry*, Hume says:

When we run over libraries, persuaded of these principles, what havoc must we make? If we take in our hand any volume of divinity or school metaphysics, for instance, let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No.

Commit it then to the flames, for it can contain nothing but sophistry and illusion. (1748, §12.3, 165)

⁵ This extension of Lewis' deployment of counterpart theory to avoid necessary connections is envisaged in MacBride 2005, 139-40.

Lewis does not of course sign up to Hume's account of the legitimate sources of human knowledge; and of course an interest in the failings of 'school metaphysics' – namely Aristotelian scholasticism – would be somewhat anachronistic. Nonetheless, we shall argue in this section that Lewis's attitude to some debates in contemporary ontology, again deriving from the inconstancy of modality, is on a par with Hume's attitude to school metaphysics – and for broadly analogous reasons.

In *On the Plurality of Worlds* and elsewhere, Lewis provides some examples of cases where shifts in context prompt the appearance of a genuine ontological dispute about the *de re* modal facts when in fact, on his view, there is no such dispute to be had. One is the dispute about the essentiality of origin:

I suggest that those philosophers who preach that origins are essential are absolutely right – in the context of their own preaching. They make themselves right: their preaching constitutes a context in which *de re* modality is governed by a way of representing (as I think, by a counterpart relation) that requires match of origins. But if I ask how things would be in Saul Kripke had come from no sperm and egg but had been brought by a stork, that makes equally good sense. I create a context that makes my question makes sense, and to do so it has to be a context that makes origins not be essential. (1986, 252)

The disputes about the relation between a thing and the matter that constitutes it (1986, 257) and about mereological essentialism (1986, 248-51) get similar treatments.

These are all standard disputes in contemporary ontology, and none of them, in Lewis's book, constitutes a genuine dispute at all. As he puts it: "You could do worse than plunge for the first answer to come into your head, and defend that strenuously. If you did, your answer would be right. For your answer itself would create a context, and the context would select a way of representing, and the way of representing would be such as to make your answer true" (1986, 251).

Moreover, it is not merely Lewis's implied judgement about the vacuity of such disputes about *de re* modality that aligns him with Hume (and we might speculate that Lewis's use of the word "preach" in the above passage is a nod towards Hume's antipathy towards scholasticism). The presupposition that ontological "disputes" such as these are *bona fide* disputes brings in its train the view that our ordinary *de re* modal judgements place epistemic constraints our metaphysical

theorising. We shall argue that from Lewis's perspective – according to which the relevant constraints are methodological rather than epistemic – such disputes engender a decidedly scholastic conception of our cognitive access to the fundamental nature of reality.

As we have seen, Lewis's commitment to the context-dependence of the counterpart relation derives from an appreciation of the inconstancy of our ordinary, commonsense *de re* modal judgements. For Lewis, common sense is, as far as possible, not to be violated; and so (as he says in a variety of contexts) where our ordinary judgements are not settled, it is a virtue of our philosophical theory if it doesn't deliver a decisive answer either. Now, why does Lewis take this attitude to commonsense judgements, and what does he mean by 'common sense'?

Lewis's answer to both questions comes in the following passage:

... a theory cannot earn credence just by its unity and economy. What credence it cannot earn, it must inherit. It is far beyond our power to weave a brand new fabric of adequate theory *ex nihilo*, so we must perforce conserve the one we've got. A worthwhile theory must be credible, and a credible theory must be conservative. It cannot gain, and it cannot deserve, credence if it disagrees with too much of common sense. Common sense is a settled body of theory – unsystematic folk theory – which at any rate we *do* believe; and I presume that we are reasonable to believe it. (*Most of it.*) (1986, 134)

Our philosophical theorising is thus, for Lewis, constrained by *our* commonsense theory of the world: there are not many different 'commonsense' theories held by different people. Thus, for example, where two people disagree with each other, say about whether Kripke could have been brought by a stork, for Lewis that constitutes evidence for the inconstancy of *our* – collective – commonsense theory even if the participants in the dispute individually exhibit no inconstancy at all. (Perhaps one participant has had their contextual parameters fixed once and for all by early exposure to *Naming and Necessity*, and the other by their ability to make perfectly good sense of the fairy story they were told as a child concerning the provenance of babies.) And our commonsense theory – and therewith the inconstancy of *de re* modal judgements – is to be respected as far as possible simply because philosophical theory construction demands conservatism: we lack the intellectual resources to start from

scratch. Thus, for Lewis, the truth (or close to it) of our commonsense theory imposes a methodological constraint on our theorising: we can undertake minor repairs to Neurath's boat if necessary, but since the boat is seaworthy and indeed already out on the high seas, large-scale repairs would be both unnecessary and dangerous.

This view of commonsense theory contrasts sharply with the view taken in much contemporary debate about *de re* modality. Suppose we start out with the assumption that a dispute about, say, the essentiality of origin is a genuine dispute, so that there is an absolute fact of the matter about whether Kripke could have been brought by a stork. We cannot now regard the "dispute" about whether or not Kripke could have been brought by a stork as merely an instance of the inconstancy of our collective commonsense theory, where inconstancy itself is something that our metaphysical theory should respect; that option has been foreclosed by the presupposition that there is a metaphysical fact of the matter that our dispute is aimed at resolving. Hence *our* commonsense theory, as Lewis conceives it, cannot help us.

How, then, *is* the dispute to be resolved? Well, it is a dispute about the nature of reality, and so our method for resolving it must, somehow or other, make contact with reality. And yet we cannot invoke experience or observation, since we're doing metaphysics, not science; so where should we turn? The standard answer is: "intuition". The nature and epistemic status of "metaphysical intuition" is itself currently much in dispute; for example Paul describes intuitions as "quasi-perceptual" (2010, **), while according to Ernest Sosa: "When we rely on intuitions in philosophy ... we manifest a competence that enables us to get it right on a certain subject matter, by basing our beliefs on the sheer understanding of their contents" (2007, 102). But what is generally agreed upon is that metaphysical intuitions have epistemic status: that a particular philosopher *X* has the intuition that Kripke could have been brought by a stork is, by *X*'s lights, at least *prima facie* reason to think that the essentiality of origin is false.

If we think of our own judgements about Kripke's origins as equivalent to or arising out of intuitions to which at least *prima facie* epistemic entitlement attaches, then of course inconstancy, as exhibited by the firmly-held but contradictory views of the disputants, is likely to seem anomalous and unsettling: analogous to two experimenters peering through the same microscope and claiming to see entirely different things. In the case of our experimenters, we quite plausibly assume that something has gone awry: maybe one of them needs a new pair of spectacles or

someone twiddled the dial between observations. And so, on this way of viewing intuitions, we are liable to see inconstancy as a kind of cognitive failing on the part of one of the disputants: there is a fact of the matter to be had, but one of us just isn't *getting* it.

We are now in a position to explain our earlier claim that, from Lewis's point of view, the supposition that "disputes" about *de re* modality are genuine disputes engenders a decidedly scholastic – and from Lewis's point of view unwelcome – conception of our cognitive access to the fundamental nature of reality. First, we can only suppose that there are genuine disputes to be had here if we jettison Lewis's conception of the nature and methodological significance of 'commonsense theory', since on Lewis's conception what commonsense reveals is that our *de re* modal judgements are true or false not absolutely but relative to a context. And, second, the replacement for (our collective) commonsense theory as a methodological constraint on metaphysical theorising is a view according to which our "intuitions" about the absolute *de re* modal features of reality are to be accorded epistemic status. And this really is a move towards scholasticism. Hume held that all our knowledge of facts about the external world comes to us through our senses or through reasoning from causes to effects; and the scholastics, who held that we could penetrate into the essences of things, were amongst his prime targets. But this – for Lewis no less than for Hume – cannot be done.

6. Humean supervenience and *de re* modality

In §§2 and 3, we showed how Lewis's counterpart theory allows him to acknowledge the force of Quine's scepticism about Aristotelian essentialism whilst also enabling him to make sense of QML in particular and *de re* modal language more generally. Indeed one might, in Humean spirit, think of Lewis as offering a "sceptical solution" to the problems that Quine had posed for *de re* modality: there are no absolute facts about the modal profile of a thing. There had better not be, otherwise we would be unable to accommodate the inconstancy of modal discourse.

In §§4 and 5, we explored two ways in which Lewis's views on *de re* modality should be seen as distinctly Humean. But we have so far placed little weight upon Lewis's well-known commitment to the doctrine of Humean supervenience: "the doctrine that all there is to the world is a vast mosaic of local matters of particular fact, just one little thing and then another" (1986a, ix). In this section, we explain how

Lewis's eschewal of necessary connections between distinct existences – already discussed in the context of truthmaker theory in §4 above – connects with the thesis of Humean supervenience; and we argue that his worldview is far more thoroughly Humean than his commitment to the contingent truth of this doctrine suggests.

Counterpart theory is used by Lewis to provide a reductive analysis of necessity and possibility. Claims involving “necessarily” and “possibly” – and also “essentially”, “contingently” and “accidentally” – can systematically be translated into claims about possible worlds and their inhabitants, and counterpart relations between those inhabitants, where counterpart relations themselves are similarity relations. To this account, Lewis later adds an account of the semantics of counterfactuals – which, again, appeals only to possible worlds and counterpart relations. And Lewis's concerns here are clearly not merely logical and semantic; his modal ontology is, precisely, an ontology of possible worlds – conceived as distinct concrete particulars – and similarity relations.

But what about the constituents of possible worlds (including the actual world) themselves? As is very well known, Lewis upholds the thesis of Humean supervenience:

Humean Supervenience is named in honor of the greater denier of necessary connections. It is the doctrine that all there is to the world is a vast mosaic of local matters of particular fact, just one little thing and then another ... We have geometry: a system of external relations of spatiotemporal distances between point ... And at those points we have local qualities: perfectly natural intrinsic properties which need nothing bigger than a point at which to be instantiated. For short: we have an arrangement of qualities. And that is all. There is no difference without difference in the arrangement of qualities. All else supervenes on that. (1986, ix)

Note that Lewis describes Hume as the *greater* denier of necessary connections, and not – contrary to popular misquotation – the *great* denier of necessary connections. Lewis is here clearly advertising himself as a denier of necessary connections. And so he is, at least when it comes to the actual world: neither Lewis's “qualities” nor the “arrangement” thereof have any modal features whatsoever, in and of themselves. Lewis's “qualities” are instances of perfectly natural properties, which are all categorical (see Lewis 2009), and their arrangement is a purely spatiotemporal. Of

course, there are modal truths about the qualities and their arrangement: two instantiations of the same perfectly natural property necessarily resemble each other, since natural properties just *are* those properties “whose sharing makes for resemblance” (Lewis 1983b, 13); the triangle formed by three equidistant points will necessarily be congruent with a triangle formed by any distinct trio of equidistant points; and so on. But those modal truths, like any other, are to be analysed in terms of possible worlds and counterparts: they are not inherent in the very fabric of the Humean supervenience base itself.

Above the Humean supervenience base Lewis allows for modal connections between distinct existences, but they are always analysable out by deploying the machinery of counterpart theory. Causes and effects, for example, are distinct existences that stand in a modal relation to each other. But causation itself is analysed in terms of counterfactual dependence, which in turn gets an analysis in terms of similarity relations between possible worlds (Lewis 1973; 1979). Or we might define a notion of physical necessitation, so that event *x* physically necessitates event *y* if and only if the occurrence of *y* is entailed by the occurrence of *x* together with the laws of nature. So we have – explicitly – necessary connections between distinct existences, but again the necessity is analysed in terms of similarity between worlds (since that is how Lewis analyses lawhood – about which more below) together with straightforward entailment.

Of course, Humean supervenience is, by Lewis’s own admission, at best contingent (at best because it may yet prove to be false). As he says:

Two worlds might indeed differ only in unHumean ways, if one or both of them is a world where Humean supervenience fails. Perhaps there might be extra, irreducible external relations, besides the spatiotemporal ones ... [etc.] It is not, alas, unintelligible that there might be suchlike rubbish. Some worlds have it. And when they do, it can make a difference between worlds even if they match perfectly in their arrangements of qualities.

But if there is suchlike rubbish, say I, then there would have to be extra natural properties or relations that are altogether alien to this world. (1986, x)

A world containing irreducible necessary connections between distinct existences would, of course, differ in ‘unHumean’ ways from worlds that lack them. But could

such necessary connections be ‘alien’ relations, instantiated at other possible worlds but (it is to be hoped) not at the actual world? It would seem not. For – to repeat – modality is to be analysed according to counterpart theory. Any modal truth whatsoever can be translated into a non-modal truth about similarity relations between possible worlds. In other words, necessary connections fall outside the scope of Lewis’s explanation of the contingency of Humean supervenience: necessary connections between distinct existences *necessarily* supervene on non-modal features. So there are no irreducible necessary connections between distinct existences at this or any other possible world.

Evidence for this claim – if such is needed – comes from Lewis’s use of conceptual analysis. For example, while he is happy to admit the possibility of irreducibly mental states (one kind of ‘suchlike rubbish’) – and his functionalist account of mental states leaves such a possibility open (1966) – when it comes to *modal* features of the world, Lewis goes for full-blown reductionist conceptual analysis every time: necessary connections between distinct existences are to be “explained, or excused” (2001, 113). His accounts of laws (1973a, 72-7), causation (1973b) and dispositions (1997) in particular are all reductionist. The laws of nature are analysed in terms of the arrangement of qualities; causal facts are analysed in terms of facts about similarity of worlds, where non-violation of the laws constitutes one respect in which one world is similar to another; and the instantiation of dispositional properties is analysed in terms of the instantiation of categorical properties plus (again) facts about the laws. Thus, for example, on Lewis’s story the existence of fundamental dispositions is simply conceptually impossible, since what it *is* for something to have a dispositional property is for it to instantiate some categorical – and therefore non-modal – property such that its doing so, together with the laws, entails that it will behave in such-and-such a manner.

It is in the case of laws that Lewis comes closest to an explicit expression of a view that can be considered genuinely Humean. Armstrong argues that laws of nature are states of affairs in which a higher order relation of nomic necessitation (N) holds between lower order universals (F , G). According to Armstrong, the law that F s are G s consists in the obtaining of a higher-order state of affairs, $N(F,G)$. If the lower-order states of affairs Fa also obtains, then these two states of affairs together necessitate the further, distinct state of affairs Ga to obtain. But Armstrong’s account of laws offends against Lewis’s Humean sensibilities: “What leads me (with some

regret) to reject Armstrong's theory ... is that I find its necessary connections unintelligible. Whatever N may be, I cannot see how it could be absolutely impossible to have $N(F, G)$ and Fa without Ga " (1983, 40). Of course $N(F, G)$ isn't *entirely* distinct from Ga but this reflection didn't appease Lewis; it only drew from him an expression of an even stronger suspicion about necessary connections:

I am tempted to complain in Humean fashion of alleged necessary connections between distinct existences, especially when first-order states of affairs in the past supposedly join with second-order states of affairs to necessitate first-order states of affairs in the future. That complaint is not clearly right: the sharing of universals detracts from the distinctness of the necessitating and the necessitated states of affairs. But I am not appeased. I conclude that necessary connections can be unintelligible even when they are supposed to obtain between existences that are not clearly and wholly distinct. (1983b, 40)

Interpretation of Hume is, of course, a thorny business; but we think Lewis's position on necessary connections comes very close to Hume's remark that "we do not understand our own meaning" if we attempt to make the word "necessary connection" stand for some real, mind-independent feature of reality (1739-40, 1.3.14, 168) – with a caveat. For Lewis, it is not the reality or mind-independence of necessary connections between distinct existences that is being denied – causes and effects really do stand in such relations, for example, as a matter of mind-independent fact – but rather their status as constituents of this or any possible world, considered in isolation from the similarity relations possible worlds bear to each other.

On a standard and familiar reading of Hume, he reduces causation to constant conjunction. Lewis's metaphysics as a whole – and not merely his account of causation – can be seen as a more sophisticated and thoroughgoing application of Hume's (alleged) strategy for dealing with necessary connections. On a slightly less familiar reading of Hume (Beebe 2006, Ch.6; Coventry 2006), causal facts are, in part, determined by the projection of our own minds onto a world that, in itself, contains nothing that could serve as the referent of the idea of necessary connection. On this way of looking at Hume, counterpart theory provides a Humean option that was not available to Hume himself: Hume was right that no referent for the idea of necessary connection is to be found in the *actual* world, but Lewis's much more generous conception of reality – it contains other possible worlds as well as our own –

allows him to restore mind-independence to causation without giving up on Hume's central negative insight.

As we have said, it is in the case of laws that Lewis comes closest to explicitly aligning himself with an authentically Humean position. But the point we have been urging is that laws are not a special case for Lewis. On his conceptual analysis of laws, facts about what the laws are, at *any* possible world, wholly depend upon non-modal facts about the arrangement of qualities. But so, ultimately, do facts about dispositions and causation. Wherever a commitment to irreducible necessary connections between distinct existences threatens, Lewis responds with a conceptual analysis that removes the threat not just from the actual world, but from all possible worlds. And of course this is just what one would expect from a philosopher who regards such connections as unintelligible.

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