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A World of Modal States of Affairs:
An Account of the Metaphysics of De
Re Modality

THESIS

8782

**A World of Modal States of Affairs:
An Account of the Metaphysics of De
Re Modality**

James Kelly
Trinity College, Dublin

A thesis submitted for the degree of
Doctor of Philosophy

2009

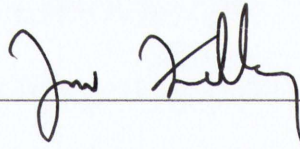
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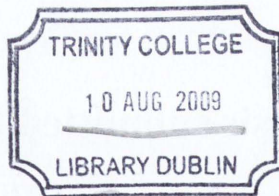
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Summary

The primary aim of the thesis is that of building a metaphysical account of *de re* modality. I take a truthmaker-theoretic approach to that, and so the central questions to be addressed are whether the truthmakers for *de re* modal truths feature at the most fundamental level of reality and, if they do, how they do.

In Chapter One I locate this metaphysical concern in relation to the other kinds of basic concerns we have in the philosophy of modality. Following that, I embark on assembling a metaphysical backdrop for my modal investigation. I assume realism about universals, and argue that this means we should rule out bundle-theoretic conceptions of particulars. I discuss David Armstrong's views on particulars, but find them unsatisfying. I conclude that realists about universals must, at least as things stand, opt for a substratum account of particulars. With universals and particulars in place, the need arises, I argue, for "unity-providers" – means by which things may be brought together with properties. States of affairs are chosen to play this role. An account is still, at that point, needed, however, of just *how* states of affairs unify. This is the problem of the nature of exemplification. Options are scarce, however, and having identified problems with both Armstrong's (pre-1999) account and the account he currently espouses, originally developed by Donald Baxter, I turn to a relational account of exemplification. That sort of account is, famously, the subject of a Bradley-inspired regress objection. I offer a response to that which seeks to call into question the legitimacy of that objection.

I take states of affairs to be the best candidates to serve as truthmakers and, at the outset of Chapter Two, I employ Armstrong's "Truthmaker Argument" in support of their choice for that role. (Although I criticise Armstrong's conception of his own argument.) The main business of the dissertation gets underway in §2.2. There I criticise the widely-held conviction that there are *non-modal* states of affairs (facts). I discuss what I call the Separatist Impulse – the impulse to separate out the property-possession and possibility aspects of states of affairs involving contingent exemplification. I conclude that we have no good reason to pursue this separatist line, and indeed *have* good reason to think of those as two equally important – and *present* – aspects of contingencies. This leads to one of the central claims of the dissertation: the Principle of Modal Ubiquity (PMU). According to this, each and every state of affairs essentially involves a modal dimension. There are no non-modal states of affairs.

PMU has many wide-ranging and important consequences. Firstly, a strong form of modal primitivism. Also, it seems to rule out, for example, possible worlds approaches to modality which employ the concept of non-modal exemplification. I discuss the sense in which we may still employ possible worlds discourse, as a heuristic, in the latter sub-sections of §2.3. Some further consequences (for modal epistemology, for our understanding the function and source of modality, etc.) are discussed in Chapter Four. One other consequence to mention is that PMU gives us reason, if we are truthmaker theorists, to seek ever more urgently a satisfactory metaphysical account of modality, for truthmaker theory now seems to depend

upon the provision of one. The construction of such an account is the aim of Chapter Three.

I consider here what I call the “locus” question, the question of what *bears* modal status. I evaluate particulars, states of affairs and properties for the role, and reject all of those in favour of an exemplification-centred theory. The account involves significant refinement of one defended recently by Colin McGinn. My Refined Copula Modifier theory has, I believe, many attractions and I show various respects in which it is preferable to the other options we have. The dissertation concludes, in Chapter Four, with reflection on some consequences of the theory, and especially of PMU, and discussion of the relationship between modality and essence.

Acknowledgements

This thesis is dedicated to my father and mother,
with love and gratitude

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A.M.D.G

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Introduction

The primary aim of this dissertation is to give a metaphysical account of de re modality. The primary finding will be that modality pervades reality and that we must, therefore, adopt a strong form of modal primitivism. I shall take an unfamiliar route to a familiar conclusion: modal primitivism. In order to be more precise about the aim, arguments and conclusions of the dissertation, I must go some way towards clarifying what I mean here by “de re modality” and “metaphysical account”.

Circumscribing De Re Modality

I take the following to be examples of expressions of propositions in which distinctively modal terms occur de re: “It is necessary for Obama to be human”; “Obama might have had green rather than brown eyes”.^{1, 2} In the first, we find de re necessity and in the second, de re possibility. “It is necessarily true that eight is greater than seven” and “It is possible that the number of planets is greater than seven” would typically be classified as expressions of de dicto modal propositions.³ But how should we characterise the de re/ de dicto distinction?⁴ I shall say that a modal term occurs de re when it pertains to the *thing* (the particular, the individual) referred to in the (expression of the) proposition, and de dicto when it pertains to the *truth* of the proposition⁵. As my choice of examples

¹ I shall employ the convention throughout of using angled brackets to generate names of propositions. For expressions of propositions (sentences, statements, etc.), I shall use double quotation marks (“..”). Single quotation marks (‘..’) are reserved for quotations of peoples’ stated views.

² Other common forms of de re modal locutions include “*a* is necessarily F” and “*a* necessarily Fs”.

³ As would “Necessarily, *p*”, “*p* is necessarily true” and “*p* is true of necessity”.

⁴ The distinction goes back at least to medieval philosophers such as Abelard (see, for example, *Super Periermenias* 3-47) and the anonymous author of *Dialectica Monacensis*, but may even have been drawn by Aristotle (see, for example, *De Sophisticis Elenchis* 166^a23-31). For discussion of its origins see Simo Knuuttila, *Modern Modalities*, (Kluwer Academic Publishers, 1988) and *Modalities in Medieval Philosophy*, (Routledge, 1993). The distinction was revived by G.H. Von Wright in his *An Essay in Modal Logic* (North Holland Pub. Co., 1951).

⁵ Ted Sider, “Reductive Theories of Modality”, in M.J. Loux & D.W. Zimmerman (eds.), *The Oxford Handbook of Metaphysics*, (OUP, 2003), says that we ought not formulate the de re/de dicto distinction ‘etymologically’. If a de re modal claim is said to be one in which the modality pertains to the object, and *dicta* (propositions) are, as he says, objects ‘in a perfectly good sense of

above would suggest, I agree with Stephen McLeod that the distinction is well-captured in the contrast between claims of the form “It is necessary that p ” and claims of the form “It is necessary for a to be F ”.⁶ The former, I shall say, is the canonical form of expressions of de dicto modal propositions, and the latter the canonical form of expressions of de re modal propositions. Much more could be said about the distinction but, for reasons which will become clear, it is difficult for me to do so at this stage without prejudging substantive issues to be addressed later, so I shall not attempt just now to make my characterisation of de re modality (the focus here) any more precise.

A Conception of Metaphysics

In saying that I wish to construct a metaphysical account of de re modality, just what kind of account of that am I seeking to construct? It is, of course, a widely debated question what we do when we do metaphysics, and it would be wholly unrealistic of me to attempt in this context to build anything like a *definitive* characterisation. That would easily require a dissertation-length study in itself (and perhaps a life’s work). Rather, what I shall do is to assume a certain conception of metaphysics which is (at least currently) fairly widely accepted. My hope is, obviously, that adoption of this conception will not prevent *too* many from engaging with the discussions and arguments of this dissertation. But in saying that I do not wish to detract from the fact that each component of it is, in various respects, controversial. Here is the conception of metaphysics I shall adopt:

“object” (p.183, n.3), then doesn’t de dicto modality emerge as merely a species of de re modality? That is, isn’t the entire distinction lost? I think we can get around this by saying – as I have – that a de dicto modal claim is one in which a modality pertains to the *truth* of a proposition (the truth of the proposition coming within the scope of the modal operator). I don’t think there is any ‘perfectly good sense of “object” in which the truth of a proposition may be regarded as an *object*. So, we can safely define de re modality as I have done. Alvin Plantinga characterises the distinction etymologically in *The Nature of Necessity*, (Oxford, Clarendon Press, 1974), pp.9-13, although his characterisation lies, I think, somewhere between mine and Sider’s parody of the etymological characterisation.

⁶ Stephen McLeod, *Modality and Anti-Metaphysics*, (Ashgate, 2001), p.118. McLeod is influenced in this by Ian Hacking’s discussion in his “All Kinds of Possibility”, *Philosophical Review*, 84:3, (Jul., 1975), pp.321-337.

In metaphysics we are concerned with the ultimate nature of reality. In doing the metaphysics of topic *T*, we attempt to describe how *T* features (if it does) [or: how *T*-entities feature (if they do)] at the most fundamental level of reality. An important aspect of the metaphysical investigation of *T* will involve consideration of the nature of the *truthmakers* for true *T*-claims (if indeed there are any true *T*-claims).

As it stands, this conception of metaphysics has (at least) two drawbacks: it is imprecise and it is controversial in several respects. In spite of those, however, I think it will suffice for the purposes of this dissertation. My aim here is not, after all, to investigate the nature of metaphysics. Regarding the imprecision, we would need, for example, to be told precisely what is meant by “ultimate”, “nature” and the other important terms here. Also, something would need to be said about, for example, what constraints there are on the type of description mentioned. The bigger problem here, however, is with the controversial nature of the various aspects of this conception.

The first controversy would be over the idea that metaphysics is, somehow, concerned with how reality *really* is, so to speak. We seem to be tacitly assuming here that we have *access* to reality as-it-is-in-itself, and this is, of course, far from uncontroversial. Kant and Putnam, amongst many others, would certainly want to take issue with such an assumption. But the renaissance of metaphysics in the last thirty or so years has produced a number of philosophers who would agree with this aspect of my conception.⁷ In any case, this is the *realist* stance I shall take. We can regard it as realist in a number of senses: (i) I am assuming that there *is* some reality – in other words, that there *are* some existents; (ii) I am assuming that although there *may* be some gap between appearance and reality, we have some

⁷ For example: Michael Loux, *Metaphysics: A Contemporary Introduction*, 2nd ed., (Routledge, 2002), p.11ff; Michael Jubien, *Contemporary Metaphysics: An Introduction*, (Blackwell, 1997), pp.20-23; Peter van Inwagen, “What is Metaphysics?”, in *Metaphysics: The Big Questions*, P. van Inwagen & D.W. Zimmerman (eds.), (Blackwell, 1998), pp.1-15; D.W Hamlyn, *Metaphysics*, (CUP, 1984), p.8ff; Bruce Aune, *Metaphysics: The Elements*, (University of Minnesota Press, 1985), p.18. It may be possible to re-state my conception of metaphysics in terms of the old distinction, discussed by Aune, between general and special metaphysics. The former ‘is concerned, on the whole, with the general nature of reality’, whilst in the latter we are ‘concerned with certain problems about particular kinds or aspects of being’ (*ibid*).

epistemic access to the latter⁸; and (iii) I am assuming that reality does not depend upon on our conceptual or linguistic activity.⁹

The second claim above – that in doing the metaphysics of topic *T*, we attempt to describe how *T* features (if it does) [or: how *T*-entities feature (if they do)] at the most fundamental level of reality – is controversial in (at least) two respects. First, insofar as what is said here serves to amplify what preceded it, it will be controversial in the various respects just outlined. Second, the idea that there is a *fundamental* level of reality is controversial – indeed the claim that there is is a substantive metaphysical thesis in itself. But, it might be said, if it is a metaphysical thesis, then in denying that, isn't one *doing* metaphysics?¹⁰ As long as the denial did not come in the form of (for example) a positivist attack on the meaningfulness of the claim, then it seems safe to say that one *would* be doing metaphysics. And yet, anyone denying that thesis¹¹ would hardly want to characterise themselves as being interested in uncovering what goes on at the most fundamental level of reality, which is how they *would* be characterised if my conception of metaphysics is correct. They are, after all, questioning the very idea of a fundamental level of reality. So, has my conception of metaphysics brought us to the absurd position wherein we must deny that theorists whom we would usually regard as metaphysicians, and who would regard themselves as having metaphysical interests, really *are* metaphysicians? Strictly speaking, it seems we would be thrust towards that absurdity; but do we really need to speak so strictly? Could we not add appropriate qualifications where necessary, such that we ensure

⁸ This is opposed by positivists, such as A.J. Ayer, who opens his *Language, Truth and Logic*, (Penguin, 2001), p.13, by considering ways 'of attacking a metaphysician who claimed to have knowledge of a reality which transcended the phenomenal world'.

⁹ Some might prefer to see (iii) subsumed under (ii) but it would be to stray too far from the point to consider that matter here. Also, I am not suggesting that (i)-(iii) are *sufficient* for realism, although I am inclined to think that at least (i) and (iii) are necessary for it. I have in mind here the most general form of realism, what has been called "metaphysical realism" (by Putnam, *Realism and Reason*, (CUP, 1985)). Or, perhaps less provocatively, "generic realism" (see Alexander Miller's "Realism", *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.), <<http://plato.stanford.edu/archives/fall2008/entries/realism/>>).

¹⁰ The point is reminiscent of F.H. Bradley's comment, in *Appearance and Reality*, (Clarendon Press, 1930), p.1, that '[t]he man who is ready to prove that metaphysical knowledge is wholly impossible... is a brother metaphysician with a rival theory'.

¹¹ For example, Jonathan Schaffer; see his "Is There a Fundamental Level?", *Nous*, 37:3, (2003), pp.498-517. In support of the fundamentality requirement see R.P.Cameron, "Turtles All The Way Down: Regress, Priority And Fundamentality", *The Philosophical Quarterly*, 58:230, (2008), pp.1-14.

that those metaphysicians who (for example) question the notion of a fundamental level of reality still get counted as metaphysicians? To be sure, this would be an *ad hoc* response, but I see no other way. It appears that under *any* definition of metaphysics we will be forced into making incorrect or uncomfortable declarations: philosophers with what we thought were metaphysical interests will no longer qualify as metaphysicians, and topics which were regarded as distinctively metaphysical will now belong to some other sub-discipline within philosophy. A certain amount of flexibility is called for. Of course, we might opt to take the other kind of route in characterising metaphysics: we might try to say what it is by giving a list of topics studied by people we would like to call “metaphysicians”. But the question will always lurk in the background – what *makes* all of those topics metaphysical ones? By attempting to state the *theme* of metaphysics, even as roughly as I have done, we take the more difficult but, I think, the more honest approach to the matter.

The final potential source of controversy to be noted here is my claim that truthmakers play an important role in metaphysical investigation. The core intuition shared by truthmaker theorists of all stripes is that if *p* is true, then there is something that *makes* it true (something “in virtue of which” it is true): *p*’s truthmaker. Truth, they say, is *grounded*.¹² There are, however, disputes about every aspect of this intuition, and the consequences and foundations of every aspect of it. The notion of truthmakers is, it seems, an old one, but was only revived in recent contemporary philosophy by Mulligan, Simons & Smith in their (1984).¹³ Since then, truthmaker theory has been one of the most vibrant areas of research, featuring significantly in most of the major work in metaphysics in the intervening years. Indeed the core intuition, set out above, has become so deeply

¹² Gonzalo Rodriguez-Pereyra, “Why Truthmakers”, in H.Beebe & J.Dodd (eds.), *Truthmaking: The Contemporary Debate*, (OUP, 2005), p.21: ‘the idea that truth is determined by reality sounds grand, but in itself is a very minimal idea: it is simply the idea that the truth of a truthbearer is determined by its subject matter’. Cf. Richard E. Aquila, *Intentionality: A Study of Mental Acts*, (The Pennsylvania State University Press, 1977), p.58: ‘It always makes sense to ask what *makes* any given proposition a true one’ [emphasis in original]

¹³ Kevin Mulligan, Peter Simons & Barry Smith, “Truth-Makers”, *Philosophy and Phenomenological Research*, 44:3, (Mar., 1984), pp.287-321. David Armstrong, the *éminence grise* of truthmaker theory, notes in *Truth and Truthmakers*, (CUP, 2004), p.1, that C.B.Martin was a pioneer of Twentieth-Century truthmaker theory.

embedded in the philosophical consciousness that those who reject it seem to be very much in the minority. But it's not always clear that those who have problems with it wish to *reject* it in a straightforward sense. Often, criticisms of the basic truthmaker-theoretic intuition have to do with how that might relate to certain conceptions of *truth*, and/or to whether it presupposes or implies (or even excludes) *realism*, in various senses of the word, and, more generally, to concerns arising at the intersection of metaphysics and the philosophy of language.¹⁴ For example, there is, it seems, even amongst ardent practitioners of truthmaker theory, little in the way of clarity or consensus over the nature of the relationship between truthmaker theory and the correspondence theory of truth. But some of those with reservations about truthmaker theory formulate their concerns within the context of consideration of this relationship and issues proximate to it.¹⁵ So, the battle-lines over the fundamentals of truthmaker theory are not yet all that clear.¹⁶ But it would draw us very far from our present concerns to consider in detail, or to attempt to argue for, those fundamentals. As I said, those who oppose truthmaker theory are in the minority – as Rodriguez-Pereyra notes, even the likes of W.V.Quine, Paul Horwich and Crispin Wright, ‘who cannot be suspected of trying to advance the cause of truthmakers’, appear to be amenable to the basic idea that truths are made true by reality.¹⁷ So, I shall assume as much here: I shall take it that the core truthmaker-theoretic intuition is sound.

¹⁴ See, for example, John Heil, *From an Ontological Point of View*, (Oxford: Clarendon Press, 2003), pp. 9-10, 48-49, 54-55; Scott Soames, “Truthmakers?”, *Philosophical Books*, 49:4, (Oct., 2008), pp.317-327. See also Barry Smith’s discussion (from the other side of the fence) of such questions in “Truthmaker Realism”, *Australasian Journal of Philosophy*, 77:3, (Sep., 1999), pp.274-291. Gonzalo Rodriguez-Pereyra, *op. cit.*, thinks that ‘the idea that truth is determined by reality...does not commit [us] to any kind of substantive realism. For idealists can accept that truth is determined by reality – they will simply add that this reality is not mind-independent or language-independent’ (*ibid*). Jonathan Lowe, in *The Four-Category Ontology: A Metaphysical Foundation for Natural Science*, (Oxford: Clarendon Press, 2006), thinks that the assumption that truths need truthmakers is ‘not incompatible with metaphysical idealism, subjectivism or relativism’, p.182 n.6.

¹⁵ This is one aspect, for example, of Trenton Merricks’ argument against truthmaker theory in *Truth and Ontology*, (OUP, 2007). Regarding the connection between truthmaking and correspondence see Armstrong, *op. cit.*, pp.16-17. Damien Cox, in “The Trouble With Truthmakers”, *Pacific Philosophical Quarterly*, 78, (1997), pp.45-62, argues that truthmaker theory cannot supply truthmakers for logically complex expressions (disjunctions, etc.) without undermining its plausibility by adopting an extravagant metaphysics. For that reason, he thinks, the prospects are bleak for truthmaker theory.

¹⁶ For a good overview of the issues facing truthmaker theorists see Helen Beebe & Julian Dodd’s Introduction to *Truthmaking: The Contemporary Debate*, (OUP, 2005).

¹⁷ Rodriguez-Pereyra, *Op. cit.*, p.22.

Once that is granted, the reasons for wanting to employ the truthmaker-theoretic approach in metaphysics should be clear. According to the first part of my conception, in metaphysics we are interested in *reality*. Metaphysicians of topic *T* are interested, that is, in uncovering how (or if) the subject matter of *T* features at the fundamental level of reality. And an obvious way to pursue that interest is to investigate whether and how the *truthmakers* for *T*-claims feature at that level.¹⁸ There are, it is also felt, other benefits to the truthmaker strategy in metaphysics. For one thing, it is often claimed that it helps us in “catching cheaters” – those who would help themselves to certain controversial truths without embracing the ontological commitment to their truthmakers.¹⁹ Whatever about such applications of truthmaker theory, I think the inclusion of a truthmaker-theoretic component in our basic conception of metaphysics is justified by the fact that truthmaker theory affords us an admirably clear way in which to frame and investigate metaphysical questions.

But *which* truthmaker theory do I mean? For there are many variations on the one theme of truth being grounded. Within truthmaker theory there are disputes raging about almost every aspect of the core intuition: Are truthmakers *entities*? If they are, what kind of entities are they? (If they are not, then how is truth grounded in reality?²⁰) Is truthmaking a relation? If it is, what kind of relation is it? (If it is not,

¹⁸ Indeed Cameron has recently (“Comments on Merricks’s *Truth and Ontology*”, *Philosophical Books*, 49:4, (Oct., 2008), pp.292-301) attempted to *motivate* truthmaker theory by saying that

[a]nyone who believes that it makes sense to speak of one truth holding in virtue of another has to say something about the class of truths that are brute: the class containing all and only the truths that are not true in virtue of any other truth....Truthmaker theory just is a theory about which truths are brute: it says that the only brute truths are truths concerning what there is – every other truth must hold in virtue of one or more of these brute truths. (pp.292-293)

A truthmaker-driven metaphysics of topic *T* amounts, on this view, to the investigation of whether *T*-truths are brute. In the present context, the question would be whether *de re* modal truths are brute; and this is equivalent to asking whether their truthmakers feature in reality (or, at the fundamental level of reality, if we wish to talk in such terms). It is the question whether they form part of ‘what there is’.

¹⁹ Armstrong (2004), pp.1-3, outlines the supposed paradigm of such supposed cheater-catching: C.B.Martin’s truthmaker-theoretic criticism of phenomenalism.

²⁰ David Lewis at first rejected the demand that truthmakers be entities, in “A World of Truthmakers?”, in his *Papers in Metaphysics and Epistemology*, (CUP, 1999), pp.215-220. Later on, however, he advocated a traditional, entitative conception of truthmakers (see n.21 below). Other theorists who have embraced truthmaking but rejected truthmakers include: Julian Dodd, “Negative Truths and Truthmaker Principles”, *Synthese*, 156, (2007), pp.383-401; cf. “Farewell to

then *what* is it?) Do truthmakers *necessitate* the truth (or existence) of the truths they make true? Does *every* truth have a truthmaker? And so on. My concern here is with modality, first and foremost, so I shall not be entering into (all of) these disputes. If we are to *get* to the metaphysics of modality at all, some controversial positions must be invoked along the way without argument. That is a practical necessity.

Although it will not be necessary for me to enter into all of the controversies of truthmaker theory, I will need to take a stand on the nature of truthmakers. And I shall take what we might call the “traditional” approach: I shall say that truthmakers *are* indeed entities, that we commit ourselves ontologically when we commit ourselves to a truthmaker for a truth.²¹ That much I shall assume, but the question now is from *which* category of entities will our truthmakers come? Which entities are best suited to play that role? To consider this, I shall need to choose between ontological categories. Obviously, that will mean me having to *commit* to an ontology. If I were to adopt a single-category ontology, according to which reality is at bottom composed of none but the entities of that category, there would be no choice to make. If our truthmakers are to be entities, then they will have to be of that category. I shall not, however, opt for such an ontology, although, initially, I shall only make one ontological commitment – to the category of *universals*. I shall assume that properties and relations are universals. As universals, properties will be capable of simultaneous multiple instantiation. This, then, is what I am assuming:

States of Affairs”, *Australasian Journal of Philosophy*, 77:2, (1999), pp.146-60 (see below, §2.1, for discussion of Dodd); Jennifer Hornsby, “Truthmaking Without Truthmaking Entities”, in Beebe & Dodd (2005); and Joseph Melia, “Truthmaking Without Truthmakers”, also in Beebe & Dodd (2005).

²¹ Amongst those subscribing to some version of the traditional view are, of course, Armstrong, who takes truthmakers to be states of affairs, *op. cit.*, cf. *A World of States of Affairs*, (CUP, 1997); Richard Aquila (1977), p.58ff, who also takes truthmakers to be states of affairs; Gonzalo Rodriguez-Pereyra, *op. cit.*; cf. *Resemblance Nominalism: A Solution to the Problem of Universals*, (OUP, 2002), who adopts nominalised states of affairs as truthmakers; Jonathan Lowe, *op. cit.*, for whom truthmakers are tropes (in his terminology: “modes”); as they are for Mulligan, Simons & Smith (1984), although their tropes are “moments”; Herbert Hochberg, “Facts and Classes as Complexes and as Truthmakers”, *The Monist*, 77:2, (Apr., 1994), takes facts and sets of facts as his truthmakers; and David Lewis, “Things *qua* Truthmakers”, in H.Lillehammer & G.Rodriguez-Pereyra (eds.), *Real Metaphysics: Essays in Honour of D.H.Mellor*, (Routledge, 2003), pp.25-43, argues for particulars as truthmakers.

RU: Properties and relations are universals²²

But this realism about universals (RU) will take us a long way. The argument of Chapter One will be that RU leads us to commitments to particulars and states of affairs as *sui generis* ontological categories. The metaphysics to emerge will give reality a trifold character – certain entities will be universals, certain others particulars and certain others states of affairs, but all entities will fall under one (and only one) of these categories.

The category of particulars is *sui generis* only if the so-called “bundle theory” of particulars is false. I shall take it that there are only two developed theories of particulars: bundle theories and those which countenance a “core of particularity” of some kind. I shall argue that, given RU, the bundle theory can only be a bundle-of-universals theory, and – as things stand – such theories are afflicted by a number of serious problems. So much so that they are implausible. We have no choice, then, but to adopt a robust conception of particulars, according to which each particular has a core of particularity. This kind of theory is variously known as a “bare particular” or “substratum” theory.

States of affairs quickly follow. In RU we claim that properties are multiply-instantiable. What they will be instantiated *in* are particulars. But although a particular may exemplify a property, often (in the majority of cases) it only does so contingently. Which is to say it could fail to have the property. If *a* has *F* contingently, it might not have had it or it might cease having it, having had it. But what is the difference between *a* having *F* and *a* not having it? The world is clearly different in the two scenarios: in one, *a* has *F*, in the other it doesn't. The difference, I shall say, is that in the former the *state of affairs* of *a*'s being *F* obtains, in the other it does not obtain. A state of affairs will be a particular (or particulars) exemplifying a universal – a particular having a property or *n* particulars standing in an *n*-place relation. And the state of affairs *a*'s being *F* is not reducible to *a* and *F* – it is an entity over-and-beyond those.

²² I shall not need to take a stand on whether universals are transcendent or immanent. More on this later.

I shall, therefore, account for the *unity* of *a* and F, where *a* has F, in terms of states of affairs. But we still must say *how* states of affairs provide unity in this way. We must, that is, answer the problem of *exemplification*. We must say what exemplification *is*. I shall argue that it is a relation, that where *a* is F, *a* bears the relation of exemplification to F. And a state of affairs will be defined as a particular(s) bearing the exemplification relation to a universal. Of course, the well known regress-objection inspired by F.H. Bradley looms large for such relational views of exemplification. I will discuss a suggestion of Armstrong's as to how we might learn to live with the regress, although I shall not myself use his argument. My own response to Bradley questions the legitimacy of the objection itself.

So, with a metaphysic of universals, particulars and states of affairs, we have three options when it comes to truthmakers. At this point, I help myself to Armstrong's argument in *A World of States of Affairs* – what he calls the 'Truthmaker Argument' – in support of the choice of states of affairs as our truthmakers.²³ This, however, has consequences for other aspects of our truthmaker theory. The key premiss in the Truthmaker Argument is the thesis of Truthmaker Necessitarianism – that truthmakers necessitate the truth of the truths they make true.²⁴ And so, in using that argument I will indeed be committing myself to that Necessitarian position. I need not, however, take any stand on the correctness of Truthmaker Maximalism – the claim that every truth has a truthmaker. If it is helpful, I would be willing to amend the core truthmaker outlook I am adopting, such that it would commit us to there being at least *some* truths which have truthmakers. So, according to the truthmaker-theoretic conception of metaphysics which I will adopt here, some truths have their truth grounded in states of affairs which necessitate that truth.

²³ *A World of States of Affairs*, p.115ff. Hereafter, I shall use the abbreviation "WSA" in references to this work. I shall say below (§2.1) that Armstrong misidentifies what it is that the argument establishes. That misidentification is a symptom of a wider deficiency in his metaphysics, having to do with the problem of exemplification.

²⁴ I shall talk in terms of propositions as truthbearers and observe the usual distinctions between those and their expressions (sentences, statements, or whatever), but nothing in my theory depends upon this assumption.

I can now state more precisely the primary aim of the dissertation. It is to build a metaphysical account of de re modality, and that will involve consideration of the truthmakers for de re modal truths.²⁵ We are to investigate whether the truthmakers for de re modal truths feature at the most fundamental level of reality. Given my commitment to the Truthmaker Argument, that means investigating whether modal states of affairs feature there. If they *do*, then we must say something about *how* they do, how modality “fits” with the other features of reality, as it is in itself. So, the first question will be: are modal states of affairs *reducible* to some more basic states of affairs? And there seem to be two ways of responding to this. We might try to answer it by examining modal states of affairs and theorising about how they might be incorporated into our picture of fundamental reality. We would then conclude that they do or do not feature there. Another approach, however, is to argue that they *must* feature there. And this brings us to one of the central issues of the dissertation.

Most theorists take the first kind of approach to the question of the status of modal states of affairs. And this is understandable – if we are asked whether Φ states of affairs are reducible or not, it makes perfect sense for us to investigate the nature of the constituents of Φ states of affairs and assess whether the ontological ground of those may be traced beyond Φ states of affairs to some distinct class of states of affairs (or aspects of those). If we find that they may, then Φ states of affairs are said to be reducible to those other states of affairs. Otherwise they must be said to

²⁵ It is sometimes suggested (see, for example, D.H.Mellor, “Replies” in Lillehammer & Rodriguez-Peryra (2003), p.213) that necessarily true propositions do not need truthmakers. The idea is that if p is necessarily true, then the world will make it true regardless of *how* the world is. That is, indeed, just the standard *definition* of necessary truth: p is necessarily true iff p would be true regardless of what was the case. Therefore, it is said, necessary truths do not need what we might call “dedicated” truthmakers – particular states of affairs in which their truth is grounded – for any given state of affairs can obtain or not and it will not affect the truth of a necessary truth. This may indeed be the case when it comes to de dicto modality, but it is not the case with de re modality. If $\langle a$ must be F \rangle is true, it does not follow that \langle It is necessarily true that a is F \rangle is true. If a is a contingent existent, there will – in the jargon of possible worlds – be worlds at which a does not exist. So it will be false to say that it is necessarily true that a is F, for there are worlds at which $\langle a$ is F \rangle is *not* true – namely, those worlds at which a does not exist ($\langle a$ is F \rangle may not be *false* at those worlds, we might say it has *no* truth-value, but which ever way we go it will not be *true*). And yet it may be true that a is necessarily F. It is not, for example, a necessary truth that Socrates is human, but Socrates is, nevertheless, necessarily human. So, de re modal truths may not always be converted *salve veritate* into de dicto truths. And, therefore, at least some de re truths have their truth grounded in *certain* ways the world is.

be irreducible. And all of this looks like a perfectly normal and satisfactory way to deal with such issues; a sound metaphysical methodology. But, when it comes to modal states of affairs, things are not so clear-cut. Most theorists assume that there are non-modal states of affairs (at least, amongst those who accept states of affairs). I shall question whether the states of affairs which are assumed to be non-modal really *are* non-modal. When we examine paradigmatically non-modal states of affairs, we find that they are, one and all, states of affairs involving *contingency*. And the standard way of understanding contingency has it that there are two aspects to it: property-possession and possibility. What I call the “Separatist Impulse” is the impulse to secure the reality of simple property-possession (exemplification *simpliciter*), the non-modal aspect of contingency, by separating out the possession and possibility aspects of contingencies. And in a fairly robust sense: they wish to build separatism into the metaphysical profile of contingency. I shall argue that we have no justification for making this separation, and, what is more, that there does seem to be good reason to go the *other* way and say that property-possession and possibility are intimately linked – as two aspects of the one state of affairs. My view is that our concept of non-modal states of affairs is the product of an illegitimate violation of that intimacy. The correct course of action is to construe states of affairs involving contingent exemplification as *modal* states of affairs – every bit as modal as those involving necessary exemplification.

Often, worries about modal states of affairs have to do with our epistemic access to them, or lack of it. But we can group all the various kinds of worries together and say that, in general, people have tended to think that *non*-modal states of affairs are less problematic than modal ones. My suggestion will be that there are *no* non-modal states of affairs. Theorists have, I shall argue, been in the grip of the *myth* of the non-modal state of affairs.

Without questioning the separatist assumption, most theorists work with the idea of non-modal states of affairs. Faced then with epistemological and other difficulties with modal states of affairs – those involving necessity or the possibilities separated out from contingent states of affairs – they come to regard

non-modal states of affairs as less problematic and therefore more welcome. In wanting to question the separatist assumption, I do not *set out* to de-bunk the idea that there are non-modal states of affairs. I question it because (A) it is, I presume, in general good metaphysical practice to question all of one's assumptions and (B) because it simply doesn't seem obvious to me that the assumption is correct. My intuition is that contingency involves possibility in a much more intimate manner than separatism would allow. I think Armstrong was right in saying that possibility was of the very essence of contingency, but I shall argue that he fails in his bid to reconcile the existence of an intimate connection between contingency and possibility with a reductionist stance on possibility. In fact, what he ends up doing is giving us a further perspective on the dubiousness of the separatist strategy and the cost of connecting contingency and possibility.

I shall consider *why* we might want to take the separatist line, although the conclusion will be that solid motivation is elusive. We must go to the very heart of things and examine the *origins* of the separatist impulse. As we shall see, its origins lie in some rather murky semantic and pragmatic waters, and there doesn't seem to be much reason for optimism regarding its prospects.

Having rejected separatism, we will have arrived at the Principle of Modal Ubiquity (PMU) – the thesis that *all* states of affairs are essentially modal. With that, the landscape alters. If one takes the entitative approach to truthmaker theory, and one thinks those entities must be states of affairs, one can no longer regard the problem of providing truthmakers for de re modal truths as a sub-problem of truthmaker theory on a par with the sub-problems of providing truthmakers for the truths of other problematic discourses. For any such discourse with Φ as its (or a) distinctive predicate, if one believes that Φ -truths have truthmakers (if one is a maximalist, one will automatically think this), then *whatever* truthmakers are recommended for Φ -truths will be partly modal. Every state of affairs has a modal dimension, according to PMU, so whatever states of affairs we pick as our truthmakers for Φ -truths will be partly modal. So, if PMU is correct, then if truthmaker theory can provide truthmakers for *any* class of truths, it can provide

truthmakers for de re modal truths. PMU makes the general efficacy of truthmaker theory conditional upon our being able to give an *account* of the states of affairs truthmaking for de re modal truths.

From PMU, modal primitivism follows. (However, we shall see that modal primitivism need not imply modal ubiquity.) And this will be my negative answer to our first question – whether modal states of affairs are reducible. The second question will, however, be outstanding. We must still give an account of how irreducible modality fits with the other aspects of the adopted metaphysics. I characterise this as the “locus issue”. (It is upon this account that the efficacy of truthmaker theory now depends.) *Where*, so to speak, do we find modality within states of affairs? Less metaphorically: in ascriptions of de re modality, to *what* do we ascribe the modality? More metaphysically: to which type of constituent of states of affairs does modal status attach? (Or: with which is it most closely associated?) I consider various theories of the locus of modal status and conclude by defending a qualified version of one of them. The final chapter discusses some consequences of the theory of modality proposed in this dissertation and includes a brief discussion of the relationship between essence and modality.

But to whom is this dissertation addressed? Obviously, it will not be very relevant to those who have qualms about the legitimacy of metaphysical investigation. Nor will it have very much relevance for one – such as Quine – who wishes to eschew de re modalising on the grounds that it is unintelligible (see below). My audience will be theorists who are sympathetic to the truthmaker-theoretic approach to metaphysics and who are, obviously, concerned with de re modality. I very much doubt if anything I have to say would change the mind of one who harbours profound reservations about truthmaker theory. But it must be acknowledged that the truthmaker-theoretic approach is now so common within metaphysics that I am alienating very few theorists in adopting it.

Within truthmaker theory, there are, as I have said, those who believe we can have truthmaking without truthmaking entities. Is my discussion relevant to them? Strictly speaking, it would seem not, but it must be borne in mind just how

difficult the question of modal truthmakers has proved to be. As Christopher Peacocke says, the problem of necessity has ‘this distinction: that there is practically no philosophical view of the matter so extraordinary that it has not been endorsed by someone or other’.²⁶ We are simply *so* unclear about how, even broadly speaking, we ought to approach the matter that one proposal might have just as much plausibility as another, even though they arise at different extremes of the spectrum of possible forms of response. In other words, a good theory of modality is something so valuable that many would, I believe, be willing to reconsider their most basic general metaphysical views in order to accommodate it. In that spirit, I think it is not unlikely that some who wish to embrace truthmaker theory and yet avoid truthmaking entities might look again at that position in the light of an attractive theory of modality. I am not, of course, saying that my theory has that degree of appeal, just that almost *everything* is up for grabs when it comes to philosophising about modality. Insofar as those taking a non-entitative view of truthmaking share my desire to give a metaphysical account of modality (in the broadest sense of “metaphysical”), and insofar as convincing accounts of that type are so hard to come by, it would be unrealistic to say that I am talking directly past such theorists. And the very same can be said, *mutatis mutandi*, about those who *do* take an entitative approach but disagree with me on *which* entities play the role of truthmakers. In the search for an answer to the metaphysical problem of modality, as in the search for the Holy Grail, *nothing* is sacred.

My general metaphysics is, I think, not a great deal more costly than the alternatives. In assuming realism about universals (RU) I am, of course, opposing trope theories and the various nominalisms. Obviously, my metaphysics is heavier than the nominalists’ in that I countenance properties. And my theory of modality seems to require such a commitment. And so, it seems, my theory does carry more weight than nominalist theories of modality might be expected to. (However, as I shall note in the conclusion, it may be possible to adjust the locus theory defended below, albeit fairly radically, to allow certain types of nominalist to take the same

²⁶ “Metaphysical Modality: Understanding, Truth and Epistemology”, p.521, *Mind*, 106:423, (Jul., 1997), pp.521-574.

basic approach as I am here. So, my commitment to universals might *not* be required by *all* aspects of the theory.) Regarding trope theory, there is the question whether or not trope theorists need to postulate states of affairs. All I shall say is that if they do *not*, then mine is a three-category ontology and theirs a single-category ontology – particulars being all that they countenance. But, as we shall see in §3.2, it is not easy to see how we could accommodate modality in such a sparse ontological environment. The force of PMU makes itself felt yet again. If contingent exemplification always has a modal dimension, then *anyone* who embraces such exemplification must account for that modal dimension. Either that or they must offer a grounding for the postulation of non-modal states of affairs.

But what if one were not to be convinced by my argument against separatism? That argument is important to the dissertation, as it paves the way for PMU. Of course, one would need to do more than express mere discomfort at the conclusion of my argument against separatism and for PMU. One would need to show that I have misconstrued separatism, or its origins, or have underestimated its possible defences. Perhaps one would need to go yet further and actually *provide* what nobody seems to have thus far: a convincing argument in favour of it. But what if all of that was done and we were satisfied that my anti-separatism had been held off. What, then, have I to offer here? Well, I have a primitivist account of modal states of affairs to offer – fast becoming a popular view on modality. A problem for primitivists is how – precisely – modality figures within reality. This is what I call the locus issue: to *what* does modal status attach, or with what is it most closely associated? My “Refined Copula-Modifier” theory is an answer to this and I believe (and will argue!) that it is preferable to the alternatives. The theory is adequate in various technical respects and, perhaps more importantly, it is, I think, intuitively satisfying. Anyone who knows the philosophy of modality will appreciate the rarity of plausible metaphysical accounts of modality which stay within actualist boundaries and are complementary to a (fairly) commonsense general metaphysical picture. I have these hopes for my theory, although it is, of course, difficult to tell from this vantage whether it *does* qualify as such. One thing I can say for certain is that I would be willing to give up a lot of what I argue for along the way in order to preserve the core thesis of my Refined Copula Modifier

theory. If that is not the correct account of the locus of modality, then it is, in my opinion at least, almost certainly in the vicinity. It is, I believe, worth defending. And so, I think there are certainly aspects of the theory which are valuable independently of the arguments advanced against separatism and in favour of modal ubiquity. Nevertheless, it would I think be a difficult job to establish that I have not, *at least*, motivated a reappraisal of the popular commitment to non-modal states of affairs.

In detail, the argument of the dissertation runs as follows. In Chapter One I begin by trying to clarify how the metaphysical problem of modality (my concern here) relates to the other basic problems in the philosophy of modality: those of the clarity and function of modalising. In §1.1, I discuss the clarity issue and in §1.2 the function issue. In §1.3 I introduce the source question. The metaphysical work begins in §1.4, where I start by making my assumption of realism about universals. In §1.4.1, I argue against theories in which particulars are taken to be bundles-of-universals, and in §1.4.2 I consider and dismiss an Armstrongian “third way” between such a view and substratum theory. I go on to argue (§1.4.3) that particulars and the universals they exemplify must be united within states of affairs, and propose a relational view of exemplification (§1.4.4). In §1.4.5, I argue that Armstrong (pre-1999) fails to offer any account of exemplification and that the account he has since adopted, which is the only developed non-relational view on the market, is beset by problems. Baxter’s non-relational account of exemplification is considered in §1.4.6 and in §1.4.7 I offer a response to Bradley’s objection. My relational account is explored further in §1.4.8.

I open Chapter Two (§2.1) by following Armstrong in arguing that truthmakers must be states of affairs. But I criticise Armstrong’s misconception of what his Truthmaker Argument establishes. In §2.2 we arrive at one of the central topics of the dissertation. I begin by discussing the Usual Approach and separatism (§2.2.1). §2.2.2 opens with critical discussion of Armstrong’s account of contingency and possibility, which leads to an exploration of possible justifications for the separatist strategy. In §2.2.3, I look at the origins and the popularity of that strategy and conclude that we have good reasons to question its legitimacy. I

discuss also how we can release ourselves from the “myth” of non-modal states of affairs. In §2.3 I present what is one of the central claims of the dissertation – the Principle of Modal Ubiquity. Having discussed that, and certain of its consequences in modal philosophy, I move, in §2.3.1 to the topic of possible worlds. In §2.3.2 I argue for a Timid Fictionalist theory of worlds. The chapter closes (in §2.3.3) with another look at the source question, and with an introduction to what is the topic of Chapter Three: the issue of the *locus* of modal status.

The first task in Chapter Three is to motivate the locus question (§3.1). From there, I move to consideration of the various types of answer which have been given. In §3.2 I argue against the idea that particulars might be capable of (literally) bearing of modal status, and against states of affairs for that role in §3.3. In §3.4 I consider and dismiss the “modal-properties” account, most prominently advocated by David Wiggins. One of the critics of that account is Colin McGinn and his “Copula-Modifier” theory is examined in §3.6. Before doing that, however, I present (§3.5) what I regard as an important point about universals and their association with modality within states of affairs. Having rejected McGinn’s theory in §3.6, I go on to recommend a “Refined Copula-Modifier” account in §3.7. The details of the account are important and are set out in the first two subsections of §3.7. Having rejected separatism in §2.2, I owe an account of just how it is we may regard possibility as an aspect of contingent states of affairs, an aspect alongside property-possession. The rest of §3.7 is devoted to consideration of what the proposed theory means for modal logic, and how it compares to those other theories discussed in §§3.2 - 3.6.

As mentioned above, the fourth chapter is taken up with discussion of certain putative consequences of the theory – in particular, of PMU. §4.1 sets out the kind of answer we may give, in light of PMU, to the question of the source of modality (which is one way we can frame the demand for a metaphysical account of modality). In §4.2 I argue that PMU affords us a direct answer to the function question, and in §4.3 I consider whether PMU might entail a new status for modal epistemology. In §4.4. I discuss the relationship between *de re* modality and

essence, in light of the proposed theory. In §4.5 I suggest that that theory might also contain within it the resources needed to build an account of the truthmakers for negative truths. The fourth chapter also contains my concluding remarks on the dissertation.

Chapter One: Towards A Metaphysics

§1.0 Introduction

Our core concerns in the philosophy of modality may be broken down as follows. One type of concern is with the *clarity* or intelligibility of modalising. Another is over the *function* or utility of that practice. A third is over the metaphysics and a fourth over the epistemology of modality. I shall begin here by briefly discussing the first two. The wider intention here is to clarify how the issues I am concerned with in this dissertation relate to others which have featured prominently in the literature on modality – to supply a context for the investigations which are central to this dissertation.

At the start of the first section, §1.1, I characterise the clarity issue. I go on to (briefly) discuss Quine's negative views on the clarity of modal discourse and how they figure in his rejection of modalising. I note one respect in which such a rejection could be seen as an excessive, and possibly incoherent, response to the putative deficiencies in our logical and semantical accounts of modality.

§1.2 concerns the function issue. Having settled upon a particular formulation of the question, I argue that it is difficult to see how one might respond to it without using modal vocabulary, and that this might be a problem for those wishing to deny modalising a role. I briefly discuss Quine's views on the issue and conclude that it is plausible to think that his rejection of modality was at least partly based upon a negative view of the utility of modalising. I say that the function question is one which can and should be taken by *all* theorists at an early stage in the philosophy of modality. I finish by offering a response to sceptics about the utility of modalising, which is intended to (at least temporarily) shift the burden of proof from the modaliser to the sceptic. My direct answer to the function question, however, will not come until Chapter Four (§4.2). In §1.3 I discuss the manner in

which the demand for a metaphysics of modality has been framed in terms of a demand for the *source* of modality. I examine what the source question might presuppose and what kind of answer would be appropriate to it.

The real work of the chapter begins in §1.4. I open that section with my assumption of realism about universals (RU) and follow that with my claim that anyone who accepts universals has a choice when it comes to the nature of particulars: either bundle theory or substratum theory. In §1.4.1, I argue that the bundle-of-universals view of particulars is not, at least as I present it, a viable option given the problems facing it. I go on to consider (§1.4.2) Armstrong's position on particulars and argue that it is – contrary to what he thinks – an *anti*-realist position. But, given his commitment to states of affairs, he cannot coherently maintain that anti-realism. He should, I argue, bite the bullet and declare himself a substratum theorist. So, Armstrong does not offer us any “third way” between bundle and substratum theories. The conclusion is that those who accept RU should be substratum theorists.

The argument of §1.5.1 is that states of affairs are required in this metaphysics of particulars and universals. They are required if we are to account for the difference between a particular having a property and not having the property. An atomic state of affairs will be defined as a particular or particulars exemplifying a universal, and, in §1.5.2, I propose a relational view of exemplification. I also discuss in that sub-section Armstrong's (pre-1999) views on exemplification and conclude that he has not really offered an account of that at all. In §1.5.3, I consider and reject Donald Baxter's non-relational theory of exemplification (lately adopted by Armstrong). Bradley's regress objection to relational accounts of exemplification is the subject of §1.5.4, and I close the chapter, in §1.5.5, by offering further thoughts on my relational account and discussing William Vallicella's treatment of the issue of exemplification.

§1.1 The Clarity Issue

The issue of the clarity or intelligibility of modal discourse may be broken down into two components: concern over the informal interpretation of that discourse and concern over its formal interpretation. The former encompasses worries about the availability of satisfactory accounts of the *meaning* of the modal terms. In the latter we find the myriad issues associated with the provision of accounts of the *logical* behaviour of the modal terms. So, with the “Clarity Issue” we have a grouping of two related sets of worries – one semantical the other logical. Obviously, the relationship is an intimate one; the informal semantics informs our construction of formal systems of modal logic inasmuch as it is usually hoped that the *formal* semantics for those systems complement the intuitions explored at the informal stage.

The clarity question was pushed to the foreground in modal philosophy through the work of W.V. Quine. He wished to reject the modal notions because he felt they were not sufficiently clear, intelligible.²⁷ His rejectionism (as we might call it) can be formulated: “We have no satisfactory account of the meaning of the modal terms and none of their logical behaviour”. It doesn’t seem as if he can claim that such accounts are *impossible*, for that would be to employ the very notions he wishes to reject within his formulation of that rejection.²⁸ The main themes in Quine’s modal rejectionism are as follows. Firstly, he thinks modal logic was born of a conflation of use and mention. Secondly, he thinks that quantification into modal contexts produces opacity, and that rehabilitating modality *de re* means either sacrificing the modal distinctions or employing the concept of (Aristotelian) essence, which is, he thinks, more baffling ‘than the modalities themselves’.²⁹

²⁷ The *loci classici* of his rejection of modality are his: “The Problem of Interpreting Modal Logic”, *The Journal of Symbolic Logic*, 12:2 (Jun., 1947), pp.43-48; “Two Dogmas of Empiricism” and “Reference and Modality”, both in his *From a Logical Point of View*, 2nd ed., (Harvard University Press, 1980); “Three Grades of Modal Involvement” in his *The Ways of Paradox and Other Essays*, (Harvard University Press, 1976); and §41 of his *Word and Object*. (The Technology Press of M.I.T, 1960).

²⁸ Crispin Wright, *Wittgenstein on the Foundations of Mathematics*, (Duckworth, 1980), p. 205: a philosopher’s rejection of a concept ‘may be based on the belief that a satisfactory explanation [of the concept] cannot be given’. That’s fine in many cases but one wishing to reject modal notions *tout court* could not consistently make this type of claim.

²⁹ Quine (1960), p. 197.

Thirdly, he believes that we are not in a position to provide a non-circular definition of necessity. The first two themes may be said to concern the possibility of getting-up an acceptable logic for the modal notions, while the third concerns our ability to understand modality at the informal level. So, Quine thinks we do not have either an acceptable logic for the modal notions, nor a satisfactory (informal) semantical account of them. These concerns are, it seems, for Quine, sufficient to ground a rejection of the modal notions. Now, a modal formulation of rejectionism may be coherent if the rejectionist is seeking to do away with modality *de re* but not with modality *de dicto*. Quine's rejection of quantified modal logic comes down to his belief that the only way to do that logic is by appeal to Aristotelian essentialism, which is, for him, an 'unreasonable' philosophy. When he moves then to reject *de re* modalising he does not, however, leave things there. He says that, if we have to employ essentialism to do quantified modal logic, then.....

.....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.³⁰

So Quine would not, it seems, wish to offer a rejectionism restricted to *de re* modality. Therefore, if his rejectionism is to be coherent, it must be formulated without appeal to modal notions.³¹

³⁰ "Reference and Modality", in Quine (1980), p.156.

³¹ Some believe that Quine takes an error-theoretic, and not a rejectionist, stance on modality (see Crispin Wright, *Realism, Meaning and Truth*, (OUP, 1986), p.191, Bob Hale, "Modality", in *A Companion to the Philosophy of Language*, (Blackwell, 1997) and Matti Eklund, "Antirealism About Modality", (forthcoming), p.3). Supposing that the question of the basic acceptability of the modal notions turns on their clarity, I think this is incorrect. Quine says the modal notions are unclear, unintelligible, etc.. An error-theory, however, will say that the germane discourse *is* clear, intelligible, coherent, etc., but that it is, in a sense, worthless – it never enables us to express truths. As Richard Joyce, *The Myth of Morality*, (2001), p.4, tells us, an error-theory about a discourse holds that it is 'smooth-running, useful and familiar....apparently with clear paradigms and foils', but that it is nonetheless 'systematically flawed'. Another possibility is that Quine wished to offer a *projectivist* view of modality. But a similar problem afflicts this as did the suggestion that he was an error-theorist. The projectivist (expressivist, non-cognitivist) says that modal claims are not assertoric, and so not truth-apt – that they serve to express attitudes of ours towards the embedded statements in modal contexts. But projectivists say nothing about modal concepts being unintelligible or fundamentally disreputable. Maybe Simon Blackburn, "Morals and Modals", in G.F. MacDonald & C. Wright (eds.), *Fact, Science and Morality: Essays on A.J. Ayer's*

I shall not attempt to answer Quine's concerns here, for in this context I could not devote anything like the space which would be required to do so. I shall merely say the following. As I have formulated it, the clarity issue should not, in my view, be the most pressing of our concerns in the philosophy of modality. Many would, I suspect, agree with me in regarding outright rejection of the modal notions as excessive in light of the progress which has been made in modal philosophy over the past fifty or so years. We may (and I would say most do) think of our semantical and logical accounts of modality as incomplete in various respects, but this doesn't translate into a widespread feeling that they should be dismissed. Quite the contrary in fact – I would say this spurs us on in the work of refining and expanding those accounts. So, to me Quine's rejectionist proposal looks extreme. If we want to nit-pick, we could say that he has no way of ruling out the *possibility* of completely satisfactory accounts of modality (however it might be that we would recognise them as such were we to have them). To put it another way, he has no way of establishing the *impossibility* of such accounts. The burden of proof is, I suggest, with the one who would do away with notions so deeply entrenched in ordinary and scientific thought and discourse. Quine might perhaps dispute the depth or legitimacy of that entrenchment, but that's another matter. I shall leave the clarity issue with the thought that there is at least room for debate over where the burden of proof lies – whether it is with the defender of modalising or the sceptic.

'*Language, Truth and Logic*', (Blackwell, 1986), pp.206-207, gets to the truth of it when he says that although Quine *did* want to be a modal projectivist, he took 'the projective view of modality to be a relegation: it unfits the notion for serious science'. But if Quine felt that the only account we *have* of modality – namely, the projectivist one – is not the kind of account we should have for respectable notions, then doesn't he still qualify as a rejectionist by my lights? Doesn't he still think we lack a satisfactory account of modality?

§1.2 *The Function Question*

There are a number of ways of formulating the function (or “utility”) question but the best candidates seem to be:

- (i) What role has modalising in guiding our practical or intellectual conduct?
- (ii) In terms of the goals we set for philosophical or scientific or (in general) theoretical inquiry, what role does modal judgement play?
- (iii) In terms of our practical or intellectual lives, why are we interested in establishing the modal facts?

Now, (i) looks to me the best formulation. An answer to (ii) might be informative to one person but not to another, given that different people, or communities (historical or otherwise), could have different ideas of what is or should be going on in philosophy, science, etc.. That kind of necessarily loose-ended situation is avoided by adopting (i) as our preferred formulation. (iii) presupposes too much to be a question which a modal non-realist could comfortably take, and it would be wrong to build into our formulation of this question realist (or for that matter non-realist) assumptions about modality. (i) gets to the heart of the matter succinctly without these kinds of drawbacks.

Whichever way we might eventually choose, it certainly seems as if we cannot adequately formulate the function question in wholly non-modal terms. Surely we should always be looking to ask something like “Why do we *need* to modalise?” or “Is modalising dispensable?”, and both of these involve modal notions. It may, of course, turn out that we *need* to modalise only in a very weak sense of “need”, e.g. to make some aspects of our practical or intellectual lives run a little more smoothly than they would were we to abstain from modalising. If this is correct, then the position of anyone wishing to deny that modalising has *any* role whatever will surely look so extreme as to be *prima facie* implausible.

Another issue is whether we should seek a univocal role for modal judgement or instead look for what role judgements of *logical* necessity might have, and what role judgements of *metaphysical* necessity might have, and so on for the other kinds of modality (nomic, epistemic, deontic, etc.). Intuitively, judgements of these various modal kinds will not have one and the same role in our lives – surely the judgement that it is logically necessary that *P* has a different kind of utility to us than (say) the judgement that it is nomically necessary that *P*? In order to properly address this question, one would – I suspect – have to go a long way down the road towards answering the function question itself. And because that is not my (immediate) aim, I shall just assume for the time being that different kinds of modal judgement may be said to play different roles in our lives.³²

Having touched on the matter in connection with formulation (iii) above, I want to briefly consider what presuppositions our preferred formulation, (i), itself has. In asking of a discourse with Φ as its central predicate, “what role does Φ -judgement have in our lives?”, are we presupposing Φ -realism? It’s plausible that one might wish to reject modalising because one feels it has no distinctive role to play for us. Indeed, some believe that is – or, perhaps, should be – Quine’s real reason for rejecting modality. As discussed above, a popular view is that Quine was sceptical about the *clarity* of modal discourse. In recent work, however, John Divers has argued that Quine – or Quineans – ought to be construed as sceptical about the *utility* of modalising (in particular, *de re* modalising).³³ I take Divers as saying that Quine *had* doubts about the clarity of modalising, but he *also* had doubts about its utility. Certainly, in various places Quine can indeed be found putting forward a

³² In his brief discussion of the function issue, Colin McGinn, “Modal Reality”, in R. Healy (ed.), *Reduction, Time and Reality*, (CUP, 1981), p.171, appears to assume as much. He talks about the utility of modal notions in discussions of essentialism, in science and in connection with the concept of logical consequence, and it is highly unlikely that he believed the one type of modality to be involved in all three cases, given that he distinguishes between metaphysical, nomological and logical modality throughout his paper (see, e.g., pp.173, 183).

³³ See especially his “Quinean Scepticism About De Re Modality After David Lewis”, *European Journal of Philosophy*, 15:1 (2007), pp.40-62. Here we find a rare and very welcome contemporary treatment of one of the basic problems of modality – the function problem. Lucidly and forcefully, Divers urges philosophers of modality to “go back” to this, one of the most urgent yet neglected issues in the area. The function problem first came to my notice through Divers’s work and it was in considering that problem that I was led to formulate many of the central contentions of this dissertation. See also Divers’s “Agnosticism About Other Worlds: A New Antirealist Programme in Modality”, *Philosophy and Phenomenological Research*, 69:3 (Nov., 2004), pp.659-684.

utility scepticism, which he appears to regard as *complementary to* his clarity scepticism, for example:

...I do not myself make sense of essentialism, or of metaphysical necessity. If I could see how these notions were going to be useful in somehow integrating or simplifying our system of the world, I would accept them anyway. In science one introduces new concepts that are not reducible to others. But.... I have no such hopes for essentialism or metaphysical necessity.³⁴

Now, Divers' contention is that Quinean doubts about the clarity of *de re* modalising can be met using the resources provided within David Lewis's realist, counterpart-theoretic account, and that in light of this the proper focus for Quinean scepticism about *de re* modalising 'is the continuing absence of any substantial account of the utility or function of such judgement' (2007, 40). He considers various lines of defence a friend of *de re* modality might employ against the re-focused Quinean sceptic but finds potential problems with each, concluding that a viable account of the function of *de re* modalising is urgently needed and that, in its absence, Quinean function-scepticism should be considered alive and well. Now, I won't consider here how successful Divers is in his argument that Quine's clarity doubts can be met with Lewisian resources. The point remains, and Divers would agree, that whatever about his utility scepticism Quine *had* doubts about the clarity of modalising – whether or not they can be countered as Divers suggests is another matter. Nor will I consider the pros and cons of the modaliser's defence strategies, which Divers outlines. My actual response to the function question will come later on (in Chapter Four, §4.2), although it will, roughly, fall under one of those strategies. All I want to do at present is note that Quine might properly be taken as one wishing to reject modal discourse on the grounds that we lack a satisfactory account of its utility. The salient point being that rejectionism need not be based *solely* on doubts about clarity – it might also be based on doubts about its utility, or even based wholly on such doubts. So, does the question – “what role does Φ -judgement have in our lives?” – presuppose the *acceptability* of Φ -

³⁴ “Comment on Marcus” in *Perspectives on Quine*, Barrett & Gibson, eds., (Basil Blackwell, 1990), p.244.

discourse? I don't think so. Surely a direct answer to this could be the one a utility-rejectionist would want to give, namely: "It has no role". And a plausible account of presupposition has it that a presupposition of question Q is any proposition which is implied by all direct answers to Q . The rejectionist's is surely a direct answer to the function question about Φ -discourse, and it certainly doesn't imply the acceptability of that discourse; therefore, the function question doesn't presuppose that.³⁵

A similar response can be made I think in the case of the various modal non-realisms. A reductionist might say that Φ -discourse has no *distinctive* role, that the role it plays may be filled by employing γ -discourse, where the reductionist is claiming that Φ -discourse is reducible to γ -discourse. The reductionist will usually want to claim that the one is reducible to the other because γ -discourse is somehow more basic, and hopefully less problematic, than Φ -discourse. Again, the formulation of the function question seems to presuppose nothing to which the reductionist might wish to object. A projectivist could say Φ -discourse *has* a role, only perhaps not the role commonly ascribed to it (e.g. that of enabling us to state the Φ -facts). An error-theorist will (usually) say that it has the same role given it in realist accounts, although Φ -statements will always come out false. So, our formulation – (i) – involves its employers in no prejudgement as to the utility of modalising. Even if we were to say Φ -discourse *has* a role, we could still adopt a reductionist, projectivist or error-theoretic stance on that discourse; not that we would even need to say that much – our formulation doesn't, after all, presuppose that it *has* a role.

The quietist might say that it is not the job of philosophy to 'call to account any such practice' as modalising.³⁶ So, our preferred formulation of the function question would, I take it, presuppose a non-quietist stance on modalising. But couldn't we say that about most of the popular formulations of most of the big

³⁵ This account of presupposition is due to Bas van Fraassen, *The Scientific Image*, (Oxford, Clarendon Press, 1980), who follows Belnap & Steel, *The Logic of Questions and Answers*, (Yale University Press, 1976) in certain details.

³⁶ Divers (2007), p.58.

questions tackled by philosophers? So, I'm not sure this should count as a serious deficiency afflicting our formulation of the function question.

If we assume that non-quietist stance, as I wish to, one thing is clear about the function question: it needs to be taken early in philosophising about modality. It seems as if our very first task should be to get up some sort of account of the informal, pre-philosophical use of the modal terms. But the function question would need to be the very next item on our order of business, for we hardly want to do a lot of difficult logical, metaphysical and epistemological work on modality only to find on getting around to the function issue that modalising has no distinctive role in our lives. As mentioned, my actual direct *answer* to the function question will come later on. At this point I merely want to offer a response to the utility-sceptic which will afford me the breathing space to develop my metaphysical theory of modality. It will then be possible to derive from that theory an account of the utility of modalising – and, I think, a strong one at that. So, without further ado, let us get on with making the initial response.

The utility-sceptic [hereafter “the sceptic”] demands of the modaliser an account of role of modal judgement in our practical or intellectual lives. The sceptic can see no distinctive role for it, and so regards it as dispensable. He says to the modaliser:

Why do you do it? I think we can get by perfectly well without making modal judgements, but you say we can not – why can we not?

If the sceptic has some fairly plausible picture of how we *would* get by well enough in the absence of modalising, then the burden of proof appears to lie with the modaliser. The sceptic looks perfectly justified in asking:

Have I gone wrong somewhere in putting together my picture of our practical and intellectual lives, one wherein these are seen to run just as smoothly in the absence of modalising as the modaliser believes they do when we engage in that form of judgement? If you think I have, then

specify my error. If you think I have misrepresented some aspect of our lives such that the *appearance* of harmony in the absence of modalising (which we find in my picture) depends in some way on so misrepresenting things, then tell me what I have misrepresented.

The modaliser apparently needs to make a reply along the following lines:

The sceptic has misrepresented aspect *A* of our practical or intellectual lives and this misrepresentation facilitates the coherence (plausibility, apparent adequacy) of the sceptic's picture. If we correct the misrepresentation, and make whatever further adjustments to the picture are necessitated by our doing that, then the modal-free picture of our lives falls into incoherence (or implausibility, or inadequacy). We see then that life can *not* run as it does (or as smoothly as it does) in the absence of modalising.

The modaliser cannot coherently continue to engage in modalising in the face of the sceptical challenge without believing there is something wrong with the sceptic's picture in spite of its *prima facie* plausibility. But the modaliser might at this point turn the tables on the sceptic by asking whether he thinks modalising is entrenched across ordinary and "serious" (scientific, theoretical) thought and discourse. The fact is, I see no way for one to deny that modalising *is* so entrenched.³⁷ If that is the case, then the sceptic would have to agree that modalising *is* so entrenched. However, the sceptic who takes this line now has to make this entrenchment consonant with their denial of a distinctive role for modalising. They might say:

Yes, modalising is well entrenched in ordinary and scientific thought and discourse, but it need not be. The entrenchment is *revisable* insofar as modalising is an artifact of philosophy which has, over time, seeped down

³⁷ Short of actually giving lots of examples of occurrences of the modal notions in various theoretical and everyday settings, I'm not sure how *one* would actually *argue* that the modal notions are entrenched. Weak though such a response might be, it would still seem enough to fend off those who would deny that modality is deeply entrenched.

into ordinary and scientific thought and discourse. Philosophy has, in this respect, bequeathed us an artificial adulteration of such thought and discourse. Those would get along just fine if we were to eradicate that adulteration, so we are under no compulsion to perpetuate our participation in this unfortunate legacy.

But the modaliser can now make the obvious objection that the sceptic must himself employ modal terms in the formulation of his position – he *must* modalise in order to express why we *need not* modalise, and this looks incoherent. The next best form of scepticism – which denies modalising *is* in fact so entrenched – is, I am assuming, a non-starter. And so, I believe that the burden of proof can, at least temporarily, be shifted back onto the sceptic. The sceptic must show us why we don't need to modalise without, so to speak, showing us that. They must formulate their thesis of the dispensability of modal judgement without employing modal terms in that formulation.³⁸

This kind of response to the utility-sceptic is a version of what Divers calls the 'circularity' objection.³⁹ He thinks one can, without vicious circularity, respond to the function question by saying that we *must* modalise in order to achieve this or that. And I agree with him. If the goal is to give an account of the function of modalising – as opposed to an analysis of the modal notions – then we may indeed *use* those notions in giving the account. But the utility-sceptic is one who thinks that modalising has *no* role, and so their aim will not be to give an "account" of its role, rather to give an account of its *lack* of utility. They must tell us why we don't need to engage in that form of judgement. But in doing that they paint themselves into a corner: they must admit the (highly paradoxical) claim that modalising *is*

³⁸ Besides this main point here, I want to note my agreement with Kripke's claim that

[i]f someone thinks that the notion of a necessary or contingent property (...consider just the *meaningfulness* of the notion) is a philosopher's notion with no intuitive content, he is wrong.....people who think the notion of accidental property unintuitive have intuition reversed, I think. (*Naming and Necessity* (1980), pp.41-2 [italics in original].)

I won't argue for this here because the question of the *source* of modalising's widespread entrenchment has no significant bearing on my argument for the relocation of the burden of proof from the modaliser to the sceptic.

³⁹ Divers "Modal Commitments" (forthcoming), p.10.

needed in order to express why it is not needed, that it has *at least* this (rather perverted) role. The sceptic is not *explaining* the role of modalising, but is denying it *has* any role. Thus, the sceptic cannot legitimately employ modal locutions in the formulation of that denial, as one who does *not* wish to make such a denial can. If I wish to say modalising has role *R*, then I can use modal locutions in spelling out *R* and simply say that my analysis of those locutions is a separate matter, another day's work. If modalising has a role in expressing the utility-sceptic's position, then it *has* a role, therefore the scepticism is incoherent (or self-defeating).

So, that's my initial response to the utility-sceptic's challenge. But the function question is of interest to everyone concerned with modality – it is not *only* of relevance in debates with those wishing to reject modalising. Those who accept the legitimacy of modalising (“modal acceptivists”) feel the lack of an account of the function of modal judgement just as keenly as the would-be utility-sceptics who wish to do away with such judgement. As Divers urges, philosophers of modality must legitimise modality to *at least* the extent that it is clear why we go in for modal judgement⁴⁰. And there are a number of ways we can go about legitimising it: we can follow the realist and say that modalising has a distinctive role *R*, or the reductionist, saying that modalising has no role distinct from that of base discourse *D*, or the projectivist, according to whom modalising has a role in terms of projection of attitudes, or, finally, the error-theorist, who holds that although modalising has role *R* (as the realist says), it never enables us to express

⁴⁰ It's not – at this stage – necessary for me to consider the other strategies Divers discusses for avoiding the function question (i.e., besides the objection from circularity). Those strategies include denying that we can give an instrumental account of modal judgement; making the ‘bluntly cognitive response’ (p.15) that the function of modalising is just to get at the modal facts; asserting the essentiality to thought of modal judgement; claiming that our non-modal thought will always have modal implications; claiming that modalising (in some sense) comes “for free” and that this deflates the force of the function worry; and finally, claiming that although we have no account of its function, its having *some* function is put beyond doubt by the degree to which modalising is entrenched in our thought and discourse. This latter strategy is certainly related to part of my response to the utility-sceptic (the part where we seek to drive the sceptic to say that although it is entrenched, it need not be). Still, I am not appealing to that (putative) entrenchment in order to *avoid* giving an account of the function of modalising, rather I am employing it in seeking to hold off the sceptical threat. The same, I think, may be said, *mutatis mutandis*, with respect to the third strategy listed: that wherein we claim that modalising is essential to thought. (This bears a relation to my circularity-based objection to the sceptic.) I will, however, be coming back to the so-called ‘bluntly cognitive response’, although I am not convinced that this represents a strategy for *avoiding* the function question. More on this in Chapter Four, §4.2.

truths. So, although I will assume that the utility-sceptic has no way of coherently formulating their position, I will nevertheless offer a direct answer to the function question. Because even if we think – against the sceptic – that modalising *has* a role, we still want to clarify that role as much as possible.

§1.3 *The Source Question*

The third in our list of basic areas of concern over modality is the question of its metaphysics. In a well known paper, Michael Dummett says: '[t]he philosophical problem of necessity is twofold: what is its source, and how do we recognise it?'.⁴¹ Dummett's idea is that we have a twofold problem, that of the metaphysics and epistemology of modality. In taking these two obviously distinct types of problem in the one go, Dummett is paying homage to the perennial philosophical desire to meet what Christopher Peacocke has recently described as the "Integration Challenge" – the challenge of integrating our preferred metaphysical and epistemological accounts of modality.⁴² But, as venerable and admirable as the desire to meet that challenge might be, I cannot, unfortunately, attempt to do so here. Save for a brief discussion in Chapter Four (§4.3), I shall not be considering the epistemological question in this dissertation – my concern is with the metaphysics of modality.

Now, for all its apparent felicity⁴³, Dummett's formulation is not without its problems. Bob Hale, for example, thinks it presupposes modal realism, although I am inclined to think it only presupposes modal *cognitivism*.⁴⁴ Surely a reductionist

⁴¹ "Wittgenstein's Philosophy of Mathematics", p.327, *The Philosophical Review*, 68:3 (Jul., 1959), 324-348. Reprinted in Dummett, *Truth and Other Enigmas*, (Harvard University Press, 1978), pp.166-185.

⁴² The Integration Challenge is discussed in Peacocke's *Being Known*, (Oxford University Press, 1999), see especially Chapter 4 – "Necessity".

⁴³ Wright (1980), p.467 calls the formulation 'compelling'; Hale (1997), p.490 says: 'As pinpointing what has been the preoccupation of much philosophical discussion of necessity, Dummett's formulation can scarcely be faulted'.

⁴⁴ Hale (1997), p.487. To see that cognitivism amounts to something less than realism, we need only recognise that, for example, where a Dummettian antirealist about modality argues that modal truth-conditions are evidentially constrained, she is nevertheless putting forward a cognitivist view. Such an antirealist is just as much a cognitivist as any realist is. (An aside here: It's not actually clear whether there can *be* Dummettian anti-realists about modality. Colin McGinn (1981), pp.167-

could reply that the source of necessity is *X* and we recognise it in virtue of *Y*. With Dummett's formulation we seem to ask nothing to which the reductionist (a modal *non*-realist if anyone is) could not directly reply – i.e. without challenging the question's presuppositions. The modal non-cognitivist would, however, have to question the presupposition that necessity *is* actually something we recognise, and so could not (it seems) offer a direct answer to the twofold question as currently formulated. The simple solution is to replace Dummett's formulation with something like: what is the source of necessity and, if necessity is apt for recognition, how do we recognise it?⁴⁵

A perhaps deeper problem is whether the source question can be satisfactorily answered by a *non-reductive* account of modality. If it demands a reductive account, then far from presupposing realism, as Hale thought it (in virtue of the epistemological component), Dummett's formulation would actually presuppose a form of *anti*-realism. In asking after the source of *X*, do we presuppose that *X* must obtain in virtue of something further, *Y*? If we do, then Dummett's formulation should, I think, be abandoned. The statement of a problem which exercises realist and nonrealist philosophers of modality alike should not inherently favour any one or other of the possible responses to it. I certainly cannot consider here the general question of the form of genuine explanations, so I propose that we take Dummett's

8, argues that 'the shape realism takes with respect to modal sentences does not easily fit the mould Dummett casts'. Hale, "Realism and Its Opponents", in Hale & Wright (1997), p.284 says that Dummett neglects the ontological aspect of modal realist-antirealist disputes.)

⁴⁵ Crispin Wright (1980), p.342 rehearses the usual cognitivist outlook: 'we think of necessity as something of which we have a cognitive apprehension... We are not inclined to ask: *Do* we recognise necessity? Or: Is recognition of such a thing even possible?'. The common assumption is that any account which calls the possibility of such apprehension into question would not be acceptable – we should see it as fundamentally flawed. Well, any account which calls the possibility of such apprehension into question would, certainly, go against the commonsense cognitivist tide. (Of course, Wright himself wants to give just such a non-cognitivist account.) But we could hardly say there are grounds here for a serious objection against non-cognitivism, or against a formulation of the "problem of necessity" designed to allow for the possibility of a non-cognitivist response. I tend to agree with Blackburn's view (in "Wittgenstein, Wright, Rorty, and Minimalism", *Mind*, 107:425, (Jan., 1998), pp.157-181) that when commonsense is the standard against which theory is judged 'cognitivism and realism always win easily' (p.172). The tacit conclusion here is, of course, that adoption of commonsense as our standard *unfairly* tips the scales in favour of cognitivism. The formulation recommended above offers an attractive impartiality to one wishing to merely *ask* after the metaphysics and epistemology of modality. We should not want to prejudice the question of the truth-aptitude of modal discourse in merely stating the basic worries thrown up by that discourse.

source question quite loosely – that is, as simply as asking after a metaphysical account of modality.

§1.4 *The Background Metaphysics*

We are moving on now from consideration of those basic problems of modal theory to more substantial matters. As signaled in the Introduction, I am taking a “traditional” approach to truthmaker theory. I am saying that truthmakers *are* entities – that if p has a truthmaker T , then T will be an entity. Of course, the question is: *which* kinds of entities are suitable for the role of truthmakers? I have not, as yet, actually made a commitment to any particular ontological category. But the time has come to do so, for we cannot even begin to discuss truthmaking in general, or truthmakers for de re modal truths in particular, without first having settled upon *some* form of an ontology. My understanding is that an ontological category demarcates a particular way of having being. Defenders of an n -category ontology (where $n > 1$) will hold that being may be enjoyed (or perhaps “achieved”) in any of n different ways. If, for example, we have two categories in our ontology, C_1 and C_2 , then for any entity e , it will be the case that e achieves the status of an entity – i.e., e is real, has being – in either the C_1 -manner or in the C_2 -manner. In countenancing a given category C we are committing ourselves to the reality of some C -entities.⁴⁶

I shall assume realism about universals:

⁴⁶ By ‘entity’ I just mean something having being, as Jonathan Lowe, *The Four Category Ontology* (Clarendon Press, 2006), p.5 says: ‘beings, in the most general sense of that term’. In acknowledging that there is an ontological category C , that being may be had in the C -manner, our commitment to entities having reality in that manner is unlike a commitment we might make to the existence of entities satisfying some predicate or other. Commitments of the latter type are undertaken (or eschewed) during investigation of how our various ontological categories ought to be *sub-divided*. For example, suppose we were to admit a category of particulars, and so commit ourselves to entities which have their reality as particulars do (however that might turn out to be). This would, then, be different from committing ourselves to the existence of particulars satisfying the predicate “...is a set”, or the predicate “...is human”. In adopting a multiple-category ontology, we are denying that entities are at the most fundamental level homogeneous, the view that being is enjoyed in one-and-only-one way. A multiple-category ontologist must commit themselves to the *reality* of examples of each way-of-being, on pain of being in contravention of Ockham’s Razor. This is, at least, how I think we should read the purely metaphysical version of that principle – as saying that we ought not posit unnecessary ontological categories. An unnecessary category is, in my view, one demarcating a manner of being enjoyed by no entity.

RU: Properties and relations are universals

There are, of course, scores of different theories of the nature of properties. According to some, properties form an ontological category all of their own, a *sui generis* category. For example, Platonists (Transcendent Realists) about universals are traditionally regarded as holding such a view. According to others, properties form a sub-category of a genuinely *sui generis* category. An example of this sort of view is trope theory, wherein properties are seen as a sub-category of the fully *sui generis* category of particulars. Of course, there are also a plethora of anti-realist accounts of properties, although I shall not discuss those here.⁴⁷ Nor shall I attempt to defend RU here – the debate over the reality of universals is simply too vast to get into in this context and, as I have already said, we must make *some* brute assumptions about metaphysics if we are to get to the real topic here – modality.⁴⁸

With that assumption made, we must now consider the nature of particulars. The choice here is between *bundle* theory and *substratum* theory.⁴⁹ More accurately, given RU, the choice is between substratum theory and a bundle-of-universals view.⁵⁰ Substratum theorists will contend that there is more to a particular than its properties, and bundle theorists will deny this. According to bundle theories, a particular is nothing more than its properties. The substratum theorist will hold that there is a core of particularity which is (somehow) within the particular, in addition to its properties. My contention here is that if one takes properties to be

⁴⁷ See, for example, Gonzalo Rodriguez-Pereyra, *Resemblance Nominalism: A Solution to the Problem of Universals*, (OUP, 2002); David Lewis defends a form of class nominalism in “New Work for a Theory of Universals”, *Australasian Journal of Philosophy*, 61 (1983), pp.343–377; and Quine offers a predicate nominalism in *Ontological relativity and other essays*, (Columbia University Press, 1969), pp.139–60. A detailed overview of the various debates about properties is given in Alex Oliver’s “The Metaphysics of Properties”, *Mind*, 105:417, (Jan., 1996), pp.1–80.

⁴⁸ For what I regard as strong arguments in favour of universals see, for example, Armstrong’s *Nominalism and Realism: Universals and Scientific Realism Vol.I*, (CUP, 1978); WSA, §§3 & 4.

⁴⁹ Strictly, these are *families* of theories, for there are a variety of theories (often mutually exclusive) going under both titles.

⁵⁰ That is, RU rules out the possibility of a bundle-of-tropes view, for we cannot simultaneously hold that properties are universals *and* tropes, nor would we want to. In the same way, bundle theories involving any anti-realist conception of properties are also ruled out, if indeed such theories could be coherently developed (to the best of my knowledge, no such theory has been defended).

universals, as I do in RU, then one is forced to deny the bundle theory and, so, to accept the substratum view.

I might also add here that if we are assuming the Platonic (Transcendent Realist) view of universals, this would also lead us quite painlessly to the substratum view. The reason being that a theory according to which particulars are merely bundles of transcendent universals appears to be utterly implausible. Universals, on the Platonic view, are abstract entities, existing in “Plato’s Heaven”. But some particulars are, I hope we would all agree, most definitely concrete – for example, Mt.Rushmore. How then could a concrete particular like Mt.Rushmore be *nothing* more than a bundle of non-concrete, abstract, universals?⁵¹ So, believers in transcendent universals should not it seems be bundle theorists. But I shall not assume Aristotelianism about universals simply in order to take the easy route away from bundle theory; I shall remain neutral between Platonists and Aristotelian-Armstrongians as to the nature of universals: whether they are transcendent or immanent. Therefore, my task is to show that an Immanent Realist must also adopt a substratum view. To that end, let us consider the plausibility of a bundle-of-immanent-universals account of particulars (hereafter, simply “bundle theory”).

§1.4.1 Particulars as Bundles of Immanent Universals

I intend to argue against bundle theory by pressing a very well-known objection to it. My argument will be that this is so serious an objection that bundle theory ought to be considered implausible in the absence of a satisfactory rebuttal. It is my belief that no such rebuttal has been offered, and so that the theory must be ruled-out as an option for those in the market for a theory of particulars. It may even be felt that the objection is strong enough to warrant *permanent* eschewal of the (universals version of) bundle theory, that it highlights an irreparable flaw within

⁵¹ One of the most prominent defenders of the bundle-of-universals view, John O’Leary-Hawthorne, admits, for this reason, that “[t]o enjoy even prima facie plausibility, the bundle theory must deploy an “immanent” conception of universals as opposed to a “transcendent” conception’, “The Bundle Theory of Substance and the Identity of Indiscernibles”, p.191, *Analysis*, 55:3, (Jul., 1995), pp.191-196.

that theory. I, however, will not be pushing this line. I merely want to argue that *as things stand* bundle theory is not a plausible option. I shall press the objection that John O’Leary-Hawthorne, a staunch defender of bundle theory, takes himself to be rebutting in his (1995).⁵² It goes as follows.

The bundle theorist believes that the principle of the Identity of Indiscernibles is true. The strong version of that – the one O’Leary-Hawthorne discusses – says that, necessarily, ‘there are no distinct things with all their universals in common’.⁵³ A thing, for the bundle theorist, is, obviously enough, a bundle of universals and nothing more. So, if we have what we suppose to be two things, but find that they have all and only the same universals, then we have not two things but one thing. If *a* and *b* share all their universals, that is, if they are indiscernible, then according to bundle theory, $a = b$.

O’ Leary-Hawthorne:

It is commonly supposed that Max Black’s famous paper “The Identity of Indiscernibles”⁵⁴...refutes [the principle of the Identity of Indiscernibles]. Black argues...that it is perfectly possible that there be a world consisting solely of two indiscernible spheres at some distance to each other and that this world constitutes a counterexample to the principle above.

Black himself:

Isn’t it logically possible that the universe should have contained nothing but two exactly similar spheres? We might suppose that each was made of chemically pure iron, had a diameter of one mile, that they had the same temperature, colour, and so on, and that nothing else existed. Then every quality and relational characteristic of the one would also be a property of the other. Now if what I am describing is logically possible, it is not impossible for two things to have all their properties in common. This seems to me to *refute* the principle [of the Identity of Indiscernibles].⁵⁵

⁵² He draws on chapter 9 of Armstrong’s (1978).

⁵³ O’Leary-Hawthorne (1995, 191).

⁵⁴ *Mind*, 61:242, (Apr., 1952), pp.153-164.

⁵⁵ *Ibid*, p.156. I shall leave out some rather fiddly embellishments to this thought-experiment and won’t discuss what I take to be weak attempts to discredit it (such as Black’s interlocutor’s

So, if Black is right, bundle theory is wrong. If the principle of the Identity of Indiscernibles is false, then there *could* be two non-identical things sharing all their universals. And if there could, then there must be something *more* to a particular than its universals. Let's consider O'Leary-Hawthorne's response to this.

His basic thought is that if particulars are bundles of universals, and universals are immanent, i.e., capable of being simultaneously wholly present in different locations, then what we find in the world Black imagines is not two indiscernible spheres a certain distance from one another, but rather *one* multiply-located bundle of universals. There is one bundle of universals which is simultaneously present in two locations. If we regard universals as immanent, then we take it that the one universal can be, say, 5ft from itself. It can be located at point *p* and simultaneously 5ft from *p*. So, the thought goes, if we accept that much, we must accept that a *bundle* of universals can simultaneously be a certain distance from itself.

On this picture, the principle of the Identity of Indiscernibles remains unviolated. Black imagined that the one thing could not be a certain distance from itself, and so that the "two" spheres could not be one – the one could not be identical with the other. Thus, the Identity of Indiscernibles must be false. O'Leary-Hawthorne takes himself to have refuted this argument. He says that 'ordinary talk', our everyday treatment of such matters, may side with Black insofar as it suggests that there are *two* indiscernible spheres. But as metaphysicians we might accept the immanent conception of universals even though ordinary talk would seem to point us in the direction of something closer to trope theory. We talk 'about the whiteness of Socrates' nose and the whiteness of Jocasta's nose as if they were two distinct things'.⁵⁶ We content ourselves that we are justifiably revising such ordinary talk when we adopt a theory of immanent universals. So, ordinary talk is not seen as

objection that what Black describes is unverifiable and so meaningless). I will try instead to simply get straight to the heart of the matter, the real bone of contention between bundle theorists and their opponents.

⁵⁶ O'Leary-Hawthorne (1995), p.194.

decisive in that context – it doesn't exercise such a grip on us that we eschew the immanent conception of universals. It has, we might think, theoretical advantages over the other theories of properties out there and so the revision of ordinary talk which goes with its adoption is justified. Why, then, O'Leary-Hawthorne asks, should ordinary talk be decisive when it comes to Black's world? Why should we accept that there must be two and not just one sphere? The view above – that what is in that world is a single bundle of universals a certain distance from itself – is merely a *consequence* of the immanent account of universals. So, if this answer to Black's problem looks absurd, we should, O'Leary-Hawthorne suggests, look to that theory of universals as the source of the absurdity and not to bundle theory. And as far as ordinary talk is concerned, he recommends that we allow it to proceed as normal. We should let ordinary talk continue to be evaluated as true when it takes Black's world to contain two spheres, with the proviso that the "real" truth here is to be brought out using a metaphysics of bundles of immanent universals. The real truth may be that there is only one sphere but we should let it continue to suggest that there are two, just as we don't seek to revise the ordinary conception of the whiteness of Socrates' nose as being a different thing from the whiteness of Jocosta's nose, even though we believe they really are the one immanent universal.

So, that's O'Leary-Hawthorne's response to the Black problem. My reaction to it is quite simple. He recognises that many will think they detect an absurdity lurking within the picture of a particular being a certain distance from itself, but he tries to locate that (putative) absurdity with the theory of immanent universals. I don't think this move works. Those who accept that theory can – perhaps only just about – live with the idea of a universal being 5ft from itself. But I think few of those would be willing to regard universals as immanent if they believed that particulars are *nothing more* than bundles of universals. I suggest that Immanent Realism about universals *presupposes* a non-bundle theoretic conception of particulars. If that is too strong, then I suggest that the majority of Immanent Realists *assume* that particulars are more than bundles of properties. And if even *that* is too strong, then I suggest that Immanent Realists *ought to* assume as much. But I would be willing to stick to my guns and make the first, strongest, claim. Ordinary talk

should, despite what O'Leary-Hawthorne says, be decisive here. The theory which results from the coupling of an Immanent Realist account of universals and a bundle theoretic account of particulars is simply too deeply revisionary of commonsense to be plausible. I say that if particulars must be bundles, then we should give up Immanent Realism about universals. Two points must be made here though. First, bundle theory is not the *only* theory of particulars on the market – substratum theory is just as much available. Second, the Immanent Realist conception of universals has, I believe, many advantages over its rivals, and should not be given up lightly. In fact I take issue with O'Leary-Hawthorne's point that our everyday discourse inclines more to a trope theoretic view of properties than to a universals view. Surely we often say that this is *exactly* the same colour as that, or that *both* things have the very same quality (property). Isn't this just as much evidence that commonsense favours the universals view as the example O'Leary-Hawthorne gave (of the whiteness of Socrates's nose) was evidence that commonsense favours something closer to a trope theory? So, I shall stick with my assumption (RU) that properties are universals, and I shall take it that the Immanent Realist view of universals is inconsistent with bundle theory.

Before leaving the topic, however, I would like to address a defence of the Black-inspired argument against bundle theory, made recently by Dean Zimmerman. Instead of two spheres, consider two electrons having all their properties in common. Now if the electrons obey indeterministic laws, then

...even if the electron on the one side is now indiscernible from the one on the other, it remains possible that differences will emerge later on – in other words, it is possible that *this* one should have a future differing from *that* one. And even in the case of an eternally symmetrical, two-electron universe in which differences never emerge, such differences were nonetheless possible.....But you [the bundle theorist] cannot recognise this possibility: on your view the "electrons" must *really* be a single bundle, and so nothing could be true of the one but not of the other.⁵⁷

⁵⁷ Dean Zimmerman, "Distinct Indiscernibles and the Bundle Theory", pp.306-7, *Mind*, 106:422, (Apr., 1997), pp.305-309.

Call the electrons “ e ” and “ e^* ”, and suppose that both have (*inter alia*) the universal F. The apparent problem for the bundle theorist here is that at any given time t , it will be possible for e to change from being F to being – at some later time t' – G, whilst e^* fails to change at all – it is F at t and F at t' . That is, at t it will be true that “It is possible for e to be G at t' and e^* to be F at t' ”. So, there will be lots of these sorts of modal differences between e and e^* although they will – always – have the same universals. And the bundle theorist believes that if e and e^* are indiscernible, that is, share all their universals, then they are identical. But how then can the modal differences be accounted for? This looks *prima facie* to be a fairly strong defence of the Black-inspired objection to the bundle theory. A bundle theorist could, however, try to counter-object that Zimmerman has begged the question. They could say that according to bundle theory, all of a thing’s properties are essential to it – if a is F, it could not be what it is and lack F. Call this the thesis of “Global Essentialism”, the idea that all of a things properties are essential to it. So how, without begging the question, can Zimmerman ask the bundle theorist to suppose with him that it would be possible for e to change, to lose one of its universals and gain some other in its stead, and yet remain the very thing that it is? The obvious problem from the bundle theorist’s perspective with this kind of response is that in order to make it, they must admit that ordinary things do not have any of their properties contingently. And if one admits that much, one must also admit that change (normally understood) is impossible. The bundle theorist, of course, wants to admit neither. In defence of bundle theory, O’Leary-Hawthorne & Cover, for example, offer arguments against the objections that bundle theory entails global essentialism and makes change impossible.⁵⁸ Their argument against the charge that bundle theory entails global essentialism employs an appeal to a counterpart theoretic interpretation of modal discourse. If their arguments are successful, two problems would confront them. First, bundle theory would still face the Zimmerman objection, for bundle theorists could not accuse him of begging the question on the basis of their commitment to global

⁵⁸ John O’Leary-Hawthorne & J.A. Cover, “A World of Universals”, *Philosophical Studies* 91, (1998), pp.205-219.

essentialism, because they wish to *deny* global essentialism!⁵⁹ Second, bundle theorists would have to acknowledge that their theory is, in virtue of its reliance upon counterpart theory, heavily dependent upon an extravagant and (many would feel) counterintuitive metaphysics of a plurality of concrete possible worlds. A metaphysics according to which ordinary things do not have any properties contingently is, I suggest, implausible. And although a Lewisian metaphysics of concrete possible worlds may be extravagant, many would, I think, like to stop short of deeming it implausible. In my view, then, bundle theorists are right to try to reject the global essentialism charge by employing counterpart theory, for an extravagant metaphysics is preferable to an implausible one. What, though, if the appeal to counterpart theory doesn't work? What if bundle theorists cannot reject the global essentialism charge this way? In that case, and assuming they have no other means of rejecting that charge, they are stuck with global essentialism. This means they can block Zimmerman's challenge (or at least shift the burden of proof back onto him), but it also means that their theory is deeply counterintuitive – so much so that it ought to be regarded as implausible. This is in fact how I believe things to be. I think bundle theorists *cannot* appeal to counterpart theory.

The original idea was that bundle theorists account for contingently held properties by analysing statements like “*a* might have lacked *F*” as meaning that a counterpart of *a*'s lacks *F*. The counterpart is not *a*, so *a*, the bundle of universals which includes *F*, is not itself said to be the thing which lacks *F* in another possible world. The problem, as O'Leary-Hawthorne & Cover themselves point out, is that bundle theory must – it seems – be opposed to the doctrine of world-bound individuals, and that doctrine comes with counterpart theory. If they cannot accept that, how can they accept counterpart theory? They call this a ‘noteworthy wrinkle’, but I think it is more than that.⁶⁰ The problem is that universals cannot, for the bundle theorist, be world-bound. Otherwise, what is to be said of the counterparts in non-actual worlds? Are they individuals of a different sort to those

⁵⁹ And, as things stand, I can see no other way for bundle theorists to rebut Zimmerman. Of course, whether or not *I* can see another way for them to do that is beside the point (I am not, after all, trying to defend bundle theory) – the important fact is simply that no satisfactory response *has* been offered (by bundle theorists).

⁶⁰ *Ibid.*, p.209.

in the actual world, i.e., are they *not* bundles of universals? If the bundle theorist is to admit that they must be of some other sort than actual individuals, then don't the similarity relations, upon which counterpart theory so heavily relies, look threatened? How can one plausibly claim that a non-actual individual a^* is similar to an actual individual a to a sufficient degree that a^* may serve as a 's counterpart, whilst a and a^* differ at such a very fundamental metaphysical level? If counterparts are to be of the same metaphysical stripe as actual individuals, universals cannot be world-bound. And if universals are not world-bound, the possibility arises of relations of identity holding between bundles of universals from different worlds. Bundles of universals – i.e., particulars – can achieve identity across worlds. As O'Leary-Hawthorne & Cover concede, and as is obvious, transworld identity contravenes the doctrine of world-bound individuals. a 's counterpart would not be some non-identical particular a^* , but rather a itself. Thus, the entire counterpart theoretic analysis, which was invoked to get bundle theory out of the problem of contingently held properties, fails. Bundle theorists must admit that if a might have lacked F , there is a possible world in which a itself lacks F . And bundle theory has no story to tell about how a could – *qua* bundle of universals – lack one of its universals and yet be the very thing that it is.⁶¹ O'Leary and Cover appear to have simply no answer to the problem. They make a half-hearted attempt to reply by saying that bundle theorists should grant the possibility of transworld identities but nevertheless 'adopt counterpart theory as the semantics of ordinary [modal] talk'. Ordinary modal talk need not, they think, 'be judged by the standards of strict transworld identity'.⁶² I, for one, am not sure what to make of this. Are they saying that bundle theory is so valuable that in order to save it we ought to be willing to sometimes de-couple ordinary modal talk and true modal judgement? Are they saying that we should be willing to knowingly *falsely* interpret some everyday modal claims? They say that a bundle theorist can happily adopt counterpart theory to explain ordinary modal talk 'despite acquiescing in some positive instances of strict transworld identity'.⁶³ What would this 'acquiescing' involve exactly? The bundle theorist solemnly accepting cases of

⁶¹ Not to mention the fact that it would need to explain transworld identity – to say the least, not an easy task on a Lewisian metaphysics of concrete possible worlds.

⁶² *Ibid.*, p.210.

⁶³ *Ibid.*

transworld identity as an errant child would accept a reprimand they know to be deserved? And what, one wonders, is their intention in bringing ‘ordinary’ modal talk into the mix? Do they mean that we can get by on the everyday level using counterpart theory but not in some more sophisticated theoretical context? That would be a bizarre suggestion in itself but it looks rather ridiculous in light of the fact that interpretation of ordinary modal talk would only go on within that more sophisticated theoretical context. We just don’t engage in advanced semantical consideration at the everyday level, at least not to the extent at which it would be appropriate to invoke counterpart theory. Perhaps I have misunderstood what O’Leary-Hawthorne and Cover said, but I simply don’t know how else their comments could be taken. Unless they can clarify the matter satisfactorily, the upshot is a dilemma for bundle theorists: either embrace global essentialism or solve the problem Zimmerman raises. Doing the first would render bundle theory implausible, but doing the second means rejecting global essentialism and rebutting Zimmerman along some other lines. And it is not at all clear to me how they *can* reject global essentialism. Thus, the biggest of the bundle theory’s problems seems to remain, that of accounting for contingently held properties. Until that is solved, I am inclined to think that bundle theory lies outside of the realm of genuine options for those seeking a theory of particulars.

So, after this long digression, I wish to draw the following conclusion. Black’s argument against the Identity of Indiscernibles *is* still a problem for bundle theorists. O’Leary-Hawthorne’s defence of that is inadequate. Wedding an Immanent Realist conception of universals to a bundle theory of particulars issues in an altogether implausible picture, and one of the two theories must be sacrificed. Given that I have already assumed – in RU – realism about universals, and given also that there is *another* theory of particulars available (the substratum view), I shall reject bundle theory. Zimmerman’s argument reinforces the case for doing so. In what follows, therefore, I shall take a substratum view of particulars. The *challenge*, of course, is to make that account precise, to explain the “core of particularity” lying at the heart of each particular. But it is not necessary for me to go into that in this context. As far as the argument to be made below goes, the

substratum could be given almost *any* interpretation. However, I will offer some thoughts on this issue in Chapter Four, §4.4.

§1.4.2 Armstrong on Particulars

I have assumed in the preceding discussion that if bundle theory is ruled out, then substratum theory is the only option left for realists about universals. Armstrong would contest this. He rejects bundle theory but also rejects bare particulars.⁶⁴ I certainly agree that bare particulars are perplexing items and would avoid positing them if I felt that were possible. Armstrong seems to think that his theory of “thick” and “thin” particulars represents a “third way” between substratum and bundle theories. I disagree, and in this section I shall outline my reasons. The conclusion will be that Armstrong does *not* offer an alternative to substratum theory (bundle theory having been rejected) and, given that I can see no other workable suggestions as to how we might avoid it, I believe we must accept a substratum view of the particular.

On the face of it, Armstrong’s is a three-category ontology: throughout his work he talks of particulars, universals and states of affairs as if countenancing all three categories. And he is, of course, widely known as a prominent *realist* about universals. But one cannot be a realist about particulars unless one thinks that the category of particulars is *sui generis* and not (somehow) subsumed under some other category. In fact, his is a *two*-category ontology. He does not believe in a *sui generis* category of particulars, he thinks that is a *sub*-category of that of states of affairs.⁶⁵ Insofar as universals are not capable of independent existence (for each

⁶⁴ See, for example, his (1978), p.113 and WSA, pp.86-87.

⁶⁵ Lowe (2006), p.6, talks of ‘hierarchical’ multiple-category ontologies but I’m not sure how helpful this is. If one believes that category *C** is a sub-category of category *C*, then one believes that the entities falling under *C** are merely a *variety* of those falling under *C*. And if that is the case, then one is not a realist about *C**-entities. If one holds that the category *C* is genuinely *sui generis*, that reality is (at least partially) composed of *C*-entities, then one is a *C*-realist. The foremost question must at all stages be: is the category under consideration such that the entities falling under it feature at the most fundamental level of reality? If the answer is no, then one is, in my opinion, an anti-realist about that category. In doing philosophical work it may indeed be helpful to distinguish systems of metaphysics according to whether they involve single- or multiple-category ontologies (sub-divided between hierarchical and egalitarian ontologies, the latter being a multiple-category ontology in which each category enjoys the same status), but when

universal U , there must be some state of affairs S such that U is a constituent of S ; that is, U is exemplified by some particular) he can be taken literally when he says that for him ‘the world, all that there is, is a world of states of affairs’⁶⁶, that his is a ‘Factualist as opposed to Thingist’ way of thinking about the world⁶⁷. And yet he thinks that ‘upholding the ontological reality of.....states of affairs involves admitting the ontological reality of particulars, properties and relations’.⁶⁸ This is the kind of comment from Armstrong which suggests that he actually thinks he *is* a realist about particulars. But whatever about how he himself regards his metaphysics, I think it is indisputable that he is *not* such a realist. And, whatever about upholding the ontological reality of states of affairs, if one is to uphold the reality of *universals*, then one must either account for particulars *in terms of universals* (as the bundle-of-universals theory tries to do), or embrace realism about particulars. But, as we have seen (in §1.4.1), such a bundle-theoretic view is implausible. Therefore, if Armstrong is to maintain his realism about universals, he must offer *some* realist conception of particulars. This, I think, he fails to do.

A particular for Armstrong is either ‘thick’ or ‘thin’. A thick particular is a particular having all of its properties. So, if a has three properties, F , G , H , we may say that a has one big conjunctive property, *being $F+G+H$* . This Armstrong calls a thing’s ‘nature’.⁶⁹ A thin particular, on the other hand, ‘is a thing taken in abstraction from all its properties’.⁷⁰ It is the *particularity* of a particular. A thick particular is a state of affairs – the state of affairs of the (relevant) thin particular possessing the (exhaustive) conjunctive property, the particular’s nature. It is thin, not thick, particulars which serve as constituents of states of affairs, for it can only be thin particulars we have in mind in our definition of a state of affairs as a particular’s possessing a property (or n particulars’ being related). As he says himself, it cannot be the thick particular we have in mind here, for a thick particular is *itself* a state of affairs, and states of affairs do not possess properties.

the chips are down, so to speak, there are really only two realist options: a single- or an egalitarian multiple-category ontology. Armstrong’s is, I believe, an egalitarian two-category ontology, one of states of affairs and universals, and he is, therefore, an anti-realist about particulars.

⁶⁶ WSA, p.1.

⁶⁷ *Ibid.*, p.4.

⁶⁸ *Ibid.*, p.20.

⁶⁹ (1978), p.114.

⁷⁰ *Ibid.*

So, thick particulars are states of affairs and thin particulars are thick particulars thought of in abstraction from all of their properties. But abstractions are not entities, they are not real as states of affairs are real. In abstracting a particular from its properties we are not *getting to* the core of particularity which exists within each particular.⁷¹ Rather, we are performing an act akin to Husserlian “bracketing”, we are imagining the thick particular without the properties. Consider again the simple example of *a*, with its three properties F, G, H. The act of abstraction here would be to simply ignore the universal aspects of each of the three states of affairs: *a’s being F*, *a’s being G*, *a’s being H*. What is left is an idea – that of *a* without any properties. But it is nothing *more* than that, than an idea. There are in reality no thin particulars. To give an account of Armstrongian thin particulars would be to describe a type of mental episode, and would not be to describe the nature of some feature of (non-mental) reality. Armstrong must, therefore, be regarded as a realist about thick particulars and an anti-realist about thin particulars. And given that thick particulars are just states of affairs, we can say that he is in fact a realist about states of affairs but an anti-realist in general about particulars. To put it another way, his theory is doubly anti-realist about particulars: first, the category of particulars (*qua* thick particulars) is a sub-category of that of states of affairs and second, particulars (*qua* thin particulars) are what result from acts of mental abstraction, and so are not independent of our conceptual activity.⁷²

However, he does want to say that states of affairs themselves are particulars, and so it seems that he wants to retain some semblance of realism concerning the category of particulars. But he only says that a state of affairs is a particular insofar as it is not repeatable. Clearly, this means that it is not a universal, but does it mean that it is a particular? I am inclined to think that non-repeatability is just *one* feature of particulars. The obvious other one is the ability to possess properties and stand in relations. And states of affairs don’t seem to have this ability, at least they

⁷¹ James Summerford “David Armstrong on Instantiation: A Difference That Makes a Difference”, p.581, *The Southern Journal of Philosophy*, 36, (1998), pp.577-586, has much the same view of Armstrong’s position.

⁷² I am assuming here that a realist about ϕ ’s will – at least – believe that ϕ ’s do not depend for their existence on our conceptual activity, or indeed on any activity of ours, be that mental or linguistic, etc.

don't seem to have the ability to exemplify *genuine* as opposed to mere "Cambridge" properties and relations. If states of affairs *could* exemplify universals, then why isn't Armstrong's thin particular itself a state of affairs? Why is it not conceived of as a particular having a certain number of its properties, though not all of them. It would not, then, *be* the thick particular, strictly speaking, but it would be a thicker-than-bare particular. As such, it would have to be classified as a state of affairs. The problem is, at what point would we reach rock bottom? It looks as if it would need to be states of affairs all the way down. A thin particular in this sense, *qua* state of affairs, would have to be itself constituted by a thinner particular exemplifying a universal, and that thinner particular would itself have to be a state of affairs, and so on. So either he countenances an indefinite series of states of affairs grounding any given predication claim, or he posits a bare particular. Also, if Armstrong were to say that states of affairs were particulars, and wanted to maintain realism about states of affairs (as he clearly does), then he would need to give an account of the *nature* of particulars. Thus far, he has only given accounts of thick particulars, which are states of affairs, and thin particulars, which are merely ideas we have about states of affairs (thick particulars). He has offered no account of the entities which would fall under what would now need to be a genuinely *sui generis* category of particulars. My suggestion is that instead of saying that a state of affairs is a particular, we should say that it is *more like a particular than it is like a universal*. It shares something with particulars, non-repeatability, which distinguishes it from universals, although it is not *actually* a particular. Let non-repeatability simply be part of the definition of what it is to be a state of affairs.

Again and again he says that the thin particular is not a *bare* particular, not a propertyless substratum⁷³. And yet he refers to the thin particular as 'the particularity of the particular', which is to be 'taken as fundamental and unanalysable'.⁷⁴ But if the thin particular is not *bare*, then it is either a mere idea, in which case it is not a genuine feature of independent reality, or it is a state of affairs, and we have just seen problems with that idea. My opinion is that

⁷³ For example, in his *A Combinatorial Theory of Possibility*, (CUP, 1989), p.52.

⁷⁴ WSA, p.109.

Armstrong desperately *wants* to maintain a realist position on particulars, he wants to posit a ‘particularity of particulars’, but the difficulties associated with such a substratum view lead him to what Summerford calls his ‘conceptualist’ view of (thin) particulars, whereby thin particulars are merely *ideas of* thick particulars.⁷⁵ But this is not good enough if he wants to remain a realist about universals. The universals, after all, need *particulars* to exemplify them. Armstrong, must, therefore, either declare himself a substratum theorist, a believer in a core of particularity, or develop a new account of particulars. At present there is a gap in his realist system – he has given no account of *that* which does the exemplifying in a state of affairs.

So, he is an anti-realist about particulars but he should be a realist, albeit perhaps a troubled one! Regarding universals, Armstrong says that although universals are ‘state-of-affairs types...[this]...is not intended to mean that universals are states of affairs. They are not. They are mere constituents of states of affairs’.⁷⁶ The idea is that a universal *F* may be identified with what is left after we abstract the particulars from all states of affairs of the form ___’s *being F*. The universal is a ‘guttled state of affairs’; it is ‘the constituent that is common to all states of affairs which contain that universal’.⁷⁷ It may perhaps be possible to argue that a gutted state of affairs is, nonetheless, a state of affairs, and so that Armstrong is in fact adopting an anti-realist line on the category of universals as well. I’m not convinced that such an argument would work and, in any case, I have no pressing need to argue that he is an anti-realist about universals. Therefore, I shall take him as a realist.

What I have sought to demonstrate in this section is that Armstrong does *not* offer us an alternative to substratum theory, that his is not another way a realist about universals can go once they have ruled bundle theory out. To be more precise, once the realist about universals has ruled out bundle theory, the only route left is realism about particulars. As things stand, there simply are no developed anti-

⁷⁵ Summerford (1998), p.581.

⁷⁶ WSA, p.28.

⁷⁷ *Ibid*, p.29.

realist accounts of particulars other than the bundle theory. And we have rejected that. Armstrong claimed to offer a realist account of particulars that did not involve a substratum, but, I have argued, did not succeed in that. So, we are left with the only other developed theory of particulars: the substratum theory.

§1.4.3 The Need for States of Affairs

The next argument to be made is that if one is to adopt a metaphysics of universals and particulars (now understood as entities involving a substratum), then one must give an account of the difference between a particular having some property and it *not* having that property. An account, that is, of the difference between *a* having *F* and the mere sum *a*+*F*.⁷⁸ Suppose that *F* is some property the particular *a* contingently exemplifies. Using the jargon of possible worlds, we can put the matter like this: if *a* is contingently *F* at world *W*, but lacks *F* at some other world *W*₁, what is the (*a*- and *F*-related) difference between *W* and *W*₁?⁷⁹ I shall say that the difference is that, at *W*, the state of affairs *a's being F* obtains and, at *W*₁, it does not obtain.⁸⁰ Where that state of affairs obtains, *a* is *F*, where it doesn't, it is not. I shall define states of affairs as follows:

SOA: A state of affairs is a particular exemplifying a property (or *n* particulars exemplifying an *n*-place relation).⁸¹

The view of states of affairs expressed there is, I believe, almost universally agreed upon amongst those who countenance states of affairs. It is the Russellian-Armstrongian notion of states of affairs.⁸² And insofar as it is plausible to say that

⁷⁸ See Richard Aquila, *Intentionality: A Study of Mental Acts*, (Pennsylvania State University Press, 1977), pp.59-60ff.

⁷⁹ There may be other differences between the two worlds, having nothing to do with *a* and *F*. We are, of course, only interested in how things are for that particular and that property.

⁸⁰ I shall follow Armstrong's convention of forming names for states of affairs by italicisation.

⁸¹ We may allow for higher-order states of affairs as *n*th-order universals exemplifying *n*^{th+1}-order universals.

⁸² Russell: 'We express a fact...when we say that a certain thing has a certain property, or that it has a certain relation to another thing', p.183, *The Philosophy of Logical Atomism*, (1918) in R.C. Marsh (ed.), *Logic and Knowledge: Essays 1901-1950*, (London: Allen & Unwin, 1956). Armstrong similarly says that a state of affairs is a particular having a property or *n* particulars standing in a relation.

we actually have a pre-theoretical conception of states of affairs, I believe it would be in line with that found in SOA. However, I think it is somewhat doubtful that we really do have a commonsense idea of states of affairs. That seems to be very much a technical philosophical notion and not one which naturally occurs in everyday thought or discourse. Of course, we *do* often employ the notion of a fact in everyday discourse, and as I am using it “state of affairs” is synonymous with “fact”. But in the non-technical context “fact” is often employed to mean a true statement (sentence, etc.), and not to mean a particular exemplifying a universal. I shall take it that “state of affairs” and “fact” both have the latter meaning and I shall not assume that we commonly use that concept outside of theoretical contexts.

Of course, in saying that the difference between W and W_1 is the obtaining of the state of affairs *a's being F*⁸³, we don't seem to be saying much more than that the difference between a having and not having F is it's having it in the one circumstance and not having it in the other – which is, obviously, to say nothing very informative. But we are in fact saying something important. We are saying that the difference between the two scenarios is that in the one, W , a and F are *united*, and in the other, W_1 , they are not. States of affairs are, then, *unity providers*. In the state of affairs *a's being F*, the particular and property are united in *exemplification*. But, in saying that we need states of affairs to provide this kind of unity, we do not, of course, *explain* that unity. That is, if we adopt SOA, we will still owe an account of the nature of exemplification. That is the work of the next section.

§1.4.4 The Relational Account of Exemplification

I shall adopt a *relational* view of exemplification. Where a is F , a stands in the exemplification relation to F .⁸⁴ The relation itself is a universal just like any other

⁸³ With Armstrong, I make no distinction between obtaining and existing or real states of affairs.

⁸⁴ Gustav Bergmann also takes a relational view of exemplification, see *Logic and Reality*, (University of Wisconsin Press, 1964), p.274ff. Cf. *Realism: A Critique of Brentano and Meinong*, (University of Wisconsin Press, 1967).

insofar as it is a repeatable. It may simultaneously be exemplified by distinct ordered pairs of the form $\langle x, \phi \rangle$ or $\langle \phi, \phi^+ \rangle$, or by ordered n -tuples of the form $\langle x_1 \dots x_n, \phi \rangle$ or $\langle \phi_1 \dots \phi_n, \phi^+ \rangle$, where “ x ” takes particulars as values, “ ϕ ” takes properties (and “ ϕ^+ ” takes higher-order properties), and “ φ ” takes n -adic relations (and “ φ^+ ” takes higher-order n -adic relations).

We now amend SOA as follows:

SOA^E: A state of affairs is a particular standing in the exemplification relation to a property (or n particulars standing in the exemplification relation to an n -place relation).

The exemplification relation – “ER” – will be asymmetrical: what occupies the second position in an instance I of the ER will not be capable of occupying the first in instance I^* , where what occupied the first position in I occupies the second in I^* . That is: $\forall v \forall v^* (ER \langle v, v^* \rangle \rightarrow \neg \Diamond (ER \langle v^*, v \rangle))$, where v and v^* are metavariables taking individuals or properties (of any order) as values. So, nothing v may itself exemplify that which exemplifies v . The converse of $ER \langle a, F \rangle$ will be $ER_C \langle F, a \rangle$, which may be read “ F is exemplified by a ”. The ER is also irreflexive – nothing may stand in the ER to itself: $\neg \exists v ER(v, v)$.

The big problem for such a relational account of exemplification is, of course, the regress objection inspired by F.H. Bradley.⁸⁵ The objection goes as follows: if a relation of exemplification, ER , must hold between a and F where a is F , then we must – it seems – say that the pair (a, F) exemplify ER . But then we would have to say that a *further* relation of exemplification, ER' , holds between (a, F) and ER . And to make sense of this, we would need to say that yet another relation, ER'' , holds between the triple (a, F, ER) and ER' . And so the apparently infinite regress

⁸⁵ As I read it, Bradley’s (1930) objection was to relations in general, and not specifically to an *exemplification* relation. More precisely, it was to the idea that relations belong to the realm of reality, as opposed to appearance. Richard Gaskin suggests that the regress objection to the exemplification relation may be traced to Plato, *via* Abelard; see his “Bradley’s Regress, The Copula and the Unity of the Proposition”, *The Philosophical Quarterly*, 45:179, (Apr., 1995), p.161.

continues. Now, there is much debate over (*inter alia*) whether the regress is *vicious* or not and over the question what reaction would be appropriate to the Bradleyan objection⁸⁶, but let's just assume here that the objection *does* present a problem for the relational view – at the least, it calls into question the *prima facie* appeal of the relational view. Given that, it is not surprising that many have turned away from the relational view, going in search of a *non*-relational view instead. Amongst those, we find Armstrong. I shall argue that we may regard Armstrong as having avoided the Bradleyan problem by shunning the relational view, but although he turned away from that, he did not actually turn towards some *other* view. He did not actually offer us a non-relational account of exemplification, even though he says time and again that that is what he has done. In 1999, however, Armstrong *did* adopt a particular non-relational position, developed by Donald Baxter.⁸⁷ But, I shall argue, Baxter's account suffers from very serious flaws and is not, therefore, a viable non-relational account of exemplification. I think we are forced towards the relational view by the absence of plausible *non*-relational accounts. Let's begin by looking at what Armstrong has to say (pre-1999) on the matter.

§1.4.5 Armstrong on Exemplification

Armstrong believes that the world is a world of states of affairs.⁸⁸ He thinks that if *a* is F, then *a* and F combine within a state of affairs, and on this, I agree with him. What I *disagree* with him on is the nature of the “combining”. For me, that means *a* standing in the ER to F. For Armstrong, it means a ‘non-mereological form of

⁸⁶ See, for example, Gaskin, *op. cit.*; Benjamin Schnieder, “Once More: Bradleyan Regresses”, in H.Hochberg & K.Mulligan (eds.), *On Relations and Predicates*, (Frankfurt a.M: Ontos-Verlag, 2004), pp.219-256; William Vallicella, “Relations, Monism and the Vindication of Bradley's Regress”, *Dialectica*, 56:1, (2002), pp.3-35; and Kenneth R. Olson, *An Essay on Facts*, (Stanford: CSLI, 1987).

⁸⁷ Armstrong accepted Baxter's theory upon (or shortly after) hearing Baxter give a paper on the subject in 1999, although Baxter's account was not published until 2001 (as “Instantiation as Partial Identity”, in *Australasian Journal of Philosophy*, 79:4, (Dec., 2001)), Armstrong “officially” adopted the theory in his “How Do Particulars Stand to Universals?”, in D.W. Zimmerman (ed.), *Oxford Studies in Metaphysics: Vol. I*, (Oxford: Clarendon Press, 2004), pp.139-154.

⁸⁸ WSA, p.1.

composition'⁸⁹ – the particular and property together compose the state of affairs, they are its constituents, but not its parts (in the mereological sense). He thinks there is no third element in states of affairs besides the particular and universal, no extra exemplification ingredient alongside the particular and universal.⁹⁰ In other words, Armstrong doesn't believe in anything like the exemplification relation. In his earlier work (for example, *Nominalism and Realism*), his main reason for rejecting the "relational" view of exemplification is that he believes it is vulnerable to Bradley's regress objection. Armstrong wants to avoid this objection by rejecting any relation of exemplification, rather than by positing such a relation and giving it a special primitive status.⁹¹ According to that latter stratagem, we posit the relation of exemplification and say that *a* is F iff *a* stands in that relation to F, but we resist any attempt to analyse this further. Obviously, this response has an *ad hoc* air to it – we seem to privilege the exemplification relation with primitive status merely because we see no other way around Bradley's objection. Also, as believers in universals we think that relations are, one and all, universals. And for *n* particulars to exemplify an *n*-place universal, those particulars must – it is widely believed – be linked (in some way) to that universal. So, if the exemplification relation *is* a universal, Bradley's argument would seem to go through, as there would need to be a tie between it and what exemplifies it. Defenders of the exemplification relation might try to deny this, but to do so they must either say why the exemplification relation is *not* a universal like other relations, or explain how it is such a special universal that it occurs differently to all other universals – i.e., explain how a particular can bear the exemplification relation to a universal without there being any tie between it and the particular and universal. Armstrong seems to think that the defender of the exemplification relation has no (obvious) viable way around these difficulties, and so makes the other kind of response to Bradley's objection: he concedes its force and rejects the exemplification relation.

⁸⁹ *Ibid.*, p.122.

⁹⁰ *Ibid.*, 119.

⁹¹ For discussion of Armstrong's position on exemplification see Summerford (1998) which I follow in a number of respects in what I say above.

But the reason Bradley's argument is so important and so worrying for so many is that it threatens the most obvious and (I think) intuitively satisfying analysis of exemplification: the relational one. In other words, in rejecting that analysis Armstrong sets himself a very difficult task: that of giving a *non*-relational account of exemplification. My contention is that he does not succeed. And rather than it being a case of him recommending an account which is apparently flawed in some way, the problem is that he fails to offer *any* substantive account of exemplification. He mocks the predicate nominalist view of properties, calling it "ostrich nominalism" because he thinks its proponents are guilty of trying to ignore the problem of universals. But I think Armstrong is guilty of something similar with respect to the problem of exemplification, the problem of accounting for the difference between *a* and F merely jointly existing and *a* being (exemplifying) F. Insofar as he fails to offer an answer to this, we might call him an "ostrich non-relationalist". This is *one* sense in which Armstrong's overall theory is deficient: he fails to give an account of a crucial element of it, exemplification. The problem of the nature of exemplification is, in itself, a problem *every* metaphysician must address – it is, in other words, a problem worthy of attention in its own right. And Armstrong is no exception: he is doing metaphysics and must, therefore, address this problem. But, apart from that problem being worthy of consideration in its own right, Armstrong has another reason to give an account of exemplification: he must do so in order to maintain his claim that states of affairs form a *sui generis* ontological category within his metaphysics. Let's first establish the sense in which he *does not* address the issue satisfactorily.

Before 1999, Armstrong's answer to the problem of exemplification amounted to this: "*a* is F" means that *a* is a constituent with F in the state of affairs *a's being F*, and states of affairs are composed of their constituents in a non-mereological sense. And to this we might respond: OK, perhaps the composition involved is *not* mereological, but if it is not that, then what *is* it? Armstrong never answers this. As David Lewis points out, 'time and again' Armstrong dismisses nominalist theories

because he thinks they offer unsatisfactory accounts of predication.⁹² Lewis thinks these nominalists ought to ‘rise up and cry “*Tu quoque!*”’ (p.23).⁹³ Philip Keller laments Armstrong’s lack of attention to the exemplification issue by turning Armstrong’s own words back on him:

Of exemplification, he said in 1978 that “it is interesting, but somewhat saddening, to notice that the great modern defenders of transcendent universals, Moore and Russell, do not even consider this problem of the relation between particulars and Forms to which Plato gave such close attention.” (Armstrong 1978: 67) It is interesting, but somewhat saddening, that the same can be said of *the* great contemporary defender of universals.⁹⁴

Quite. Armstrong’s idea of ‘non-mereological composition’ simply won’t do; it is fairly obviously true that exemplification cannot be mereological composition – saying so is not very helpful when we want to know what it *is*.⁹⁵ Although I am reluctant to make claims about philosophers’ motivations, I *suspect* that the reason he offers so little detail on this matter is that he is aware that some kind of exemplification tie is needed, but just doesn’t want to admit as much and then have to face the Bradleyan objection. Perhaps that is unfair to Armstrong, but it is, of course, understandable if he *did* wish to avoid facing that objection. Nevertheless, I think that anyone addressing the kind of topics addressed by Armstrong *must* give some account of exemplification.

So, Armstrong’s theory is incomplete insofar as it lacks such an account. But the problem is more urgent for him than this. It is not only a matter of general theoretical obligation for him to give an account of exemplification – the very coherence of his core doctrine depends upon it. If Armstrong wishes to maintain theses (i)-(iii), he *must* provide a theory of exemplification – and a *realist* one at that.

⁹² Lewis (1983), reprinted in Lewis’s *Papers in Metaphysics and Epistemology*, (CUP, 1999), pp.8-55. Page references are to the latter.

⁹³ *Ibid*, p.23.

⁹⁴ “A World of Truthmakers”, p.107, in J.M. Monnoyer (ed.), *Metaphysics and Truthmakers*, (Frankfurt a.M.:Ontos, 2007), pp. 105-156.

⁹⁵ In the case of some non-symmetrical relation *R*, the mereological sum $a+R+b$ is the same as the sum $b+R+a$, but the states of affairs *a*’s bearing *R* to *b* and *b*’s bearing *R* to *a* are not the same (to see this, simply interpret *R* as (e.g.) the relation “loves”).

- (i) Universals form a *sui generis* ontological category
- (ii) Particulars form a *sui generis* ontological category
- (iii) States of affairs form a *sui generis* ontological category

He cannot consistently maintain these and yet hold that exemplification is not a *further* element in states of affairs, that is, over-and-above the particular(s) and universal. If he *is* realist about universals and particulars, that is, if he does subscribe to (i) and (ii), then he cannot also subscribe to (iii) without claiming that there is something *more* to a state of affairs than the particular and universal. Without that claim, his is a world of particulars and universals, for states of affairs would be reducible to those. Recall the definition of a state of affairs: a particular exemplifying a universal (or n particulars exemplifying an n -place universal). Armstrong *must* say that this exemplification is a third aspect of the state of affairs *a's exemplifying F*, a constituent of it alongside the two other constituents, *a* and *F*. Far from being able to maintain his opening claim in WSA, that the world is a world of states of affairs, he would not even be able to maintain that states of affairs feature within reality as it is in itself. States of affairs could not feature at the fundamental level alongside particulars and universals if states of affairs were reducible to the latter. His metaphysics is incomplete in a very serious sense (that is, it is bordering on incoherence) without a realist account of exemplification. Until 1999, he offered no account, realist or otherwise.

The problem has clearly worried Armstrong for many years and, in 1999, he took a different approach to it than he had done previously. He had, as I have said, neglected to offer an account of exemplification, although he represented himself as having offered a non-relational account. Now, he adopted a non-relational account developed by Donald Baxter. But I think the account suffers from serious problems. I shall consider it but I shall conclude that it is not a viable theory of exemplification, at least, not in its present form. *A fortiori*, it is not a viable alternative theory to the relational theory of exemplification.⁹⁶

⁹⁶ P.F. Strawson, *Individuals*, (Methuen & Co., 1959), also urges a non-relational account (shying away from the relational account because of the putative threat posed to that by the Bradleyan

Before looking at that account, I might mention that there seem to be reasons to doubt the plausibility of non-relational accounts in general. I am at once in agreement and in disagreement with Armstrong when he says that exemplification is something ‘very different from anything that is ordinarily spoken of as a *relation*’.⁹⁷ I agree insofar as I don’t think the exemplification relation could be on a metaphysical par with relations like *__is above__* or *__is smaller than__*, but I disagree insofar as I think that if particulars are more than mere bundles of properties, and states of affairs *do* succeed in unifying things and their properties, then a property must be *related*, within a state of affairs, to the particular exemplifying it. The uniting that goes on in states of affairs must involve the particular and property being in some sense “welded” together (to borrow Armstrong’s phrase). And what is that but a kind of relating? Lewis is right when he says that ‘[i]f a relation stands between you and your properties, you are alienated from them’; but, unlike him, I don’t regard this as grounds for an argument *against* the relational view of exemplification.⁹⁸ Standing in a relation to your properties is, we might say, as close as you can get to them. And I agree in an unqualified way with Lewis that calling exemplification a “non-relational tie” doesn’t get us very far⁹⁹, that ‘[w]e have no developed idea what sort of thing a “non-relational tie” might be’, and that if we were to develop a theory of exemplification as a non-relational tie, then in order to mould the tie as we would need to for it to serve just as well as a *relation* of exemplification would, the tie would most likely end up a relation in all but name.¹⁰⁰ Donald Baxter, who will defend a non-relational account, makes the following point:

A non-relational tie between distinct things is pretty mysterious. Seemingly, if the things are distinct then the tie is a relation. If the tie is not a relation then the things are not

objection), although he doesn’t provide very much detail. Exemplification, for him, is a matter of there being a ‘non-relational tie’ (p.167ff) between a thing and an attribute (sometimes calling it ‘the attributive tie’, p.168). He discusses certain (mainly logical) features the tie must have but, as with Armstrong, his account is, in the end, a negative one – it really only tells us what exemplification is *not*.

⁹⁷ WSA, p.118 (emphases in original).

⁹⁸ David Lewis, “Tensing the Copula”, p.5, *Mind*, 111:441, (Jan., 2002), pp.1-13.

⁹⁹ Lewis, *op. cit.*, p.6.

¹⁰⁰ *Ibid*, p.7.

distinct. So a non-relational tie could hold between distinct things only if they are not distinct.Still, we need the tie if we want universals and particulars.¹⁰¹

Baxter seems to be admitting here that there are informal grounds for questioning the non-relationalist enterprise. I don't think, however, that we have sufficient grounds here to dismiss non-relational theories. However, the theory he offers is – to my knowledge – the only fully developed metaphysical theory of non-relational exemplification. And so, if we have reasons to reject that theory, as I think we have, then we must revert to a relational account. Let's consider Baxter's theory.

§1.4.6 Baxter's Non-Relational Theory of Exemplification

On Baxter's account, universals and particulars have 'aspects'. Suppose *a* is F and *b* is also F. The universal as it is in *a* is one aspect of the universal F and as it is in *b* is another aspect. He is marking here what he calls 'a formal – an aspectival – distinction'.¹⁰² A particular is composite 'in virtue of all the universals it instantiates', and particulars are composed by their aspects.¹⁰³ Thus, the aspects of a particular will be the universals it exemplifies. And they themselves, as we have just said, are aspects of universals. So, where a particular *a* exemplifies a universal F, an aspect of *a* is identical with an aspect of F. Given a certain understanding of "part" (see Baxter, p.453), we can say that *a* and F are *partially identical*. 'The non-relational tie is the identity of an aspect of a universal with an aspect of a particular'.¹⁰⁴ Now, I have only given here the briefest of summaries of Baxter's theory – it is far richer than what I have said here might indicate and is worthy of much attention. Although there are, he thinks, similarities between his and Scotus' theory¹⁰⁵, what he offers is here is a novel solution to one of *the* most difficult problems in metaphysics. But the reason I haven't presented the theory in more

¹⁰¹ Baxter (2001), p.449.

¹⁰² *Ibid*, p.453.

¹⁰³ *Ibid*, p.454.

¹⁰⁴ *Ibid*, p.453.

¹⁰⁵ *Ibid*, n.19, p.456.

detail is that I think we can recognise serious flaws in it even on the basis of the summary given above.

The first kind of worry I have about the account is over what we might call the “internal unity” of particulars and universals. Do particulars *exemplify* their aspects? If so, the account faces a regress: if the particular is partially identical with its aspects, there would need to be aspects of the particular, which we have already implicitly taken to be such that it does *not* itself have aspects, that it is, in some sense, a core of particularity. Also, there would need to be aspects of the aspects. Clearly, if the “core”-particular has aspects, it would need to *exemplify* them, and so there would need to be aspects of the aspects of the core particular, and aspects of the aspects of the aspects, and so on. And whether within particulars or universals, how would the aspects (in the original sense) be related to one another? By something like compresence, as we find in certain bundle theories?¹⁰⁶ But then aspects would – presumably – need to *exemplify* this relation. And, again, on Baxter’s account this would mean that an aspect of an aspect would be identical with an aspect of another aspect, which sets us off on another infinite regress.

Let’s assume though that Baxter or his followers could answer this kind of general worry about aspectival theories of particulars and universals. The big problem his account of exemplification faces is that it appears to make all exemplification necessary. The thought is that where there is identity, there is necessity. If an aspect of *a* is identical with an aspect of *F*, then “those aspects” *must* be identical.¹⁰⁷ But how, in that case, can a particular *contingently* instantiate a universal? In short, it cannot. Baxter favours a Lewisian realism about possible worlds but seeks to distinguish his view from Lewis insofar as he wishes to allow what Lewis bans – namely, trans-world identity. But I’m not so sure he really is allowing trans-world identity, at least not in any well-understood sense of the notion. His idea is that a particular ‘insofar as it is in one world may have a

¹⁰⁶ Such as that proposed by Russell in *An Inquiry into Meaning and Truth*, (New York: W.W. Norton, 1940), Ch.6.

¹⁰⁷ The necessity of identity is not, of course, an uncontroversial thesis. For criticism of the Kripkean arguments for the necessity of identity see, for example, David Bostock, “Kripke on Identity and Necessity”, *The Philosophical Quarterly*, 27:109, (Oct., 1977), pp.313-324.

property that it, insofar as it is in another world, lacks.’¹⁰⁸ And this may be restated in terms of aspects: an aspect of *a*, which is in world *W*, may have *F* in *W*, whilst another aspect of *a*, which is in *W*₁ (where *W* ≠ *W*₁), lacks *F*. This then is how we are to understand *a*’s being only contingently *F*. My first thought is that although an *aspect* of *a*, the thing in *W*, may be in *W*₁, it is not *all of a* which is in *W*₁. And shouldn’t trans-world identity involve *all* of the one thing be in more than one world? He says that ‘[t]he very thing can be in a world even if the whole thing is not’, but he doesn’t elaborate on this.¹⁰⁹ An aspect of *a* in *W* is one thing – in that world it is an aspect of a whole particular, *a*. But the idea of an aspect of *a* in *W*₁ is rather perplexing – wouldn’t there need to be some *whole* thing in *W*₁ of which it is, in that world, an aspect? Surely aspects cannot float freely in worlds without whole particulars to be aspects of. And what particular could an aspect of *a* be an aspect of in *W*₁ (i.e., in *any* world) other than *a* itself? At this point Baxter seems to have a problem: in order to avoid Lewis’s objection to trans-world identity (that it allows the one thing to both have and lack a property¹¹⁰), he appeals to the idea of a thing being in a world without the *whole* thing being in that world. But if by this he means that *aspects* of things can be in different worlds, then he needs to show how this does not entail that the whole thing is in those worlds, as I claim it does.

In the absence of further detail it seems to me as if the aspect of *a* in *W*₁ ought to be seen as a *counterpart* of the aspect of *a* in *W*. So, perhaps we should take Baxter as not really allowing trans-world identity at all, but rather as proposing a form of counterpart theory. If that is the case, then we can make what I believe to be a strong objection to his account.¹¹¹ In the modal part of the claim “*a* is *F* but it is possible for *a* to have lacked *F*” we take ourselves to be referring to something which is possible *for a*. The counterpart theoretic analysis violates this intuition – as Lewis calls it, the ‘he himself’ intuition.¹¹² In a sense, it *divides* the possibility between *a* and something else: a counterpart of *a*’s. The possibility is no longer as

¹⁰⁸ Baxter, “Free Choice”, n.2 p.13, *Australasian Journal of Philosophy*, 67:1, (1989), pp.12-24.

¹⁰⁹ *Ibid.*

¹¹⁰ Lewis, *On the Plurality of Worlds*, (Blackwell, 1986), pp.198-201.

¹¹¹ That is, besides the objection already made in Chapter One against non-fictionalist possible worlds theories which employ the concept of exemplification *simpliciter*.

¹¹² *Op. cit.*, p.199.

we intuitively think it to be, that is, it is no longer associated *exclusively* with *a*. Appropriating Baxter's own terminology we might put it like this: intuitively, the possibility referred to is a possibility for *a* as it is – that is, as it is in the world in which we encounter it. If *a*'s exemplification of F is the intersection of an aspect of *a* and an aspect of F, then, intuitively, the possibility has a very close association with the aspect of *a* which actually intersects with the aspect of F. On Baxter's theory, this association is at best weakened and at worst abolished.¹¹³ What is, at least, indisputable is that we cannot, by Baxter's lights, say that *a* as it is might not have had some property it does in fact have. Support here comes from an unlikely source: Armstrong (unlikely in that Armstrong subscribes to Baxter's view of exemplification, or at least to a slightly modified version of that). He thinks that an adherent of Baxter's theory is 'forced to say that...each intersection ...is... necessary'; '[w]here *a* is in fact F, this is strictly necessary'.¹¹⁴ The 'strictly' here is meant to foreshadow what comes next – Armstrong's attempt to accommodate contingency. Although it is true that *a* must be F if it exemplifies F,

[n]evertheless, there is a sense in which *a* might not have been F. Object *a* and property F might not have existed, but instead there might have been counterpart *a'* and counterpart F' where *a'* is not F'. These close counterparts are very like *a* and F respectively, but would lack this particular intersection. Like any counterpart theory, this gives us less than we might have hoped, but perhaps it gives us enough.¹¹⁵

I take it that in the last sentence here Armstrong is (quietly!) admitting that counterpart theory suffers from the problem I outlined above, that it has difficulty satisfying our intuition that if something is possible for *a*, the possibility has to do with *that very thing* and not some other thing, such as *a'*. He doesn't push this counterpart theoretic rescue of contingency and later he says that what it gives us

¹¹³ The general objection to counterpart theory here is, I take it, at the root of Kripke's famous "Humphrey objection" (*Naming and Necessity*, n.13 p.45, (Harvard University Press, 1980)). If the possibility were divided between a thing (e.g., Humphrey) and one of its counterparts, then the thing (Humphrey) has less reason to care about it than we intuitively think he has.

¹¹⁴ Armstrong, "How Do Particulars Stand to Universals?", pp.144-145, in D.Zimmerman (ed.), *Oxford Studies in Metaphysics: Vol. I*, (Oxford, Clarendon Press, 2004), pp.139-154.

¹¹⁵ *Ibid*, p.145.

is merely a ‘simulacrum of contingency’¹¹⁶ Armstrong is committed to the view that all exemplification is necessary; regarding Baxter’s aspect-based trans-world- (or is it counterpart-?) theoretic attempt to salvage contingency he says simply ‘I think this part of Baxter’s theory is wrong’.¹¹⁷ And he admits that in general he finds Baxter’s idea of aspects ‘difficult to understand’.¹¹⁸ But even if Baxter or Armstrong could account for contingency on a trans-world or counterpart theoretic basis (and, if the latter, satisfactorily address worries over the ‘he himself’ intuition), still, it would surely be an unattractive feature of this account of exemplification that it requires the extravagant metaphysics of a plurality of concrete possible worlds. But, one way or another, account for contingency they must.

Kris McDaniel raises the following problem. If *a* is partially identical to F, then, necessarily, *a* exists iff F exists. But then we cannot say that “*a* might not have been F” means that a counterpart of *a* lacks a counterpart of F. For in that world *a*’s counterpart, *a*’, would not have *any* of the properties had by *a* itself, as none of those would exist – *a* is, after all, partially identical with *all* of its properties. So on what basis then is *a*’ a counterpart of *a*, given that it shares no properties with *a*?¹¹⁹ Also, if one of *a*’s properties F had not existed, neither would any other particular *b* which was also F. So, *b* exists iff *a* does. Therefore, McDaniel concludes, ‘the world suffers from a disturbing interconnectivity’.¹²⁰ Even worse, if, *qua* naturalist, Armstrong believes that everything is spatiotemporally related, then everything is partially identical with everything else. Thus, the entire world depends upon each particular; all in all, this theory means that ‘the world is disastrously modally fragile’.¹²¹ Having made a very similar argument lamenting

¹¹⁶ “Particulars Have Their Properties of Necessity”, p.243, P.F. Strawson & A. Chakrabarti (eds.), *Universals, Concepts and Qualities: New Essays on the Meaning of Predicates*, (Ashgate, 2006), pp.239-247.

¹¹⁷ Armstrong (2004), p.47.

¹¹⁸ “How Do Particulars Stand to Universals?”, n.3, p.142.

¹¹⁹ This effectively blocks Armstrong’s (2004) idea that within the theory, counterparts can ‘substitute for contingency’, p.48.

¹²⁰ Kris McDaniel, review of *Truth and Truthmakers* in *Notre Dame Philosophical Reviews*, (Aug., 2005), online at: http://ndpr.nd.edu/review.cfm?id=3422#_edn1.

¹²¹ *Ibid.* Stephen Mumford makes the same criticism in his *David Armstrong*, (McGill-Queen’s University Press, 2007), pp.189-190.

the loss of contingency in Armstrong's new metaphysics, Simons brings us back down to earth:

I invite metaphysicians who espouse universals to gaze on this picture and wonder whether it is worth it, just to be free of possibly solvable worries about the nature of instantiation.¹²²

A final point we might mention here is that, whatever about the problems discussed, Baxter's theory of exemplification could only be adopted by Immanent Realists about universals – Transcendent Realists would be out in the cold. Armstrong says as much himself (although, being an Immanent Realist himself, he does not see it as a problem): 'If the universals are transcendent, how could they intersect with particulars?'.¹²³ Insofar as I am trying to remain neutral here between Transcendent and Immanent Realists, I would – strictly – have to say that, regardless of the problems discussed, Baxter's theory is not a viable alternative in this context to the relational view of exemplification. But besides such a neutrality issue, there clearly *are* a number of problems for Baxter's theory. I submit that in the absence of solutions to those, that non-relational theory of exemplification is out of the running. And, because there are, to my knowledge, no other well-developed non-relational theories, we must adopt a relational account of exemplification.

If we take that route, however, the Bradleyan objection awaits us.¹²⁴

¹²² Peter Simons, "Negatives, Numbers and Necessity: Some Worries About Armstrong's Version of Truthmaking", p.260, *Australasian Journal of Philosophy*, 83:2, (Jun., 2005), pp.253-261. We shall quietly ignore here the suggestion Simons makes in the sentence immediately following those quoted: 'And if the worries are not solvable, anyone for nominalism?!' Mumford (*op cit.*, p.192) asks basically the same question as Simons: 'Are we really willing to give up our modal intuitions, and a modal theory [Armstrong's earlier combinatorial theory], just on the basis of a theory of instantiation?'. (For many, it seems, Baxter is Armstrong's Yoko.)

¹²³ "How Do Particulars Stand to Universals?", p.140.

¹²⁴ Note that the Bradleyan objection also applies to trope theories employing the notion of compresence. Anna-Sofia Maurin deals with this issue in her "Trope Theory and the Bradley Regress" (forthcoming).

§1.4.7 Responding to Bradley

For Armstrong, truthmakers are states of affairs. In Chapter Two, I shall agree with him on this score. The point here is that Armstrong uses his truthmaker theory in arguing that the Bradleyan regress is a harmless one:

the truthmaker needed for each step in the regress *after the first* (the introduction of the fundamental tie) is nothing more than the original state of affairs.¹²⁵

If the truthmaker for $\langle a \text{ is } F \rangle$ is the state of affairs a 's being F , and a state of affairs is defined as a particular bearing the exemplification relation, ER , to a universal (or n particulars bearing the exemplification relation to an n -place universal), then that state of affairs involves a 's bearing ER to F . But the *ultimate* truthmaker for $\langle a \text{ and } F \text{ exemplify } ER \rangle$ will not be another state of affairs, in which the pair (a, F) bear a further exemplification relation, ER' , to the original one, ER . Rather, it will be the original state of affairs of a 's bearing ER to F . The idea is that these further states of affairs, involving the succession of exemplification relations ER' , ER'' , etc., *supervene* upon the original one – a 's bearing ER to F – and so would not be *additions* to our ontology. This is, of course, based upon Armstrong's theory of supervenience, according to which if X supervenes upon Y , it is impossible for Y to exist without X also existing. And, he takes it, if all that is required for the existence of X is that of Y , then X "costs us" nothing more, ontologically speaking, than Y does. X comes as an 'ontological free lunch' given our commitment to Y .¹²⁶ So, the picture looks like this:

- (i) The truthmaker for $\langle a \text{ is } F \rangle$ is the state of affairs a 's bearing ER to F .
- (ii) The truthmaker for $\langle a \text{ and } F \text{ exemplify } ER \rangle$ is the state of affairs (a, F) 's bearing ER' to ER .
- (iii) The truthmaker for $\langle (a, F, ER) \text{ exemplify } ER' \rangle$ is the state of affairs (a, F, ER) 's bearing ER'' to ER' .

¹²⁵ WSA, pp.118-119.

¹²⁶ *Ibid.*, pp.12-13.

And so it would continue. Armstrong's idea is that once we commit ourselves to the reality of the first exemplification relation, *ER*, we make no further ontological commitment in accepting the states of affairs found in (ii) or (iii) or any of the subsequent claims in the series. This is simply because the relations found in those states of affairs, namely *ER'*, *ER''*, etc., all supervene upon the original one, *ER*. That *a* bears *ER* to *F* may be contingent, but once it is accepted that it does, we have, so to speak, enough in reality to ground the truth of the claims we must accept in accounting for its bearing that relation to *F*. We have enough to ground the truth of the claims found in (ii) and (iii) above and in all subsequent to those.

It is an interesting suggestion as to how we might respond to Bradley. As a dutiful Humean, Armstrong is, of course, offering an account of supervenience in which we avoid commitment to necessary connections between distinct existences. If *X* supervenes upon *Y*, the existence of *Y* necessitates that of *X*. But *X* and *Y* are not, then, for Armstrong, distinct existents. If they were, then supervenient entities would not represent an ontological free lunch. I, however, feel no duty to Hume when it comes to necessary connections. I believe that distinct existents *can* be necessarily connected. But if I take that (anti-empiricist) stance, then I cannot employ Armstrong's response to the Bradleyan. The only way for me to do so would be if I were to develop my own account of supervenience, one in which *distinct* existents may be said to supervene upon one another without that generating any ontological costs. That is, I should need to say that the states of affairs referred to in (ii), (iii) and every other claim in the series above supervene upon that referred to in (i), and *are* distinct entities from that referred to in (i), and yet *because* they supervene upon the latter, they come at no further ontological cost. That looks like a tall order for an account of supervenience but, in any case, I cannot undertake consideration of the likelihood of developing such a theory here. Therefore, although Armstrong's proposal seems to offer a way for *Humeans* to adopt a relational account of exemplification, it does *not* represent a solution for those, like myself, who disagree with Hume over necessary connections. So much the worse for anti-Humeanism, I say. So much the worse for Humeanism, the Bradleyan might say. I shall offer my own kind of response to the Bradleyan objection.

Where a is F , a state of affairs obtains: a 's being F . As a realist about particulars and universals, I believe that they feature at the most fundamental level of reality, that they are irreducible in the ontological sense. But I also believe that states of affairs only succeed in unifying particulars and universals by virtue of the fact that within states of affairs, particulars *exemplify* the universals. States of affairs provide unity because exemplification "happens" within states of affairs. Now, the Bradleyan objection is to relational accounts of that exemplification charges that if a bore an exemplification relation to F , we should have to say that they together exemplify that exemplification relation. So, we would get another fact, more basic than a 's being F – we would get a and F 's *exemplifying the exemplification relation*. This would, in turn, have to be accounted for in terms of a further exemplification relation. And so on. But the question is: how *can* there be a more basic fact than a 's being F , if a and F are both simple – however we care to understand 'simple'? If we *really* are realists about particulars and universals, then we shall have to operate with *some* notion of simple particulars and simple universals. That is, of course, a very difficult philosophical matter in itself, but I see no need for us to assume or exclude here any particular account of simplicity. All we need to recognise is that *some* account of that must be adopted. So, if we have a simple particular bearing a simple universal, and this is achieved by the particular and universal standing in a relation of exemplification (which will *itself* be simple – how could it be otherwise in what is, *ex hypothesi*, a simple (atomic) state of affairs?), then where is there left to go? The Bradleyan thinks this generates an infinite series of states of affairs of the form $(x, U, ER...ER_n)$'s *exemplifying* ER_{n+1} , where x is a particular and U a universal. But at what level of reality are these further states of affairs (*viz.*, those coming after the initial "groundlevel" state of affairs) to be found? I am not, of course, asking the epistemological question here, I am wondering how there could be states of affairs more basic than those at the most basic level of reality.

But it would, I think, be possible for the Bradleyan to respond that in making this type of argument we beg the question. The Bradleyan objection is that *a 's being F* cannot be considered an atomic state of affairs, simply because it is susceptible to

further analysis. *a's bearing ER to F* can be analysed into *a's and F's exemplifying ER*, and so on. With our initial state of affairs, we have *not* reached the fundamental level of reality. That, indeed, is the *problem* with the relational account of exemplification: if we adopt it, we *never* reach the ontological bedrock. But, by way of reply, we might point out that reaching the bedrock is bound up with what we are taking as ontologically *primitive*. Whether one's account of exemplification is relational or not, primitives must be chosen. So where do the non-relationalists think we reach bedrock? Which primitives will *they* choose? And why, most importantly, would we be better off with those than with the primitives a relationalist would choose? The Bradleyan objection cannot be taken in isolation from these questions. It works, I suggest, just as long as there are non-relational theories of exemplification with *clear* advantages over the relational one. The primitives of the *viable* non-relational theories should generate substantially less residual opacity than that generated by the primitives of the relational theory. And, as things stand, I don't regard Baxter's theory as viable – it simply has too many unresolved (and possibly irresolvable) problems with contingency, not to mention the difficulties faced by an aspectival conception of particulars and universals in general. And, pre-1999, Armstrong claims to offer a non-relational account, but actually offers no account at all. at least not for realists about states of affairs. So I don't think we find any viable non-relational theory there. So, with Baxter's account out of the running (at least pending clarification and/or revision), we must conclude here that in the absence of any other well-developed non-relational theories (there may well *be* others; I am not aware of any), we must adopt a relational view of exemplification. The Bradleyan objection may be considered a threat only insofar as (i) there *are* viable non-relational accounts and (ii) the primitives adopted within those generate less opacity than do those adopted within the relational account.

We must reach primitivity at *some* stage in our metaphysics, and I propose that a realist about particulars, universals and states of affairs has little or no choice – at least as things stand – but to take the exemplification relation as primitive. Specifically, what I think we must take as primitive is the notion of a particular or universal *standing in* the relation of exemplification. The exemplification relation

will be a universal just like any, except for this one (very important!) *sui generis* feature. Its relata will stand in it without, so to speak, “mediation”. If *a* is F, *a* and F will be related by the exemplification relation, ER, although neither of those will be related *to* ER. The exemplification will relate without relating to what it relates. Particulars and universals will participate in the exemplification relation in a manner unlike that in which they participate in any other relation. We might think here of something like C.D. Broad’s ‘metaphysical glue’ – the particular and universal are bound together by the exemplification relation without there being anything between it and either the particular or the universal, just as there is nothing between the glue and *X* or between the glue and *Y*, where two items *X* and *Y* are glued together.¹²⁷ I don’t deny that this idea is in itself puzzling, but at the stage of primitives we *will* have residual opacity. We can say much that is informative about primitives without seeking to reduce them, but it is analytic that we cannot say *everything* about our primitives.

William Vallicella discusses relational theories of exemplification, and I think it will help to bring out the details of my account a little more if we (critically) consider what he says.

§1.4.8 States of Affairs and The Relational Theory of Exemplification

According to Vallicella, mine is a ‘reductionist’ conception of states of affairs.¹²⁸ Because the ‘primary constituents’ of a state of affairs – the exemplifier(s) and what is exemplified (usually: particular and universal) – can exist without the state of affairs existing (as we discussed above, in §1.4.3), Vallicella contends that a ‘unifier of a fact’s constituents...[a] connector, is needed’ (p.238). He sets up a trichotomy: we can say that the connector is *internal* to a state of affairs, or *is* the state of affairs, or is *external* to the state of affairs. Mine is the first type of view – the exemplification relation is a constituent of states of affairs along with

¹²⁷ C.D Broad, *Examination of McTaggart's Philosophy: Volume I*, (CUP, 1933), p.85.

¹²⁸ William F. Vallicella, “Three Conceptions of States of Affairs”, p.238, *Nous*, 34:2, (2000), pp.237-259. References in brackets in the text are to this article.

particulars and/or universals.¹²⁹ He regards this as a reductionist view in that it takes states of affairs to be ‘analyzable without remainder into their constituents....both primary [the particulars and/or universals] and secondary [the exemplification relation]’ (pp.238-239). He calls the second type of view, that what unifies states of affairs just is the states of affairs themselves, ‘non-reductionist’. Here, states of affairs are ‘irreducible entities distinct from their constituents’ (p.238). Vallicella’s own view is of the third type, and he argues that God can serve as the external unifier of states of affairs (p.252). But I don’t wish to argue against either his or the second type of view here. Rather, I wish to point out two problems with the trichotomy he sets up.

First, I don’t regard my conception of states of affairs to be reductionist in the sense Vallicella employs. I don’t, that is, believe that states of affairs can be reduced to their constituents in as straightforward a sense as Vallicella has in mind. Given that the primary constituents of a state of affairs can exist even though the state of affairs of which they are constituents does not, Vallicella (rightly) thinks that ‘on any reasonable theory a fact does not supervene upon its primary constituents’¹³⁰, that there must be something more to facts than particulars and universals. But he is, I suggest, wrong to think that in positing either an exemplification relation or non-relational tie we offer a reductionist theory of states of affairs, insofar as states of affairs would, on such theories, supervene upon their primary and secondary constituents. Imagine a world *W* in which *a* lacks *F* although something else, *b*, has *F*. And, for simplicity, assume the relational view that property possession is a matter of bearing the exemplification relation, *ER*. The Armstrongian definition of supervenience has it that *X* supervenes upon *Y* iff it is impossible that *Y* should exist and *X* not exist. But in *W*, the state of affairs *a*’s *being F* does not exist, even though all three constituents – *a*, *F* and *ER* – do. Thus, we have a possible world in which what is supposedly supervened-upon exists, even though what is supposedly doing the supervening

¹²⁹ A non-relational view of exemplification such as Baxter’s, for example, would also be classified as reductionist here.

¹³⁰ Vallicella, “From Facts To God: An Onto-Cosmological Argument”, p.161, *International Journal for Philosophy of Religion*, 48, (2000), pp.157-81.

does not. A state of affairs cannot, therefore, be reducible to its constituents; at least not in such a straightforward manner.¹³¹

My second problem with Vallicella's set-up is that in calling it 'non-reductionist' he bestows an unwarranted legitimacy on Armstrong's account of exemplification (p.246). He takes Armstrong's view to be that what unifies states of affairs are the states of affairs themselves; *they* do the non-mereological binding which distinguishes *a's being F* from the mere sum *a+F*. But this is not, I suggest, a non-reductionist view of exemplification so much as an *evasion* of the problem of exemplification. What is lacking here is *some* positive characterisation of the difference between states of affairs and mereological sums.

Vallicella brings up an interesting point which will help in drawing out the difference between my view and the reductionist one he discusses. He talks about the difference between the exemplification *relation* and exemplification *relationships*. A relationship, he says, is

a particular relational fact, which is nothing apart from *its* terms, and so cannot exist without the terms it in fact has. A relationship is in every case a *particular*, an unrepeatable. But a relation is a universal that can exist without relating the terms it happens to relate. (p.245, emphases in original)

I agree that a relational fact – a fact of the form *a's bearing R to b* – cannot exist without its terms, and so a relationship cannot exist without the entities *in* that relationship. And I agree that a relation *can* exist without the entities it happens to relate. But I disagree that a relationship is 'nothing apart from its terms'. Obviously, *a* and *b* could exist without them being *R*-related, so let's assume that by 'terms' Vallicella meant the *constituents* of the relational fact. What I disagree with then is the claim that the relationship, the relational fact, *a's bearing R to b*, is nothing more than its constituents, namely: *a*, *R* and *b*. A relationship, I suggest, is the *presence* of a relation between the terms it relates. It is more than the three constituents *a*, *R* and *b*, for, as we saw above, it's possible for all three to exist

¹³¹ Richard Aquila (1977), p.59, criticises this argument. See below.

without it being the case that *a* bears *R* to *b*. What is needed for *a*'s bearing *R* to *b* is that *R* be present between *a* and *b*. A relational state of affairs may, therefore, be said to supervene upon the existence of its constituents but also upon the presence of the relation between the terms. Which is to say that, necessarily, if *a*, *R* and *b* all exist and *R* is present between *a* and *b*, then the state of affairs *a*'s bearing *R* to *b* exists. Such a state of affairs is not reducible to *a*, *b* and the relation *R*, which characterises the relationship between *a* and *b*. And insofar as a relationship *is* a relational fact, a relational fact is the presence of a relation between the terms it relates. Mine is a relational view of exemplification, and every fact involves exemplification. Therefore, *every* fact is a relational fact. So, the difference between the exemplification *relation* and an exemplification *relationship* is that the latter is the presence of the former between particulars and universals (or between universals and higher-order universals). This is why I dispute his characterisation of my type of view of exemplification; I think that a state of affairs may be reduced, in a sense, to its constituents *plus* the presence of the exemplification relation between the participants *in* that relation.¹³² A state of affairs *is* the presence of *ER* between particulars and universals (or between universals and higher-order universals). And it is rather difficult to see how this differs from what Vallicella calls the 'non-reductionist' conception of states of affairs. Insofar as I am saying that *a*'s being *F* is the presence of *ER* between *a* and *F*, couldn't my view be accurately characterised as Vallicella does the 'non-reductionist' one – couldn't I too say that what unifies a state of affairs is just the state of affairs itself?¹³³

¹³² Aquila (1977), p.59, thinks that this view (or something close to it) means that 'there would no longer be any distinction at all between a state of affairs and the [exemplification] connection among its constituents.' But the distinction is that a state of affairs *is* the exemplification connection connecting its constituents, the presence of that connection between its constituents, while the exemplification connection itself is *what is present*. In these terms, we *can* distinguish – as Aquila seems to think we cannot – between *a*+*F*+*ER* and the state of affairs *a*'s being *F*. Thus, it *is* possible, *pace* Aquila (p.60), to regard *ER* as a *universal*. My argument here is similar to one given by Alexius Meinong (in *Gesammelte Abhandlungen*, 2nd ed., (Leipzig: Verlag von Johann Ambrosius Barth, 1929), 2:389-90), and Aquila's response (pp.67-68ff) is to invoke the Bradleyan regress objection. But that is, I think, an earlier issue than those with which we are presently concerned.

¹³³ And everything I say here could be said, *mutatis mutandis*, by the non-relational theorist. Theirs could be the claim that it is the *presence* of the non-relational tie of exemplification that is the defining characteristic of states of affairs.

So, although there remains a distinction between, on the one hand, mine and (for example) Armstrong's views of exemplification, and, on the other hand, Vallicella's own (externalist) view, the differences between mine and Armstrong's view do *not* equate to those between a reductionist and a non-reductionist. For my view seems to meet the criteria for both the reductionist *and* non-reductionist conceptions. We could look for new ways to distinguish mine from Armstrong's view but I suggest instead that we say that there are only *two* types of view: internalist and externalist. Vallicella's is an externalist view, and Armstrong's might be characterised as an *incomplete* internalist account; mine is (or at least, aspires to be) a complete, or perhaps, "minimally sufficient", internalist view.¹³⁴

The approach I have taken has been to begin by arguing that we need states of affairs to act as unity-providers and, having done that, I then argued for a particular conception of the nature of the unity provided. I said that the unity of a state of affairs is a matter of the exemplification relation holding between the exemplifier(s) and the universals exemplified. Stephen Read takes a very different view on matters. Although he seems to agree that we need states of affairs (he uses "fact") if we are to have unity at all, he criticises the kind of approach to the problem of exemplification – the problem of the *nature* of the unity we find in states of affairs – taken by Armstrong and Russell and taken here. It is worth quoting the crucial passage in his paper in full.

The problem of the unity of the fact is that of reconstituting the fact from its constituents once they have been abstracted from it. My aim is to show that this problem is misconceived – indeed it is the way the problem is described and conceived which is the problem. Just as *a* is common to the facts that *a is F* and *a is G*, so too *F* is common to the facts that *a is F* and *b is F*. But seen that way, *F* becomes an object, a property robbed of its character as a property. A property or relation is by its nature a property of something, a relation between things. Once we treat it as an object, as a constituent of the fact, it loses that character, and we are simply left with a list: *a* and *F*, or *a, R* and *b*. We puzzle how to reconstruct the fact from its constituents, and like Armstrong and Russell, find we resort to

¹³⁴ I won't actually discuss Vallicella's externalist view but I might note that it is not obvious to me that there really *is* a direct disagreement between internalists and externalists (nomenclature aside). Vallicella's seems to me to be a view on what *causes* exemplification, whereas internalism is a view about how exemplification defines states of affairs.

a puzzling form of combination, something strangely stronger than mereology or aggregation. Bradley's regress beckons.

The answer is that it is *F* and *R* which provide the unity to the fact. *R* relates *a* and *b*, and thereby constitutes the fact that *aRb*....Objects do not come to us bare of their properties and relations. They have properties and lie in various relations, and that they do are the facts about them....facts are basic, in that they are the facts about their constituents.¹³⁵

As I understand it, Read's idea is that if we think of *F* as being common to various states of affairs, we are regarding it as something which is "put together" with particulars in states of affairs. What we *should* do is regard *F* as the property *a* has and the property *b* has, and so on for all its exemplifiers. The facts – *a's being F*, *b's being F*, etc. – come first. What we *have* are the facts; we don't *have* *F* waiting there, like some quasi-individual, to be put together with particulars. Nor do we have particulars waiting – propertyless – to be put together with properties. We *just* have the facts we have: the facts *a's being F* and *b's being G* and *c's being F*, and so on. The pseudo-problem of reconstitution arises when we take the *constituents* of facts as being *prior* to the facts themselves. And (if I read him correctly) the unity of the fact *a's being F* is provided by *F*. *F* characterises *a*, it characterises it *as* an *F*-thing, and in doing so the fact *a's being F* is constituted.

This is, I admit, an interesting suggestion as to how we might avoid the profoundly difficult question of how particulars and properties are "welded" together. And it has, Read claims, important consequences when it comes to truth and modality. Briefly, the consequences for modality are that possible worlds-based theories of modality cannot get off the ground without 'destroy[ing] the unity of the fact'.¹³⁶ Such theories require the reality of non-actual merely possible states of affairs. But such states of affairs are only built up using the constituents of actual states of affairs. So, a possible worlds theory will, according to Read, say that $\langle a$ is possibly *G* \rangle is made true by a non-actual state of affairs – *a's being G* – which obtains at some non-actual possible world. But the constituents of this non-actual state of affairs, *a* and *G*, are constituents of various *actual* states of affairs. In the

¹³⁵ Stephen Read, "The Unity of the Fact", *Philosophy*, 80, (2005), p.319.

¹³⁶ *Ibid*, p.341.

case of *a*, it is (let's say) a constituent of *a's being F* and *a's being H* and *a's bearing R to b*, and so on for all the actual states of affairs of which *a* is a constituent. And similarly for the property *G* – that is a constituent of various actual states of affairs: *b's being G*, *c's being G*, etc.. The problem is, we cannot “extract” either *a* or *G* from these actual states of affairs without destroying the unity of those states of affairs. Those states of affairs come *before*, or are more basic than, the particular *a* and the property *G*. Possible worlds theories misconstrue the unity those states of affairs have, seeing that as a matter of the constituents being somehow “glued” together (as they are by my exemplification relation, for instance). An aspect of that misconstrual is the belief that those constituents can be extracted from those actual states of affairs and recombined in non-actual states of affairs, such as *a's being G*, which would then serve as the truthmakers for modal claims.¹³⁷ The constituents of actual states of affairs are not *prior* to those states of affairs and, Read thinks, they would need to be in order to be extractable and recombinable as possible worlds theories require. So, such theories cannot explain modality, as the resources required for such explanation (viz., non-actual states of affairs) are not available. And the same kind of complaint can be lodged against Armstrong's combinatorial theory. He *must* regard the constituents of actual states of affairs as extractable from (prior to) those states of affairs in order to generate the recombinations in terms of which he accounts for possibility. And he cannot do that without sacrificing the unity the actual states of affairs have. So, his theory also fails to give an explanation of modality.

Now, the theory of modality I shall argue for below will not require “non-actual” states of affairs, nor will it be combinatorial in character. However, it *will* be open

¹³⁷ Read's treatment of the Lewisian view of modality is, I think, quite weak. He objects that states of affairs in which, for example, donkeys talk are not real, however much Lewis says they are (under the terms of his indexical understanding of actuality). ‘Modal realism divorces reality from what is actually the case, and so fails to give a proper analysis of the notion of actuality – and hence of reality and possibility’ (pp.335-336). But Lewis would regard this as merely “our-world chauvinism”. Read is just not willing to let go of the idea that our world is privileged; he simply will not accept that what is real need not be actual. There certainly *are* grounds, in my opinion, to reject Lewis's idea that other worlds exist and are just as real as this one, but *shouting* at Lewis that what ‘actually happens is what *really* happens’ (p.335; my emphasis) is not going to help the anti-Lewisian cause.

to the same kind of objection as Read makes to the possible worlds and combinatorial theories. I don't need to go into the details of my modal theory here – it will suffice to say that the theory will presuppose a conception of the unity of states of affairs which is contrary to Read's. It will presuppose that the constituents of states of affairs *are* extractable, that states of affairs are *not* prior to their constituents. And this outlook is common to relational and non-relational theories of exemplification alike (one of Read's main targets in his paper is (pre-1999) Armstrong, who defends (or at least purports to defend) a non-relational theory). Read thinks such theories are based on a misconception of particulars, properties and states of affairs, and that any account of modality presupposing such a theory is doomed from the start.

So, what is needed is an account of modality which respects the manner in which states of affairs have their unity. But this is just where the problem seems to arise for Read, for there doesn't seem to be any *room* for a modal theory once we have adopted his view of factual unity. What, for example, could we say about the truth of <Obama might have had green rather than brown eyes> or that of <Obama is necessarily human>? *All* we have, remember, are the states of affairs we *do* have. There is certainly a state of affairs *Obama's being brown-eyed*, and a state of affairs *Obama's being human*. But how, on Read's theory, could these account for the truth of the modal propositions? What can Read say *at all* about possibility, necessity, contingency or impossibility? Discussing Armstrong's combinatorialist approach to modality, he says:

once one has taken a fact apart, there is no way to put it back together again. If the constituents are united, then it is a fact that they are united – in the actual state of affairs. If not, then nothing can unite them. There are no recombinations of the elements of facts: the only states of affairs there are, are the actual states of affairs – how the elements are in fact combined and united....What combinations there are, are all there are.¹³⁸

¹³⁸ *Ibid*, p.340.

Nothing can unite a particular and some property it does not have, even though our modal intuitions might tell us that that particular *might* have had that property. What now is to be said about possibility?

what actually happens is what really happens. Other possibilities are only that, possibilities. Although possible, it must be recognized that if they did not eventuate, they really did not eventuate and are unreal¹³⁹

So, are there possibilities or not? It seems not. If all we have are the actual states of affairs, and their constituents are not (in any sense) extractable from those, then what is to become of modality? I readily grant that if we conceive of factual unity along the Armstrongian-Russellian lines, whereby the constituents of states of affairs *are* “extractable”, then factual unity represents a *big* challenge (we have to face the Bradleyan objection or make sense of non-relational ties somehow, and so on). But – as Peter Simons says in response to Armstrong’s adoption of his current position on exemplification, with all the modal problems that brings – is the cost in terms of modality really worth it, just to solve the problem of factual unity? It does, after all, seem possible (in the epistemic sense) that we should find some other way of solving that problem, which does *not* involve the eradication of modality. And, of course, I have not even considered *whether* Read’s is a good solution to the exemplification problem. It is an interesting proposal but, if it *does* have the consequences for modality that I claim it has, then its appeal as a theory of factual unity would need to be strong enough to mitigate the depth of modal revision it requires. And, as things stand with the theory, that revision would indeed be deep, perhaps even extending to the point of abandonment.¹⁴⁰

I myself think we *can* account for the truth of de re modal truths without recourse to non-actual states of affairs, but my theory *does* require that constituents of states of affairs be extractable. So, it’s trade-off time. Read may have offered an interesting suggestion as to how we should respond to the problems of factual unity, but the modal price is, I suggest, too high.

¹³⁹ *Ibid*, p.335.

¹⁴⁰ Stephen Read has conceded (in personal communication) that work would be required if his theory is to accommodate de re modality.

So, I shall stick with my relational account of exemplification. And I want to say that the *presence* of the exemplification relation between a particular *a* and a universal *F* is attributable to the particular. It is *a* that *does* the exemplifying – *F* is exemplified. (This is directly contrary to Read’s suggestion that the *property* does most of the work towards factual unity.) On my picture, exemplification is a sort of *activity* the particular engages in, although, obviously, it would not be an activity in the same sense as running or wishing are activities.¹⁴¹ Exemplification is at the very heart of what it is to be a particular – it is, so to speak, the particular fulfilling its status *as* a particular. For a particular to be real, to exist, is for it to exemplify.¹⁴²

Summary

What we have, then, is a metaphysics of universals, particulars and states of affairs. A (first-order) state of affairs is a particular(s) standing in the exemplification relation to a universal. There were two main aims in this chapter: to clarify where the metaphysical problem of modality fits within the philosophy of modality and to establish a metaphysical position ahead of consideration of which entities are best suited to play the role of truthmakers. We saw that the metaphysical problem of modality – the “source question” (loosely taken) – is one of the basic problems facing philosophers of modality, the others being the clarity, function and epistemological problems. Once that clarificatory matter was dealt with, I made my initial metaphysical assumption – realism about universals. And I argued that this leads us to commitment to particulars and states of affairs. The

¹⁴¹ Justin Broackes, “Substance”, *Proceedings of the Aristotelian Society*, 106:1, (Jan., 2006), pp.133-68, might have something similar in mind when he says: ‘*Tibbles weighing 5kg* has, I think, an ontological status partly similar to that of *Tibbles’s actions*’ (p.152). It has been suggested to me that there may be some parallels between my view of exemplification as an activity and Donald Davidson’s views on action sentences (see “The Logical Form of Action Sentences”, in Davidson’s *Essays on Actions and Events*, (Clarendon, 2001)). Unfortunately, pressures of time have meant that I have been unable to investigate this in any real depth, and so I must leave that question for another occasion.

¹⁴² And this is true, I believe, for both Aristotelians and Platonists – Immanent and Transcendent Realists about universals.

later sections of the chapter have been about teasing out the details of that commitment to states of affairs, and the big claim was that we must countenance a relational view of exemplification.

With that metaphysical framework in place, we can now move on to the question of which category of entity we should draw our truthmakers from. And, from there to the argument for one of the main claims of the dissertation – that modality pervades reality.

Chapter Two: Modal Ubiquity

§2.0 Introduction

In this chapter I shall argue that modality pervades reality, that *all* states of affairs involve a modal dimension. Ahead of that argument, however, I must select my truthmakers. In §2.1, I argue that states of affairs are the best candidates – or, rather, I use Armstrong’s Truthmaker Argument to reach that position. I also briefly clarify what the argument establishes. In §2.2 I argue against what I earlier dubbed the “Separatist Impulse” with respect to states of affairs in which universals are contingently exemplified. This leads to the Principle of Modal Ubiquity, one of the primary claims of the dissertation. Following that, in §2.2.1, I offer suggestions as to the origins of the Separatist Impulse and in §2.2.2 I show how the Principle of Modal Ubiquity entails a string form of modal primitivism.

In the second part of the chapter, I discuss possible worlds. I begin by considering how we ought to regard possible worlds discourse (§2.3) and, in §2.4, I argue for a Timid Fictionalist view of that discourse.

§2.1 Truthmakers as States of Affairs

I shall use Armstrong’s ‘Truthmaker Argument’¹⁴³ in support of my contention that our truthmakers must be states of affairs. The argument is simple and, I think, compelling – although I would not claim that it is “absolutely conclusive”; as Armstrong himself says, metaphysics is the wrong place to look for such arguments.¹⁴⁴ In particular, there are, I think, strong intuitions in support of the

¹⁴³ WSA, pp.115-116ff.

¹⁴⁴ (2004), p.2.

view that truthmakers are *tropes*, that is, given a substratum-trope view¹⁴⁵ (as opposed to a bundle-of-tropes view). However, as a realist about universals and particulars, I think the only option is to take states of affairs as our truthmakers. Assuming that realism about universals and particulars, we can set out Armstrong's argument as follows:

1. *a* contingently exemplifies F.
2. If *a* contingently exemplifies F, then it is possible for *a* to lack F.
3. If entity *e* is a truthmaker for $\langle a \text{ is } F \rangle$, then, necessarily, if *e* exists, $\langle a \text{ is } F \rangle$ is true.
4. The mereological sum $a+F$ can exist without it being the case that *a* exemplifies F.
5. *Therefore*, the truthmaker for $\langle a \text{ is } F \rangle$ must be the state of affairs *a's being F*.

Premiss 2 has something akin to axiomatic status in modal theory and I shall assume it without further comment. Premiss 3 is the thesis of Truthmaker Necessitarianism, the widely accepted idea that truthmakers necessitate or entail (in some sense) the truths they make true.¹⁴⁶ Strictly, we must count 4 as another assumption of Armstrong's, although it has a similar status in metaphysics as premiss 2. (By "assumptions" here I don't mean to suggest that Armstrong doesn't argue for these claims – he does.) The candidates for the role of truthmaker for the proposition $\langle a \text{ is } F \rangle$ are: the particular *a*, the sum $a+F$ and the state of affairs *a's being F*. Premisses 1, 2 and 3 together rule *a* out as a candidate, for *a* might exist and yet lack F, in which case $\langle a \text{ is } F \rangle$ would be false – so the *existence* of *a* does not necessitate the truth of that proposition. Again, premiss 3 is decisive when it comes to the sum $a+F$ – according to premiss 4, that sum could exist without necessitating the truth of $\langle a \text{ is } F \rangle$, and so will not suffice as its truthmaker.¹⁴⁷

¹⁴⁵ For this sort of view see R.P. Cameron, "Truthmakers and Necessary Connections", *Synthese*, 161:1, (2008), pp.27-45, and "Truthmakers, Realism and Ontology", in Robin LePoidevin (ed.), *Being: Contemporary Developments in Metaphysics*, Royal Institute of Philosophy Supplement, 83, (2008), pp.107-128.

¹⁴⁶ For argument against this principle see Cameron, "Truthmaker Necessitarianism and Maximalism", *Logique et Analyse*, 48:189-192, (2005), pp.43-56.

¹⁴⁷ Almost twenty years before Armstrong, Richard Aquila (1977), pp.58-59, made the argument against particulars as truthmakers (although he did not use the truthmaker jargon). He also made

Armstrong doesn't (directly) consider the property *F* as a possible candidate for that role, but it is easy to see why it would not do. By premisses 1 and 2, it follows that *F* could exist without that necessitating the truth of $\langle a \text{ is } F \rangle$.¹⁴⁸ The Immanent Realist about universals who believes that universals cannot exist unexemplified would simply say that is (or could be) exemplified in some particular other than *a*. (The Transcendent Realist needs no such qualification, for universals are necessary existents on such a theory.) The inadequacy of *F* as the truthmaker follows, then, by premiss 3. States of affairs are the only entities satisfying all the criteria. States of affairs are *not* mereological sums, therefore they are not ruled out with the latter. The category of states of affairs is the only category the entities of which manage to meet the condition laid down in premiss 3 (Truthmaker Necessitarianism), given premisses 1 and 2. If *a's being F* is a truthmaker for $\langle a \text{ is } F \rangle$, then it cannot be the case that that state of affairs obtains and *a* is not *F*, even though *a* is only contingently *F*. It cannot, that is, be the case that $\langle a \text{ is } F \rangle$ is false – the state of affairs *necessitates* the truth it makes true.

If we are realists about universals and particulars, then – in two senses – we cannot opt for tropes as our truthmakers. First, we are taking properties and relations to be universals, and we obviously cannot simultaneously hold this and subscribe to trope theory. Second, we have ruled out the bundle-of-universals view, and the only other bundle theory is a bundle-of-tropes view. So, we cannot choose as our truthmakers the elements of the bundles composing our particulars, as they would have to be tropes – and, as I have just said, we rule out that option when we assume realism about universals. And, as demonstrated in the Truthmaker Argument, universals, particulars and mereological sums are all unsuitable for the role of truthmakers. The only type of entities fitting the bill are states of affairs. And that will be the line taken from here on: truthmakers are, one and all, states of affairs.

the Armstrongian argument for what is premiss 4 in my presentation of the Truthmaker Argument above.

¹⁴⁸ Immanent Realists about universals (such as Armstrong) who believe that universals cannot exist unexemplified would need to supplement the argument to this conclusion. They would need premisses 1 and 2 plus the assumption that *F* is also exemplified by some particular other than *a*.

Armstrong's Truthmaker Argument establishes that states of affairs are suitable entities to act as truthmakers, given the conception of states of affairs that he and I employ. But it does *not* establish the necessity of states of affairs *in* a metaphysics such as mine (which is, certain questions about the reality of particulars aside, basically an Armstrongian metaphysics). That is an earlier question: whether we need states of affairs given realism about particulars and universals is decided in terms of states of affairs' capacity to *unify* particulars and their properties. One could accept states of affairs into one's ontology for *that* reason (that is, on the basis of a conviction that states of affairs *do* manage to supply the unity needed), and yet one could go on to eschew the truthmaker-theoretic approach, for whatever reasons one might have for wanting to take some other approach to metaphysical investigation. It is, however, fairly unlikely that one *would* go in for a metaphysics like that and yet eschew the truthmaker-theoretic approach. Nevertheless, unlikely or not, it is possible, and in such circumstances one would *not* be embracing states of affairs in order for those to serve as truthmakers – one would not be arguing for states of affairs from a truthmaker-theoretic basis. The important point is, the Truthmaker Argument only works *because* states of affairs are capable of unifying particulars and universals. The primary role of states of affairs is to provide such unity, and they have their secondary role, as truthmakers, (if indeed we *wish* to give them that role) *in virtue of* their primary role.

A complication here is that Armstrong *seems* to conflate these roles. He says:

It does not matter whether we work with tropes or universals, and again whether we work with bundles or substances with attributes. The same powerful truthmaker argument for states of affairs...can be mounted. We have somehow got to get particulars and their properties together, or else somehow get the bundles tied up. Since the links are contingent (I am assuming for the moment), the entities to be linked cannot do the job by themselves. Truthmakers must necessitate, and the mere entities or their mere mereological sum by hypothesis cannot necessitate the linkages required. So there must exist states of affairs to be the truthmakers, to get us beyond the 'loose and separate' entities....States of affairs must be introduced as *additions to the ontology*.¹⁴⁹ [emphasis in original]

¹⁴⁹ Armstrong (2004), pp.48-49.

Using states of affairs to ‘get particulars and their properties together’ is all very well – after all, I am suggesting that that is the primary role for states of affairs. But it is only *because* states of affairs do this job that they are capable of necessitating truths, as (necessitarian) truthmaker theory says truthmakers must do. In saying that ‘there must exist states of affairs to be the truthmakers’, Armstrong is clearly not attending to this difference.

Julian Dodd discusses Armstrong’s Truthmaker Argument, but only seems to add to what is already a rather confused situation. He says that, for Armstrong,

the fugitive truthmaker must...have *a* and *F* as constituents, but in such a way that it exists only if its constituents are unified....This being so, states of affairs appear to be promising candidates for truthmaking because, as they are introduced by Armstrong, a state of affairs exists just in case a particular has a property or a relation holds between two or more particulars.¹⁵⁰

Saying that a state of affairs – *a’s being F* – ‘exists only if [*a* and *F*] are unified’ betrays a misconception of the nature of states of affairs. *Pace* Dodd, the relationship between that state of affairs and the unity of *a* and *F* is not such that that unity is a *necessary condition* for that states of affairs’ existence. Rather, the unity “enjoyed” by *a* and *F* is *provided by* the state of affairs *a’s being F* (or, if we want, by the *existence* of that state of affairs). *a* and *F* “achieve” unity *within* the state of affairs *a’s being F*. To appropriate a term of Bergmann’s, the state of affairs *a’s being F* is the “nexus” of the unity of *a* and *F*.¹⁵¹

Now, if *T* is some candidate for the role of truthmaker for $\langle a \text{ is } F \rangle$, then, by Dodd’s lights, *T* must have *a* and *F* as constituents such that *T* exists only if *a* and *F* are unified. If this is right, and states of affairs are to be understood as I suggest, then our truthmakers won’t be states of affairs. For, as I see things, the state of affairs *a’s being F* just is the unification of *a* and *F*. It is, if you will, *where* *a* and *F* get unified – as Armstrong puts it, [i]n this state of affairs *a* and *F* are brought

¹⁵⁰ Dodd, (1999), p.148.

¹⁵¹ Bergmann (1967), p.9ff.

together'.¹⁵² And there would surely be something wrong in saying that the state of affairs *a's being F* exists only if *a* and *F* are unified. That would be equivalent to (something like) the claim that *a's being F* exists only if the very thing its existence brings (viz., the unity of *a* and *F*) is already the case. Its existence would be dependent upon what its existence *provides* - which would clearly be rather ridiculous. But, strictly speaking, the conclusion would have to be that, if Dodd has set things up correctly, states of affairs do *not* satisfy the criterion, and so cannot serve as truthmakers. What Dodd *should* have said was: if *T* is a truthmaker for $\langle a \text{ is } F \rangle$, then *T* must have *a* and *F* as constituents such that *a* and *F* are unified in *T*. He must drop the clause that *T*'s existence depends upon its constituents being unified. States of affairs will, then, satisfy the criterion, for *a's being F* has *a* and *F* as constituents and they are unified within it.

At the end of the piece quoted above he "establishes" that states of affairs may serve as truthmakers by pointing to the fact that a state of affairs exists *just in case* its constituents are unified. Now, apart from the fact that Dodd has shifted the posts here – earlier, the criterion is given in terms of necessary conditions, but is now a matter of necessary *and* sufficient conditions ('just in case') – I am not sure that the biconditional represents the connection between a state of affairs and the unity it supplies very well. If we say, as Dodd is now suggesting, that a state of affairs exists just in case its constituents are unified – that is, " $E!(a's \text{ being } F) \leftrightarrow a \text{ and } F \text{ are unified}$ " – there is still the worry about the left-to-right direction of this. As I said against Dodd above, it is difficult to understand the claim that a necessary condition for the existence of the state of affairs *a's being F* is *a* and *F* being unified, when it is that unification only takes place *within* that state of affairs. Perhaps we are better to characterise things somehow along the following lines:

UNITY: *Within* $\langle a's \text{ being } F, (\lambda x \lambda y [x \text{ and } y \text{ are unified}], \langle (a, F) \rangle \rangle$

¹⁵² WSA, p.116.

This states that within the state of affairs *a's being F*, the elements of the pair (*a*, *F*) are unified.¹⁵³ Although this is only intended to be suggestive of how we might represent matters, I think that we come closer to the metaphysical truth in UNITY than we do in “ $E!(a's\ being\ F) \leftrightarrow a\ and\ F\ are\ unified$ ”. In any case, I shall not consider these issues further, for the important point to be made here is just this. Although Armstrong and I both end up with states of affairs as our truthmakers, Armstrong fails to distinguish between the claim that states of affairs are the best candidates to serve as truthmakers and the claim that a metaphysics of universals and particulars *requires* states of affairs. Why is this an important point? Because I think that Armstrong's failure to make that distinction serves as an obfuscation of the dialectic within which states of affairs enter his metaphysics. I very much doubt, however, that it was an *intentional* obfuscation on Armstrong's part – he is universally esteemed for his rigorous intellectual honesty, and rightly so. Nevertheless, his neglect of that distinction means that he doesn't appropriately address the question of *why* states of affairs are needed in his metaphysics. When we *do* acknowledge that the Truthmaker Argument only works because states of affairs are *already* recognised as unity-suppliers, it is thereby made plain that it is incumbent upon us to actually *argue* for the necessity of states of affairs *qua* unity-suppliers. That is why I gave *my* argument for that before coming to the Truthmaker Argument at all. But once such an argument is given, our obligation to give an *account* of this unity-supplying becomes very prominent within the dialectic. And giving an account of this simply means giving an account of exemplification – the kind of unity particulars and their properties have.¹⁵⁴ This might be why Armstrong never offers much in the way of a positive theory of exemplification. The motivation for him to say more on this than he did was obscured at the point at which he conflated the conclusion of the Truthmaker

¹⁵³ *a* and *F* are as any *x* and *y* are when *x* and *y* are unified. “ λx [Human *x*], $\langle Obama \rangle$ ” should be read “*Obama* has the property that any *x* has if *x* is a human”. My use of lambda operator follows David Wiggins', see (for example) *Sameness and Substance Renewed*, 2nd ed., (CUP, 2001).

¹⁵⁴ Dodd, *op. cit.*, p. 150 gets it right that ‘it is not enough simply to *say* that the state of affairs *a's being F* is a unity. This unity must be *explained*’ [emphases in original]. But he is *very* swift in his rejection of relational theories of exemplification (the usual Bradleyan reason being cited).

Argument and the conclusion of an entirely separate argument for the necessity of states of affairs *qua* unity-suppliers – an argument he never actually makes.¹⁵⁵

In summary, I have argued that states of affairs are needed *qua* unity-suppliers and have offered a relational account of that unity-provision (exemplification). In this section, I have simply offered Armstrong's Truthmaker Argument for the selecting states of affairs as our truthmakers. Latterly, I have discussed how that argument was misconceived by Armstrong and how that misconception may have been important within his dialectic. But the main lesson of this section has simply been that truthmakers are states of affairs.

§2.2 *The Separatist Impulse*

After this long journey into general metaphysics, we now have the resources needed to undertake the foremost task in this dissertation – the investigation of the metaphysics of modality. The first question here is whether the truthmakers for de re modal truths are reducible. The second is, if they are not reducible, *how* do they feature within the ultimate structure of reality? In this section I shall argue that we ought to query the usual way of approaching the first question. Once we do that, we shall find that the *answer* to that question is obvious.

§2.2.1 *The Usual Approach*

In the last section I used Armstrong's argument in support of the selection of states of affairs as our truthmakers. So, our first question is whether the states of affairs

¹⁵⁵ Note that he is *far* clearer on the question of exemplification in his (2004) – that is, once he has adopted Baxter's non-relational theory. Note also that Armstrong's comment (WSA, p.117) that '[i]t is the *contingency*, as I take it to be, of *a*'s instantiating the universal F that enforces the need for states of affairs in my ontology' does not represent an argument for the necessity of states of affairs *qua* unity-suppliers. It is the contingency of *as* being F plus his acceptance of Truthmaker Necessitarianism plus his assumption that states of affairs *do* supply unity that together enforce the need for states of affairs in his ontology. My point is that he never argues for the last of these three.

truthmaking for de re modal truths are reducible. The usual way to approach this question involves the assumption that there *are* non-modal states of affairs. And it begins with our placing the *obvious* truthmakers for de re modal truths under the philosophical microscope. A little bit of truthmaker theory might help us make things more precise here. It is common for truthmaker theorists to talk about *minimal* truthmakers for truths. Armstrong defines a minimal truthmaker as follows: ‘If T is a minimal truthmaker for p , then you cannot subtract anything from T and the remainder still be a truthmaker for p ’.¹⁵⁶ Whatever we find in T is the least it takes to make p true. Armstrong also uses the notion of a *unique* minimal truthmaker: if T is a unique minimal truthmaker for p , then T is p ’s one and only minimal truthmaker.¹⁵⁷ So, when I say that in the usual approach our first move is to put the “paradigmatically modal states of affairs”, the “obvious truthmakers” for de re modal truths, under the microscope, I have in mind those states of affairs which, all else being equal, we would think were plausible candidates for the role of unique minimal truthmakers for de re modal truths. We would, of course, require some prior shared understanding as to how de re modal truths are distinguished from other types of truths. That is, there would need to be *some* degree of consensus over what *form* a de re modal truth takes and what *terms* are modal terms, and so on, even though this might not be something we would explicitly debate in the normal course of things. I shall take it here that everyone would agree that truths of the form <It is necessary for x to be ϕ > or <It is possible for x to be ϕ > will be de re modal truths.¹⁵⁸ So, we would look at truths of that form and arrive at an opinion as to what the *obvious* truthmakers for those would be – the truthmakers we would be willing to call unique minimal truthmakers for those de re modal truths (i.e., if forced by a truthmaker theorist to talk in such terms).¹⁵⁹ And, of course, the obvious truthmakers will be states of affairs of the

¹⁵⁶ Armstrong (2004), pp.19-20.

¹⁵⁷ See pp.22-23, *ibid*.

¹⁵⁸ And I take these to be equivalent in all important respects to propositions of the form < x is necessarily ϕ > and < x is possibly ϕ >.

¹⁵⁹ Armstrong points out (*ibid*) that not every truth will have a unique minimal truthmaker. And it seems as if not every de re modal truth will have a unique minimal truthmaker. For example, <There is a necessarily human entity> might be such a truth. Socrates is a necessarily human entity, so it seems the state of affairs *Socrates being necessarily human* is a minimal truthmaker for that truth. But Plato is also a necessarily human entity, so *Plato’s being necessarily human* would also be a minimal truthmaker for it. Thus, it does not have a *unique* minimal truthmaker. In any case,

form *x's being necessarily ϕ* and *x's being possibly ϕ* . For one thing, such states of affairs *involve* the modalities represented in our de re modal propositions. And they seem to have just enough to make those true: the particular referred to in the propositions is there, as is the property, and those are connected in the right way (the one is exemplifying the other). That qualifies them as minimal truthmakers for the de re modal truths and, insofar as there doesn't seem to be any *other* minimal truthmakers for them – after all, what other kind of state of affairs would have *just* enough to make them true? – these states of affairs would be *unique* minimal truthmakers.¹⁶⁰

So, the usual approach begins with an examination of our agreed-upon obvious truthmakers for the de re modal truths. And the goal of the examination is to ascertain whether those states of affairs are reducible to non-modal states of affairs – the reality of which has been assumed. But this is not to say that the usual approach somehow intrinsically involves a reductionist (or generally anti-realist) bias towards modality. Even if one were to set out to vindicate or in some sense

nothing hangs for me on whether or not de re modal truths all have unique minimal truthmakers, although it seems they don't. And here seems an appropriate place for me to note my disagreement with Armstrong's view that when it comes to truths like <Socrates exists> the only truthmaker we need is Socrates, the particular. No need, he says, for a state of affairs to be the truthmaker when the particular will do. Indeed it need not even be a particular, it might be property: the property *being human* does perfectly well as the truthmaker for <the property of being human exists>. My view is that we *do* need states of affairs as our truthmakers in such cases – in *all* cases. The truth <Socrates exists> is, I suggest, made true by any state of affairs of which Socrates is a constituent. (The truth will not, therefore, have a unique minimal truthmaker.) His *existing* is just his having properties and being in relations. *Qua* particular, that is what his existence comes to. As an Immanent Realist about universals, I think that for a property to exist is for it to be exemplified. So, <the property of being human exists> is made true by any state of affairs in which that property is exemplified, such as *Socrates' being necessarily human*. Transcendent Realists about universals may need to take the Armstrongian route here and say that it is just the property that truthmakes for this truth, given their view that properties may exist without being exemplified. Again, nothing in my argument depends, as far as I can see, upon the truthmakers for truths of the form <F exists> being states of affairs (in which F is exemplified), but if I *had* to take a position on the question, my Immanent Realist scruples would push me towards that one. (Although I call myself an Immanent Realist here, I have not argued for that position and won't be doing so. I have no need to take a stand on Immanence *versus* Transcendence, and so I shall continue to remain neutral.)

¹⁶⁰ Armstrong says (*ibid*) that *a's being F* will be the unique minimal truthmaker for <*a* is F>. It would, by the way, be begging the question here to suggest that the unique minimal truthmakers for de re truths need not themselves involve modalities, as states of affairs of the form *x's being necessarily ϕ* do. If states of affairs of that latter form were shown to be reducible to modal-free states of affairs, then it would, of course, be correct to say that the unique minimal truthmakers for de re modal truths are *not* of the form *x's being necessarily ϕ* . Such states of affairs would not even *be* minimal truthmakers for those truths – involving, as they do, modality. But, more importantly, it is the very *reducibility* of modality-involving states of affairs that is at issue here.

support a primitivist view of de re modality, one could still be working towards that end in considering how modal states of affairs *might* be said to be reducible to non-modal states of affairs. The usual approach can issue in realist conclusions just as easily as it can anti-realist ones.

My intention is to question whether what are commonly assumed to be non-modal states of affairs *really are* non-modal. Now, there aren't *cases* of non-modality as there are said to be cases of modality, those being necessity, possibility, etc.¹⁶¹ Rather, there is just the one sort of putatively non-modal state of affairs: the type of state of affairs in which a thing is said to simply *have* a property. I shall begin here by offering a few examples of theorists *working with* the assumption upon which the usual approach stands – the assumption that there *are* non-modal states of affairs. The idea being simply to demonstrate just how widespread – and apparently sacrosanct – that assumption is.

Modality de re...is quantification over possible individuals (p.8)...Humphrey satisfies 'possibly x wins'¹⁶² iff, for some world W, for some counterpart of Humphrey in W, that counterpart satisfies 'x wins' at W. The satisfaction of 'x wins' by the counterpart is unproblematic (pp.9-10)...[T]o satisfy 'x is human' at a world [one] has to have a counterpart there who is human (p.12)...I offer a treatment of properties that requires things to have or to lack them *simpliciter* (p.53)

(David Lewis)¹⁶³

What something *might* have done (or might have been) is what it does (or is) vicariously; and that is what its counterparts do (or are)....Modal facts are grounded in facts about actual character, not mysteriously independent. It is because of the way Ripov actually is that certain honest men at other worlds resemble him enough to be his counterparts...

(David Lewis)¹⁶⁴

[T]hings have their potentialities in virtue of the nonmodal characteristics they actually have.

(David Lewis)¹⁶⁵

¹⁶¹ John Divers uses this terminology of "cases" of modality in his *Possible Worlds*, (Routledge, 2002), p.3.

¹⁶² Which Lewis regards as a de re modal claim.

¹⁶³ Lewis (1986).

¹⁶⁴ *Counterfactuals*, (Blackwell, 1973), p.40

God can ordain that something shall hold good of the actual world; but how can even God ordain that something is to hold good in all possible worlds?

(Michael Dummett)¹⁶⁶

....the framework presupposes that world-states that agree on all non-modal facts are identical. Thus, those that support different modal truths must also differ non-modally.

(Scott Soames)¹⁶⁷

....once the epistemic community is specified, the answer to the question is implied by facts about the world. ('Facts' should be understood to be empirical, non-modal and theory-independent.)

(Bradley Monton & Bas C. van Fraassen)¹⁶⁸

But what *is* a merely possible fact, and what distinguishes it from an actual one?

(Richard Aquila)¹⁶⁹

To talk about actual and possible states of affairs is to talk about what *there is* and what *there could be*.

(Reinhardt Grossman)¹⁷⁰

...modality is reducible to the nonmodal if and only if modal facts are, ultimately, complexes of nonmodal facts.

(Scott Shalkowski)¹⁷¹

I find it plausible that modal facts must be grounded in non-modal facts.

(Boris Kment)¹⁷²

¹⁶⁵ "Against Structural Universals", in his *Papers in Metaphysics and Epistemology*, p.105.

¹⁶⁶ Dummett, *Op. cit.*, p.327.

¹⁶⁷ "Actually", *Proceedings of the Aristotelian Society Supplementary Volume*, 81, (2007), p.276.

¹⁶⁸ "Constructive Empiricism and Modal Nominalism", *British Journal for the Philosophy of Science*, 54, (2003), p.414.

¹⁶⁹ (1977), p.73.

¹⁷⁰ *The Structure of Mind*, (University of Wisconsin Press, 1965), p.164 [emphases in original]. I follow Aquila (1977), n.3 to Ch.3, in making this quotation of Grossman.

¹⁷¹ "The Ontological Ground of the Alethic Modality", *The Philosophical Review*, 103:4, (Oct., 1994), p.671.

¹⁷² "Counterfactuals and the Analysis of Necessity", *Philosophical Perspectives: Metaphysics*, 20, (2006), p.242.

If it cannot be displayed that modal discourse ultimately states non-modal facts what assurance can we have that the modal vocabulary which figures in our theorising does not commit us to irreducible modality?

(Fraser MacBride)¹⁷³

In these examples we see philosophers of radically different persuasions united by the assumption that there *are* non-modal states of affairs (facts). And it is almost impossible to find anyone *questioning* this assumption. Artzenius & Hall say that

[David Lewis's theory of supervenience] presupposes some reasonably robust distinction between modal and non-modal facts. One might doubt the coherence of this distinction. But since Lewis evidently does not, we won't consider the matter further.¹⁷⁴

And they don't. We are not told whether their reason for making this comment is that they think it may (in the epistemic sense) turn out that the concept of *modal* facts is incoherent, or that the concept of *non-modal* facts is incoherent. Their paper is concerned with probability and it is certainly more probable that their comment is motivated by a suspicion of the former rather than the latter kind. So, although they note that we may want to question the distinction between modal and non-modal states of affairs, it is likely that they have in mind here worries about the coherence of the concept of *modal* states of affairs (the kind of worries, perhaps, that were raised by Quine). But even if that were not the case, even if they *did* have latent worries about the coherence of the concept of *non-modal* states of affairs, the fact remains that they are not extending themselves to actually *questioning* the distinction on that basis. The assumption of the reality (or coherence) of non-modal states of affairs remains unquestioned in what they say here. I, however, wish to pursue the aporetic line wholeheartedly.

According to the orthodoxy, non-modal states of affairs are states of affairs in which particulars simply *have* properties or *are* related. I take it that this is what Lewis has in mind when he talks of having or lacking *simpliciter*, what Dummett has in mind when he talks of something 'hold[ing] good at the actual world', and

¹⁷³ "Could Armstrong Have Been a Universal?", *Mind*, 108:431, (Jul., 1999), p.474.

¹⁷⁴ Frank Arntzenius & Ned Hall, "On What We Know About Chance", *British Journal for the Philosophy of Science*, 54, (2003), n.1 p.173.

what the others mean when they talk about non-modal facts. On what I am calling the “usual approach” to modality, we assume that there are indeed such non-modal states of affairs, then go on to consider whether *modal* states of affairs might be reducible to those. And the lure of reductive accounts is certainly strong. If we *can* avoid modal states of affairs, then there is no need to worry about the nature of the extra (modal) ingredient in states of affairs of the form *x’s being necessarily F* and *x’s being possibly G*. Nor would we have any *particular* worry about how we come to *know* the propositions for which such states of affairs are truthmakers. All we would need to worry about would be non-modal states of affairs – which is not to say that the problems of the unity of such states of affairs and the nature of their constituents would be any less of a challenge given a successful reduction of modal states of affairs. We would still need to give accounts of exemplification, particulars and properties. But I doubt there is anyone who would disagree that a *significant* load would have been lifted from metaphysicians’ shoulders if we were to demonstrate that modal states of affairs do not feature at the most fundamental level, that *all* we may find there are particulars having properties or being related *simpliciter*. However, as I said earlier, one can certainly *consider* whether modal states of affairs are reducible or not without actually concluding that they *are*. One can just as easily take the usual approach – assume that there *are* non-modal states of affairs and then theorise about whether we can find a reduction class for modal states of affairs amongst those – and conclude that modal states of affairs feature at the most basic level of reality. My focus here is simply on the assumption that there *are* non-modal states of affairs, not on the reductionisms or primitivisms which may flow from adoption of that usual approach.

Examples of putatively non-modal states of affairs are not hard to come by. All of the following might reasonably be classified as non-modal: *Obama’s being brown-eyed*; *The tree’s being 5m tall*; *Majnun loving Layla*; *London’s being farther north of Zurich than Paris is*; *There being a city called “Rome” on every continent*. In each case we would, presumably, say that the property or relation is exemplified *simpliciter*. Obama just *is* brown-eyed, Layla just *is* loved by Majnun, and so on. But in each case, wouldn’t we also say that the exemplification is

*contingent?*¹⁷⁵ After all, Obama need not have been brown-eyed, and the tree might have been a millimetre taller than 5m, and Majnun might have been (say) indifferent to Layla, and Paris might have been farther north of Zurich than London is, and the cities called “Rome” might have been called something else.¹⁷⁶ Appreciating that these *are* possibilities is, I believe, a matter of basic pre-theoretical modal intuition. One cannot *argue* for any of these – how could one argue for the claim that Obama might not have been brown-eyed? (Saying that he could exist and yet lack that property would be of no help, for that is merely a slightly more elaborate way of saying the same thing: that he might have lacked it.) If someone were to contest any of these possibilities or claim to be unable to see *why* I believe in them, I simply would not know how to set about changing their minds. But those are modal questions for another occasion; here I must simply assume that these are indeed possibilities (which is not, of course, an assumption of modal *realism* – those possibilities may yet turn out to be reducible). Given that much, our examples of non-modal states of affairs may be seen as examples of states of affairs in which things *contingently* have properties or are contingently related.¹⁷⁷

Now, it would be fairly standard to express those contingencies as follows: If Obama is contingently brown-eyed, then Obama is brown-eyed but need not have been; If the tree is contingently 5m tall, then the tree is 5m tall but could have been taller or shorter; If Majnun contingently loved Layla, then Majnun loved Layla although he could have remained indifferent to her, and so on.¹⁷⁸ What we see in each case is that the contingency is expressed by employing a *conjunctive* form: *x*

¹⁷⁵ Armstrong (2004), p.86: ‘For most analytic philosophers, an attribution of a property to a particular is contingent’. Armstrong is right, most philosophers *would* think that way. And this is just what makes his partial-identity account of exemplification such a minority position.

¹⁷⁶ Many people talk in terms of contingent (or accidental) *properties*, but this can really only be a form of shorthand for contingent exemplification. See n.179 below.

¹⁷⁷ Indeed, it seems to me that if one is willing to *employ* the concept of contingency at all, then one should be willing to declare these as instances of contingent exemplification. Another way of putting this is to say that these should be declared contingencies on any *intuitively acceptable* account of contingency.

¹⁷⁸ The expressions here are casually structured as conditionals but, in more formal contexts, we could expect them to come in the form of biconditionals.

is ϕ but might not have been (or x is R -related to y but might not have been).¹⁷⁹

And what I am interested in here is how philosophers have dealt with such contingencies. Let me try to lay out the stages I think most of us go through in our thought about contingency.

The cornerstone is our conviction that there *are* non-modal states of affairs. And we will, presumably, have some examples of such states of affairs to hand. The examples I give above are intended to be entirely acceptable to one convinced of the reality of non-modal states of affairs, but if any of those proved controversial (although I cannot see how they would), I would be perfectly happy to use “approved” examples. The next step here is our acknowledgement that our paradigmatic non-modal states of affairs involve contingent exemplification. I have assumed that a believer in non-modal states of affairs *would* acknowledge as much, at least with regard to the examples I have given, and I see no reason why the believer might want to withhold assent to that. Of course, if one had doubts about the *intelligibility* or *utility* of modal notions, then one might be regarded as having good reason to refrain from contingency talk. But those questions of

¹⁷⁹ Thus, Loux, *The Possible and the Actual: Readings in the Metaphysics of Modality*, (Cornell University press, 1979), p.32: ‘[W]hen we say that Jimmy Carter is only contingently president....we seem to be saying that while this individual is, in fact, president, things might have turned out differently, so that he would, say, have lost the election of 1976’. Cf. Jacques Maritain, *Introduction to Logic*, (London: Sheed & Ward, 1937), p.113: ‘A predicate such as “ill” belongs to Peter *possibly*. Supposing that Peter is in good health, we would say: “Peter *can be* (EST POSSIBILITER) ill.”.....A predicate such as “in good health,” belongs to Peter contingently. Supposing that Peter be in good health, we would say “Peter *might not be* (EST CONTINGENTER) in good health.”’ So, for Maritain, if Peter *is* contingently in good health we may say either that he *can* have the property *being ill* or *can* lack the property he in fact has, *being in good health*. More recently, Teresa Robertson: ‘an accidental property of an object is one that it happens to have but that it could lack’, “Essential vs. Accidental Properties”, *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.), URL=<http://plato.stanford.edu/archives/fall2008/entries/essential-accidental/>. Quine (1976), p.176, gives a formal statement of essentialism in “Three Grades of Modal Involvement”: ‘ $\exists x (\Box Fx \wedge Gx \wedge \neg \Box Gx)$ ’. We can read this as the claim that some things have some of their properties essentially and others accidentally. Note how the concept of an accidental property is represented here: it is a conjunction of x ’s being G and it not being necessary for x to be G ($Gx \wedge \neg \Box Gx$). But this is just – as I say above – the usual understanding of x ’s being contingently G , according to which x has G but might lack it. The same conjunctive formulation is found in Baruch Brody, “Why Settle For Anything Less Than Good Old-Fashioned Aristotelian Essentialism”, *Nous*, 7:4 (Nov., 1973), p.354: ‘an object o_1 has a property P_1 accidentally just in case o_1 has P_1 but could lose it without going out of existence’. Blackburn, “Morals and Modals”, p.131, considers someone ‘modally blind’ to contingency: ‘he can make nothing of the idea that although there are trees there might not have been’, and here again we find contingency understood in terms of a conjunction of simply *being thus-and-so* and possibly not being thus-and-so. (Blackburn argues against the possibility of such a modally blind agent.)

intelligibility and utility come at a much earlier stage than this in the philosophy of modality. In any case, my focus is on theorists who do *not* have such qualms, who are willing to employ modal vocabulary and consider the metaphysical questions which are asked of modality. Such theorists have, as far as I can tell, no reason to deny that the examples given above (or any examples we care to give of non-modal states of affairs) are examples of *contingencies*. And in acknowledging this, as most seem to do, albeit sometimes only tacitly, most would regard themselves as having done nothing whatever to undermine their conviction that the world contains non-modal states of affairs. Admission of contingency does not, we think, have any negative consequences for our commitment to non-modal states of affairs. And yet modality has been brought into the mix: our non-modal states of affairs are now said to be states of affairs in which particulars have properties they *might not* have had (need not have had). And we must deal with that modality.

The “Separatist Impulse” is the impulse to *separate out* the two aspects of contingency: the property-possession aspect and the possibility aspect. When confronted with the presence of these possibility aspects, we look to our understanding of contingency and – it seems – we take a quite substantial metaphysical cue from the *form* in which that understanding is commonly expressed. That is, remember, a *conjunctive* form; we say that Obama’s being contingently brown-eyed, for example, means that he is brown-eyed *but* need not have been. The separatist impulse is not to separate out the possession and possibility aspects of contingency in some *merely formal* manner. Rather, the impulse is to build such a separation into the *metaphysical profile* of contingencies. In truthmaker-theoretic terms, the impulse is to distinguish between the *truthmakers* for the possession aspects and those for the possibility aspects. With respect to the possession aspect, we would seek (relevant) states of affairs involving unadorned property-possession. And with respect to the possibility aspect, we would we seek (relevant) possibility-involving states of affairs. Thus, it would not be uncommon to propose that the property-possession aspect of the contingency represented in <Obama is brown-eyed> is made true by the states of affairs *Obama’s being brown-eyed*, and that the possibility aspect is made true by some possibility-involving state (or states) of affairs such as *Obama’s possibly*

lacking the property of being brown-eyed, or Obama's being possibly not-brown-eyed.^{180, 181} We characterise contingency as a matter of some non-modal state of affairs obtaining and some *other* – possibility-involving – state of affairs *also* obtaining. Thus, the modal dimension to contingency is taken care of in this possibility-involving metaphysical sideshow. The property-possession aspect is taken as *one* element of the contingency and the possibility aspect as a distinct *other* element of it. And so, our belief in the reality of non-modal states of affairs is maintained. We can agree that in the states of affairs given above as examples of non-modal states of affairs, properties and relations are contingently borne. But all that means is that we must countenance states of affairs which are capable of making true (assuming we are truthmaker theorists) the possibility aspects of the contingency claims. And it must be well-noted that that need not mean embracing irreducibly modal states of affairs. For this is the point at which the “usual approach” to modality – with which we began here – is *adopted*. We *have* our non-modal states of affairs secured, and we now come to the question of the status of *modal* states of affairs with the intention of examining those for signs of *reducibility*. It is at *this* point, with our conviction in the reality of non-modal states of affairs in place, that we put the modal states of affairs under the philosophical microscope. And the result of such examination could be that modal states of affairs are said to be *irreducible*, just as easily as it could be that they are said to be reducible to non-modal states of affairs.

Let's recap on the picture presented. The very beginning is the demand for a metaphysical account of modality. And the first task there is to ascertain whether modal states of affairs are reducible. The “Usual Approach” to this task is examine whether modal states of affairs are reducible to *non-modal* states of affairs. But this is to assume that there *are* non-modal states of affairs. Looking at that assumption, we see that by “non-modal state of affairs” what is usually meant is a

¹⁸⁰ Or, we might prefer a possibility-involving state of affairs of the form *Obama's being possibly C-eyed*, where C is a variable taking colours (other than brown) as values. More on this below.

¹⁸¹ Actually, it *would* be uncommon to propose something like this, for it is uncommon to even explicitly signal the separatist strategy. It is an understatement to say that that strategy is *de rigueur* – even calling it a “strategy” is uncomfortable, as that suggests that the separation of the possession and possibility aspects of contingencies is something *consciously* undertaken, and with some goal in mind. But this is not, I think, the case for the vast majority of separatists – I certainly am not aware of anyone who has felt it necessary to signal their pursuit of the separatist line.

particular just *having* a property or just *being* related. But when we consider examples of such states of affairs, we see that they all involve *contingent* exemplification of properties and relations. And, according to the standard understanding of contingency, if *a* has F contingently, then *a* has F but need not have had it. So, we find a property-possession and a possibility aspect to contingency. The Separatist Impulse is to separate out those aspects. Taking a cue from the conjunctive form of expressions of the standard understanding of contingency, the separatist wants to construe those aspects as “together-but-distinct”, perhaps as *a* and *b* are together but distinct (assuming $a \neq b$) in the mereological sum $a+b$. But the separatist does not want to make a merely *formal* distinction. Rather, the separatist wants to distinguish the *truthmakers* for property-possession from those for possibility aspects of contingencies. And so the separatist has two types of states of affairs for which to account: those truthmaking for the property-possession aspects and those truthmaking for the possibility aspects. And it is at *this* point that the “Usual Approach” to modality kicks in. We look at those states of affairs truthmaking for the possibility aspects and attempt to ascertain whether they are reducible to the less-problematic states of affairs truthmaking for the possession aspects – the non-modal states of affairs.

My intention here is to question the Separatist Impulse towards the postulation of a metaphysical cleavage between the truthmakers for the property-possession aspects of contingencies and the truthmakers for the possibility aspects of contingencies. This intention is driven by a desire to take an alternative approach to the first of our metaphysical questions: whether modal states of affairs are reducible. I wish to question the reality of the (non-modal) states of affairs it is commonly assumed would form the reduction class for modal states of affairs, were modal states of affairs shown to be reducible.¹⁸² And at the heart of

¹⁸² It seems to be a moot point whether the non-cognitivist (expressivist, projectivist) approach represents yet another alternative to the usual one. When presented with some problematic discourse, those sympathetic towards non-cognitivism will begin by considering whether the discourse is *truth-apt* (descriptive, fact-stating, etc.), rather than plunging straight into consideration of whether the propositions involving the characteristic predicates of the discourse are made true by basic or non-basic states of affairs. That is, of course, if the non-cognitivist goes in for the truthmaker-theoretic approach at all. It is, I think, safe to say that many non-cognitivists seem less impressed with a sense of urgency or importance when confronted with metaphysical puzzles (about truthmakers or anything else) than those who are generally more sympathetic to

commitment to non-modal states of affairs is an acceptance of the legitimacy of the separation of the property-possession and possibility aspects of states of affairs involving contingent exemplification. In fact, the conviction that there *are* non-modal states of affairs *presupposes* the separation of the property-possession and possibility aspects of contingencies. It is *my* contention that there is no justification for making that separation. We simply do not have any good reason to share the impulse towards making that separation.

§2.2.2 Contingency Considered

I would like to begin here by considering Armstrong's (2004) discussion of contingency and possibility. The context is his search for truthmakers for modal truths – specifically, truths involving possibility.

For each contingent truth, a shadow truth accompanies it: the possibility (metaphysical possibility) of its contradictory. It is a 'mere' possibility only. Given *p*, and given that it is contingent, the truth <it is possible that not-*p*> is entailed....[I]t is of the essence of contingency that the contradictory of a contingent truth be a possibility. Under these conditions, it seems reasonable to say that a truthmaker for a contingent truth is *also* a truthmaker for the truth that the contradictory of that truth is possible. At a stroke, we have

cognitivism. Of course, one who is generally sympathetic to non-cognitivism could start by questioning whether de re modal discourse is truth-apt and yet conclude that it *is*. They would then, it seems, be back to the usual approach: considering whether the facts we attempt to state in modalising are reducible. And yet it seems as if it's possible for one who takes *my* approach to end up saying that what we thought were non-modal states of affairs *really are* non-modal. On making such a conclusion, they too would be back to the usual approach. So, there is this parallel between the alternatives to the usual approach – with either alternative it is (apparently) possible to wind up having to take the usual approach in the end. And yet it seems there might be a difference between mine and the non-cognitivist approach to matters. A “global” non-cognitivism, according to which *no* discourse is truth-apt, would, I take it, be implausible. Thus, when confronted with modal discourse, one who is generally sympathetic to the non-cognitivist outlook will – presumably – *assume* just what it is I wish to query: namely, that there *are* some non-modal states of affairs. It is difficult to feel confident in generalising like this (each non-cognitivist philosopher will, after all, plough their own philosophical furrow) but, when it comes to modality, there may be this kind of case to be made for regarding the non-cognitivist approach as merely a *variant* of the usual approach. The idea being that the non-cognitivist looks to the question of the truth-aptitude of the paradigmatically modal claims and does not question, as I wish to, the reality of a non-modal realm. Whatever about non-cognitivism, one thing I think we *can* be sure of is that the *quietist* approach should be classified as a genuine alternative to the usual approach (and to my approach).

removed the need for any truthmakers for truths of 'mere possibility' except the truthmakers for contingent truths.¹⁸³

Armstrong clearly feels that there is an intimate connection between contingency and possibility. But, what form can that connection take for him?

Suppose that $\langle a \text{ is } F \rangle$ is true. According to Armstrong, the unique minimal truthmaker for this will be the state of affairs a 's *being* F .¹⁸⁴ But, as we saw earlier, such a paradigmatically non-modal state of affairs will involve contingent exemplification. In this case, of F by a . And, by the standard definition of contingency, this will mean that a is F but need not have been. So, we have the usual property-possession and possibility aspects to the contingency here. Now, in the passage above, Armstrong is discussing instances of *de dicto*, and not *de re*, possibility, which is of course the focus here. But, unlike in the case of necessity, the *de dicto* possibility claim $\langle \text{it is possible that } a \text{ lack } F \rangle$ will be equivalent to the *de re* possibility claim $\langle \text{it is possible for } a \text{ to lack } F \rangle$.¹⁸⁵ So, what he says about the former kind of proposition ought to apply to the latter kind of proposition equally. Given that, his claim can be read as follows: the truthmaker for $\langle a \text{ is } F \rangle$ is also the truthmaker for $\langle \text{it is possible for } a \text{ to lack } F \rangle$. Crucial to his argument above is the 'Entailment Principle': if T is a truthmaker for p , and p entails q , then T is also a truthmaker for q .¹⁸⁶ We are assuming here that a contingently exemplifies F . For Armstrong, this will mean that $\langle a \text{ is } F \rangle$ entails $\langle \text{it is possible for } a \text{ to lack } F \rangle$.¹⁸⁷ And if a 's *being* F is the (unique minimal) truthmaker for $\langle a \text{ is } F \rangle$, it follows, by his Entailment Principle, that a 's *being* F is also the truthmaker for $\langle \text{it is possible$

¹⁸³ Armstrong (2004), p.84.

¹⁸⁴ *Ibid*, p.22.

¹⁸⁵ To establish the equivalence claim $\langle \langle \text{it is possible that } x \text{ is } \phi \rangle \equiv \langle \text{it is possible for } x \text{ to be } \phi \rangle \rangle$, we need only check that the propositions $\langle \text{it is possible that } x \text{ is } \phi \rangle$ and $\langle \text{it is possible for } x \text{ to be } \phi \rangle$ satisfy the following three conditions: (i) both may be true where x is not ϕ , (ii) both will be true where x is ϕ and, (iii) both will be false where x cannot be ϕ . Given that they *do* satisfy these, the equivalence claim is true.

¹⁸⁶ *Ibid*, p.10.

¹⁸⁷ His view is that if $\langle p \rangle$ is contingent, then $\langle p \rangle$ entails $\langle \text{possibly, not-}p \rangle$. But if we substitute " a is F " for " p ", and a is contingently F , this will mean that $\langle a \text{ is } F \rangle$ entails $\langle \text{it is possible that } a \text{ is not } F \rangle$. And this is equivalent to the *de re* $\langle \text{it is possible for } a \text{ to lack } F \rangle$. Thus, $\langle a \text{ is (contingently) } F \rangle$ entails, for Armstrong, $\langle \text{it is possible for } a \text{ to lack } F \rangle$.

for a to lack F >.¹⁸⁸ But how does this *non*-modal state of affairs manage to make the *modal* claim <it is possible for a to lack F > true?

Look to what Armstrong has to say about the *minimal* truthmakers for claims of the form <it is possible that a is F >. His proposal is that a minimal truthmaker (presumably the unique minimal truthmaker) for <it is possible that a is F > is the mereological sum $a+F$.¹⁸⁹ The idea being that, as distinct existents, a and F are *combinable*. In fact, what Armstrong must say is that the truthmaker for <it is possible that a is F > is $a+F$ *plus* the combinability relation holding between those. a and F on their own do not do the job; we need their combinability as well. But, for him, combinability is an internal relation.¹⁹⁰ It is within the nature of a to be combinable with F , and within the nature of F to be combinable with a . So, we can say that a and F suffice as the truthmaker for <it is possible that a is F >, but it must be kept clear at all times that this is only in virtue of their combinability.

Turn now to the case where a is (contingently) F . On Armstrong's account, < a is contingently F > entails <it is possible for a to lack F >. Because of this, together with the Entailment Principle, the truthmaker for the former is the truthmaker for the latter. In this case, a 's *being contingently F* . But what Armstrong tells us about the truthmaker for <it is possible for a to be F > where a is not in fact F , doesn't seem to help in our consideration of what it is in the state of affairs a 's *being contingently F* . On his account, the truthmaker for <it is possible for a to be F > is a and F together with their combinability. But in a 's *being contingently F* , a and F are already combined. So, the truthmaker for <it is possible for a to lack F > cannot be simply a , F and their combinability. Together those necessitate the *possibility* of a and F being combined (the possibility of their combination), but not the possibility of their being *uncombined*, so to speak. We need to look to the possibility of their *uncombination*; they are combined but they need not be – they might be *out* of that state of combination. Wondering what “uncombinability” could come to, it seems the only way to turn is back to combinability: to say that a

¹⁸⁸ For criticism of Armstrong's argument see Cameron, “Truthmakers and Modality”, *Synthese*, 164:2, (2008), pp.261-280.

¹⁸⁹ Armstrong, *op. cit.*, p.94.

¹⁹⁰ *Ibid*, p.92.

and F need not be combined is to say that each of those is combinable with entities *other than* each other. To say *a* might not be F is to say that *a* is combinable with properties other than F and F is combinable with particulars other than *a*. It must then, be this combinability which grounds the possibility of *a* lacking F. But where *a* is F and *a* is combinable with some other property, G, this will not *necessitate* the truth <it is possible for *a* to lack F>. For example, Obama being combinable with *being prime minister* does not necessitate it being the case that he might not be brown-eyed. But his being combinable with *being prime minister* does, it seems, necessitate its being possible that he might not *be president* (let's assume one cannot simultaneously be both). What we need is *incompatibility*. The state of affairs *a's being contingently F and possibly G and F's being incompatible with G* would seem to be what Armstrong needs as his truthmaker for <it is possible for *a* to lack F>. This will be a minimal truthmaker for it, although not the unique minimal truthmaker for it – we may substitute any property incompatible with F for G to generate a minimal truthmaker for <it is possible for *a* to lack F>. This would suggest that <it is possible for *a* to lack F> has no unique minimal truthmaker.

We need not worry in this context about how Armstrong would explain incompatibility – that is something he wants to avoid, but if what I have said is correct, then he must work to accommodate it.¹⁹¹ What matters here is that *if* we need combinability and uncombinability for the possibility of *a's* lacking F, where *a* contingently exemplifies F, then those must be features of the truthmaker for <it is possible for *a* to lack F>. Armstrong has already told us that the truthmaker for that will, by his argument above, be *a's being contingently F*. I have said that the truthmaker must be *a's being contingently F and possibly G and F's being incompatible with G*. But, as I have already pointed out, combinability is, for Armstrong, an *internal* relation: the combinability of *a* and F is 'necessitated by their natures'.¹⁹² And incompatibility would – I take it – also be an internal relation, one necessitated by its terms alone. Now, it seems to go without saying that *a* and F will "carry" their natures into states of affairs in which they are

¹⁹¹ *Ibid.*, §5.2.1.

¹⁹² *Ibid.*, p.92.

involved. They won't, that is, *stop* being combinable with each other or with other properties and particulars simply in virtue of their *being* combined. And this is the point I wish to make: the combinability of *a* and *G* and incompatibility of *F* and *G* must be regarded as *aspects* of the truthmaker for <it is possible for *a* to lack *F*>. And that truthmaker is, of course, *a's being contingently F*. The possibility of *a* lacking *F* is grounded in *a's* being combinable with *G* (or any other property ϕ which is incompatible with *F*) and *F's* being incompatible with *G* (or ϕ) *within the state of affairs a's being contingently F*. It is grounded in the combinability and incompatibility relations which *a* and *F* bring with them *into* the state of affairs *a's being contingently F*. That is what it is about that state of affairs which qualifies it as a truthmaker for <it is possible for *a* to lack *F*>. Without those combinability and incompatibility aspects, that state of affairs would not have the resources necessary to make <it is possible for *a* to lack *F*> true.

Consider now the fact that combinability and incompatibility are *modal* notions. The combinability of *a* and *G* is just the possibility of their being combined, and the incompatibility of *F* and *G* is just the impossibility of their both being simultaneously combined with the one particular. What Armstrong must say now is that states of affairs involving contingent exemplification have *primitive* modal aspects. (Although this is not something he wants to say.¹⁹³) There is possibility embedded right into the state of affairs *a's being contingently F*. It comes with the exemplifier and the property exemplified. And now we can clearly see that, for Armstrong, a state of affairs involving contingent exemplification must be regarded as one with a number of modal dimensions. It must be regarded as a *modal state of affairs*. Juxtapose now that with the thought that *non-modal* states of affairs are states of affairs involving contingent exemplification, and we reach

¹⁹³ He has always sought *reductive* accounts of modality (see, for example, WSA, p.154). But, it's not clear whether adding primitive possibility to the mix really makes that much difference for Armstrong. As Javier Kalhat, "A Critique of Armstrong's Truthmaking Account of Possibility", *Acta Analytica*, 23:2, (Jun., 2008), p.3, puts it, Armstrong's new Baxterian theory of exemplification 'adds a thick layer of necessity to the world'. So what difference would it make to supplement that with a layer of primitive possibility? Simply put, he has *already* failed in his reductive endeavour before he even gets to possibility. [Page references to Kalhat (2008) are to a copy received from him in personal communication and do not correspond with the pagination of the article as published in *Acta Analytica*. The published version was unavailable to me at the time of writing.]

the conclusion that, as far as Armstrong is concerned, there can be *no* non-modal states of affairs. Contingent exemplification brings modality with it. And so, what we *thought* were paradigmatically non-modal states of affairs are really modal states of affairs. Armstrong must reject the assumption that there are non-modal states of affairs because he must resist the Separatist Impulse. He cannot *get* to the conviction that there are non-modal states of affairs because he cannot follow the separatist's path of separating out the possibility and property-possession aspects of states of affairs involving contingent exemplification. The possibility aspects, for Armstrong, will be squarely within the natures of what is *doing* the exemplifying and what is *being* exemplified. Which is just to say that the exemplifier and what is exemplified will have *irreducibly* modal aspects to their natures.

We saw earlier how Armstrong claimed that possibility is 'of the essence of contingency'. Given what we have just seen about his account of contingency and possibility, that is truer for Armstrong than he might have guessed – or hoped.

The upshot here is that if we like Armstrong's account, we should resist the Separatist Impulse. Now, there *are* elements of that account which appeal to me. But Armstrong's perspective is very different to the one I shall be taking. He is seeking a reduction of modality. But that goal is rendered *impossible* (and perhaps incoherent) by the account of possibility he gives.¹⁹⁴ He is trying to take what I call the "Usual Approach" to modality – examining what are thought to be modal states of affairs for signs of reducibility – even though that approach presupposes the reality of *non*-modal states of affairs. And it seems as if Armstrong cannot believe in those. So, his perspective is quite muddled. In light of that, although I shall end up saying certain things which are perhaps *reminiscent* of some of Armstrong's views, my preferred theory will be unlike his in a number of metaphysically important details, nor will it emerge in the same fashion as his does (that is, within the context of a wider reductive agenda).

¹⁹⁴ See Kalhat (2008) for various arguments to the effect that Armstrong's theory employs modality at a number of stages and so cannot constitute a reductive theory. In fact, Kalhat also concludes (albeit from different premisses) that contingency essentially involves possibility, and that it is, therefore, 'a modal notion through and through', p.22.

But what lesson should we take from our examination of Armstrong's views on possibility and contingency? Well, we know that Armstrong recognises that there is deep connection between contingency and possibility. But his conviction on this does *not* carry him to the point of questioning the usual approach to modality and, in particular, the separatist impulse upon which that is founded. And therein, I think, lies the lesson. He *tried* to reconcile the existence of such a deep connection between contingency and possibility with an account of modality which was reductionist in spirit, and he *failed*. Or, less brutally: he tried to reconcile those but, insofar as his account was intended to be reductive, important questions remain to be answered. Had he *different*, non-reductionist, aspirations, Armstrong's account of contingency and possibility might represent a direct *attack* on the separatist impulse. The lesson is, then, that, given Armstrong's efforts *and* his reductionist aspirations, we have reason to look again at the legitimacy of the separation of the property-possession and possibility aspects of states of affairs involving contingent exemplification. We should ask what *reason* we have for pursuing that separation. If a metaphysician of Armstrong's ingenuity, who sets out on his inquiry with impeccable naturalist credentials and a complementary aspiration to construct a genuinely reductive theory of possibility, arrives in the end at an account of possibility and contingency which is, apparently, inconsistent with that separation, then is this not in itself reason enough to think again about the *basis for* that separation? He certainly did not assume anything about the connection between contingency and possibility that could be considered controversial. He assumed that the connection is an intimate one, and who could possibly doubt that? In very simple terms, his efforts show that if we want to secure any kind of meaningful connection between contingency and possibility, we should expect to pay for it.

And when we *do* look at the impulse towards a separation of the property-possession and possibility aspects of contingencies, the first thing to notice is that no one *has*, it seems, attempted to justify it. Of course, this is to the best of my knowledge; certainly, I know of no prominent metaphysician, particularly in the field of modality, who has offered any defence of it. But this is a historical question, and I may very well be mistaken in my claim that no one has defended

the separatist impulse. At the least, though, we can say that it does not seem to have troubled metaphysicians sufficiently to motivate them to conduct detailed investigations of the matter. Either that or the wider philosophical community has not been troubled enough by it to subject those investigations (if there are indeed any) to extended scrutiny in the usual way.

But let us consider why one *might* pursue the separatist strategy – what one might say if pushed to defend one’s pursuit of it. Well, we might think that the *form* of our definition of contingency is what fuels the separatist impulse. We look at that definition and see that it is given, pretty much invariably, in conjunctive form. We have, on the one hand, the property-possession and, on the other, the possibility aspects. And the concept of simple property-possession, of *just having*, is so deeply ingrained in our thought and discourse that – it seems – we almost ignore the property-possession aspect. Whatever problems we find with contingencies, be they metaphysical or otherwise, we seem to regard the property-possession aspect as, somehow, automatically isolated from – or at least not the cause of – those problems. We treat it deferentially, perhaps in acknowledgement of its central place in our thought and discourse, but often without (it seems) ever feeling the need to justify our deference to it to even that degree. The problems we find with contingency are, by and large, simply laid at the door of the possibility aspects. Most philosophers would balk at the thought of something so obviously philosophically troublesome as possibility being anything *but* separate (in a robust sense) from something so deeply entrenched and dear to our hearts as simple property-possession. This is not, of course, to suggest that *accounting* for property-possession will be painless. That is, as most people would readily acknowledge, one of the most difficult tasks we face, in so many different philosophical respects. Rather, our *attachment* to simple property-possession is so strong that we feel it should get a free ride, as it were. We would agree that no effort should be spared in working towards an account of simple property-possession (exemplification, “the unity if the fact”, and so on), but it seems we would also be willing to say that no one who questions its *reality* should be spared either. It is, we think, simply too important to do without. The separatist strategy merely ensures that the modal sideshow in contingency gets the billing it deserves.

That may be one line of thought in defence of separatism, but I don't see much here that is very comforting to the sceptic. (Perhaps that would be the whole point.) *Of course* the concept of simple property-possession is deeply entrenched in our thought and discourse, but so are the modal concepts. And of course it would be difficult to see precisely how an *anti-separatist* conception of contingency could be reflected in our discourse. But isn't it just as difficult to see how the details of, for example, a B-theory of time would be reflected in our discourse? And, perhaps the main point, why should we *not* question the move to take metaphysical cues from the *logical form* of our definition of contingency? After all, logical form is, at least partly, decided upon (if indeed it ever really is) on the basis of prior *metaphysical* investigation. And where, we might ask, is all the painstaking prior metaphysical investigation of the relationship between the property-possession and possibility aspects of contingencies? *Have* we done enough metaphysics to be sure that this (conjunctive form) is, even roughly, the kind of form we ought to attribute to claims of contingent exemplification? I, for one, think not.

Another reason we might give – although perhaps not entirely distinct from some of the avenues pointed to in the line of thought above – is that there is a deep *epistemological* distinction between these features of contingencies. We have, at least in a lot of cases, a good deal of confidence that we *do* enjoy epistemic access to the property-possession aspects (if we might put it like that) of states of affairs. And, again in a good number of cases, there are plausible accounts of the nature of that access. But when it comes to possibilities, or modalities in general, there is very little reason to be optimistic about our reaching any kind of consensus in the foreseeable future as to even the basic form of plausible epistemological accounts. Our (putative) knowledge of modal matters remains largely a mystery. One may want to object that that is a putting things too strongly, but let's just assume things *are* that bad in modal epistemology, for my response to this line of defence seems to carry whatever weight it does regardless of the extent of the problems there. The line of thought above is that because there is (or seems to be) a marked difference in the consistency and quality of our epistemological accounts of property-

possession (particulars simply *having* properties) and those of possibility, we should, on that basis, infer some form of *in re* distinction between those aspects of contingencies. The separatist strategy is merely reflective of (or in line with) the epistemological contrasts which are so evident. My response to such an apology for separatism would be to invoke an old realist refrain: that our metaphysics should not be dictated by our epistemology. This may not persuade very many hardline anti-realists (although I suspect we may have lost that section of the audience some time ago anyway), but it may give realists pause for thought. The argument from epistemology can never really be very convincing for those with realist tendencies. One of the fundamental aspects of the realist stance is acceptance of the possibility of a gap between what we know (or can know) and what there is. If one is inclined towards acceptance of that possibility, then one is unlikely to find the foregoing line of defence of separatism very compelling. If one is not so inclined, then one is unlikely to find my response to that line of defence very compelling. Perhaps never the twain shall meet, but in any event we are not about to settle matters either way here. I can only say that *I* do not find the prospect of metaphysics being subjugated to epistemology very edifying, and so would not regard the foregoing defence of separatism as an especially powerful one.

Perhaps there are other lines of defence which could be mounted for separatism. The obvious difficulty here is the dearth of treatments of this topic – if it was hotly debated in metaphysics, we would almost certainly have other defensive suggestions with which to grapple. Given that we don't, we must take another route here in our consideration of the separatist impulse. As I have said, I do not share the impulse but, more importantly, I can see no good reason why *anyone* should feel it. However, I *can* see how separatism might have become so entrenched. In the next section I shall explore the origins and popularity of separatism. In doing so, I hope to show the sense in which the alternative was always equally available to us, and the reasonableness of that alternative.

§2.2.3 On the Origins and Popularity of Separatism

I suggest that the widespread impulse towards separation of the property-possession and possibility aspects of contingencies can, at least in part, be traced to the influence of certain *semantic* considerations. My view is that a true proposition is one in which the world is represented accurately (which is, of course, controversial in itself, but leave that aside for the moment). And this is basically what is said in the Tarskian T-schema also: $\langle p \rangle$ is true iff p . But from this, much follows. Those who pursue a separatist line arrive at their separatism by firstly accepting a semantic principle such as Tarski's. The thought goes: one represents the world accurately in $\langle \text{Obama is brown-eyed} \rangle$ just in case there is a state of affairs in which Obama exemplifies the property *being brown-eyed*. And that will be a non-modal state of affairs, because our proposition involves no modal term and is yet *true*. If it is true, then what it describes must be the case, and *all* that it describes is a non-modal, simple *having* of a property.

The common route to separatism begins like this, with the truth of propositions involving no reference to modality, and carries on *via* semantic principles such as Tarski's (or those we glean from the older philosophical views on truth which lie behind Tarski's¹⁹⁵), to belief in the reality of non-modal states of affairs. Once those semantic influences have been absorbed, and our attention turns to metaphysics and the problems therein as to the nature of possibility and its connection with contingency, our reaction is to separate out the two aspects of contingency: property-possession and possibility. The semantic considerations make us *prone* to the separatist impulse. We feel a commitment to the non-modal states of affairs. We feel that we should hold fast to the reality of states of affairs in which properties are simply *had*, for we *know* that we truly represent the world in non-modal terms and that we could not do that unless there were non-modal states of affairs grounding the truth of such representations. So, we may accept the standard definition of contingency, according to which possibility has indeed some connection with the simple having of the property, but the possibility must not be

¹⁹⁵ We might think here, for example, of Aristotle's dictum: 'To say that what is is not, or that what is not is, is false; but to say that what is is, and what is not is not, is true', *Metaphysics*, 1011^b25.

afforded *too* close a connection, for then the integrity of our non-modal states of affairs will be violated. The possibility aspects of contingencies must be kept *separate* from the simple-having aspects of properties.

But if this *is* how separatism arises – or did historically – then it is vulnerable to the following kind of objection. If propositions of the form $\langle a \text{ is } F \rangle$ are capable of being true, then perhaps it is not that there are non-modal states of affairs making them true, perhaps it is merely that the separatist is especially attached to a status enjoyed by propositions which represent the world accurately *but not comprehensively*. Perhaps a proposition may be true without it representing *all* of the important aspects of its truthmaker. $\langle \text{Obama is brown-eyed} \rangle$ is true, but perhaps it only tells us about the property-possession aspect of its truthmaker, and fails to tell us about what is *another* aspect of that: the modal aspect.¹⁹⁶ In that case, what justifies us in the postulation of non-modal states of affairs to act as the objects represented by true propositions, when those true propositions may not tell us all there is to tell about the states of affairs which make them true? If truth may be enjoyed by propositions which only *partially* represent their truthmakers, then surely it is illegitimate to postulate as fully-formed portions of reality those aspects of the truthmakers which the true propositions *do* represent. What right have we to say that there is in reality a combination (a unity) corresponding in form and content to what is represented in $\langle a \text{ is } F \rangle$, when *that* in reality in virtue of which this proposition true is only partially represented in $\langle a \text{ is } F \rangle$?

And the point is, what reason have we to think that truth is *not* like this? What reason have we to doubt that truth may be bestowed upon propositions which do not fully represent their truthmakers? I *know* that Obama is brown-eyed, but I know that there is more to the story than that: I know that he might not have been. But I also know that $\langle \text{Obama is brown-eyed} \rangle$ is considered true even though it makes no mention of possibility (and I have no objection to that being evaluated as being true). And I *know* that Obama is human, but I also know that he *must* be

¹⁹⁶ I am not suggesting that $\langle \text{Obama is brown-eyed} \rangle$ is a non-modal proposition in virtue of its *overt* structure being non-modal. It is, I suggest, a thoroughly non-modal proposition, however many layers of structure we wish to assign it.

human. And, again, <Obama is human> would be declared true (and reasonably so) even though the necessity we suppose to be there is not represented. So, I *know* that truth may indeed attach to propositions that tell us only part of the story. But, if I am right that truth *does* attach to partial representations of reality, should that not be *important* to us? Surely we have no grounds for *ignoring* this and continuing to postulate truthmakers corresponding to partial representations. Don't we only want to postulate what *is* there?

Our definition of contingency tells us that there is an intimate connection between the exemplifier's *having* of the property and the *possibility* of their lacking it (or having some other property in its place). And, of course, the only other type of unity in the world is where properties are *necessarily* exemplified. So in *both* possible forms of exemplification, there is either modality or an intimate connection with modality. But in that case can't we ask of any non-modal truth which kind of exemplification it represents? And whichever answer we get – be it contingent or necessary exemplification – isn't it clear (from the very fact that the proposition involves no modal terms) that the representation does *not* capture *all* aspects the exemplification?

If we ignore this feature of truth, that it may apply to representations we *know* to be only partial, and try to push ahead with the postulation of non-modal states of affairs to serve as truthmakers for non-modal truths, then the weakness of our position becomes most obvious in cases where the truthmakers for non-modal truths would need to involve *necessity*. For example, <Obama is human> is a true proposition that involves no modal term. But – if we accept that Obama *must* be human – who will dispute that the truthmaker for this will need to involve necessity? This is not to demand acceptance of modal realism, for the necessity may, upon examination, turn out to be present in virtue of some more basic non-modal feature(s). That is, reductionists can agree that the truthmaker for this will involve necessity. Reductionists are not, after all, attempting (at least not in most cases) to eliminate the *vener* of modality from the world, rather they usually seeking to eliminate modality from the most fundamental level of reality. All we need the reductionist to do is to agree that the truthmaker will involve necessity,

even if in the very next breath they tell us how that is reducible to such-and-such. And I think most (reductionists and non-reductionists alike) would be willing to say that <Obama is human> is *not* made true by a state of affairs in which Obama *merely has* the property of being human. Most would, I think, want to say that there is necessity (somehow) involved in his exemplification of that property, even if that is, ultimately, reducible. But this should give us reason to look again at our readiness to move from what are non-modal representations, such as <Obama is brown-eyed>, and yet clearly representations of contingent exemplification, to *non-modal* truthmakers for those. Leaving the possibility aspects out of the truthmakers for those ought to be seen as every bit as objectionable as leaving the necessity aspects out of the truthmakers for representations of necessary exemplification. Our readiness to postulate non-modal truthmakers is a product of our attachment to the concept of truth. But if truths may be merely partial representations, we cannot justify such postulations by appealing only to the fact that they would serve as truthmakers for the non-modal truths. For the truthmakers can be more complicated than their non-modal representations would suggest, and yet still *be* the truthmakers for those non-modal representations. Were they *not* that much more complicated, how could they manage to make *modal* propositions true? How could the truthmaker for <Obama is human> be non-modal and yet *also* be capable of making <Obama is necessarily human> true? The move from truth to ontological commitment must be questioned.

We can, I suggest, resist such semantic sirens by attending closely to a distinction between *accurate* representation of the world (that is, truth) and *accurate and comprehensive* representation of the world. In propositions of the form <*a* is *F*>, we may represent a portion of the world accurately, but not comprehensively. In particular, we omit reference to the *modal dimensions* of the states of affairs truthmaking for propositions of that form. We can represent the world accurately in the proposition <Obama is human>, but insofar as we omit reference to the modal dimension of the state of affairs *Obama's being human*, we do not represent *all* of the main features of that state of affairs. Specifically, we do not represent the *necessity* involved in that, just as we fail to represent the possibility aspect of *Obama's being brown-eyed* in <Obama is brown-eyed>. What I want to say is that

a proposition may be *true* without telling the whole story. A proposition having that status tells us a *certain amount* about the quality of representation achieved with that proposition, although it may not always mean that *comprehensive* accurate representation has been achieved. We can, of course, have true propositions which are both accurate *and* comprehensive representations. For example, <Obama is contingently brown-eyed> or <Obama is necessarily human>. And the one truthmaker, the state of affairs *Obama's being contingently brown-eyed*, will make true each of <Obama is brown-eyed>, <Obama might not have been brown-eyed> and <Obama is but might not have been brown-eyed>. The last proposition here gives the fullest depiction of the state of affairs which is truthmaker for all three. The first accurately represents the property-possession aspect of it, and the second accurately represents the modal aspect of it, but the third tells the whole story.

We are, of course, right to be concerned in philosophy about the nature and value of truth. But I think that the popularity of the metaphysical position on contingency that I am calling "separatism" owes a lot to our failure to sufficiently mark the fact that true propositions (or whatever) may not always capture all that there is to be captured of their truthmakers. *All* that we capture with the copula is the property-possession aspect of contingencies, but that should not be taken as evidence that that is all there *is* to capture. However, perhaps that is all we *want* the copula to do – to represent the property-possession aspects of states of affairs. Because often that is indeed all that we are *interested* in. Probably more often than not, we have no interest in the modality involved. We simply want to know *whether* Socrates was a philosopher, or Obama is president, or Majnun loved Layla. Propositions of the form <*a* is *F*> inform us to a certain extent about the world, although in many contexts we are only interested in the world to that extent. But the moral is, of course, that what we are *interested* in representing and what *is there to be represented* should be assiduously distinguished. Separatism thrives upon our failure to do so.

We are drawn towards the separation of property-possession and possibility aspects of contingencies by a general preoccupation with truth which is

insufficiently tempered by a concern for *comprehensive* representation.¹⁹⁷ Of course, truthmaker theory has, in an obvious sense, played a role in sustaining separatism. Truthmakers make propositions true, but true propositions do not always comprehensively represent their truthmakers. In other words, the truth of a proposition may not always be a reliable guide to the complexity of its truthmaker. Truthmaker theory has paid insufficient attention to this fact, and the separatist impulse has flourished amongst truthmaker theorists.

If propositions may, as I have argued, be true without comprehensively representing their truthmakers, then we have good grounds for doubting the legitimacy of the move from the truth of non-modal propositions to the postulation of correspondingly modal-free truthmakers. And so, we have grounds for doubting the legitimacy of the separation of the possibility aspects of contingencies from the non-modal property-possession aspects of those truthmakers. We have, that is, no good reason to think that the modal aspects of contingencies are not aspects *within* states of affairs involving contingent exemplification in the very same way that property-possession aspects are fully-fledged aspects *within* those states of affairs.

In discussing the origins and popularity of separatism, as I have been (albeit critically), the *contingency* (for want of a better word!) of that popularity becomes quite clear. It becomes clear the sense in which the *alternative* could quite easily have been the dominant metaphysical position on contingent exemplification. It might have been the default reaction to say that contingent exemplification involves modality at its very core, that states of affairs in which properties are contingently held are *modal* states of affairs, that they are suffused with possibility. If I were to pick one factor as being decisive in the *unpopularity* of that alternative, I should say that it is our commonplace lack of interest in the modal dimensions to states of affairs. This quirk of everyday pragmatics is carried through unchecked to the serious theoretical contexts, and informs our

¹⁹⁷ Perhaps the word “comprehensive” is too strong, for do we even know what a strictly comprehensive representation of a state of affairs would look like? In the loose sense in which I am using it, a “comprehensive representation” of the state of affairs *a's being contingently F* will be one in which each of what we might call the “main players” are represented. The proposition that *a* contingently exemplifies *F* fits the bill insofar as it includes reference to the particular, the property, the property-possession and the modality.

metaphysical decisions without ever itself receiving much in the way of scrutiny. In everyday contexts we often are not interested in ascertaining the modal aspects of the exemplifications we represent. And so the *accuracy* of our representations of the aspects of states of affairs in which we are most often interested (i.e., the non-modal aspects of those) becomes our focus. When we achieve accuracy, we bestow a status on our representations: truth. And, therefore, considerations of truth – the *accuracy* of representation – trump those of the *comprehensiveness* of representation. It is in such circumstances that semantic principles such as Tarski's arise. And from there, the postulation of non-modal states of affairs is but a short step. Separatism then emerges as a form of *defence* of those non-modal states of affairs. We accept that contingency involves possibility but we don't want that "involvement" to be so substantial that the modal-free status of our non-modal states of affairs is threatened. The possibility aspects of contingencies ought to be kept at a distance from the simple *havings* of the properties contingently exemplified. A cleavage between those ought to be built into the metaphysical profile of the contingencies. Given in truthmaker-theoretic terms, that will amount to the postulation of separate truthmakers for the property-possession and possibility aspects of the contingencies. And so we will arrive at the usual approach to modality: take those distinct modal truthmakers and examine whether they are reducible.

But to all of this I say that, at *least* in the context of serious theoretical work, our concern ought to be with accurate *and* comprehensive representation. We should not allow ourselves to be guided in our ontological postulations by truth *qua* (merely) accurate representation. Indeed, it is *illegitimate* to be guided by accurate-but-partial representation. If we pay close enough attention to the distinction between accurate and accurate-and-comprehensive representation, then we not be misled into the postulation of non-modal states of affairs. And so the separatist issue will not arise. Nor will we take the usual approach to modality. For now it will be *incoherent* to ask whether the modal states of affairs might be reduced to (congeries of) non-modal ones, for there *are no* non-modal states of affairs. Contingent exemplification is shot-through with possibility, and that possibility is every bit as much an aspect of states of affairs involving contingent

exemplification as property-possession is. We will have released ourselves from the grip of the *myth* of the non-modal state of affairs. I conclude that we *have no reason to perpetuate separatism*. We should, instead, embrace *modal ubiquity*.

§2.3 *Modal Ubiquity*

I have rejected the idea that states of affairs involving contingent exemplification are non-modal states of affairs. The possibility aspects of contingencies should be considered essential features of those. Thus, I shall adopt the following “Contingency Principle”:

CP: For any state of affairs, S , with exemplifying constituent x and exemplified constituent ϕ , if x contingently exemplifies ϕ , then S essentially incorporates a modal dimension

I shall also adopt the “Principle of Exemplification”:

PE: For any state of affairs S , with exemplifying constituent x and exemplified constituent ϕ , x will exemplify ϕ either necessarily or contingently.

This might be controversial if we were taking states of affairs involving contingent exemplification as *non-modal* states of affairs, but if we accept CP, then I cannot see how PE would represent a problem for us. (It will, of course, be unacceptable one who denies the intelligibility of modalising but, as I said earlier, my arguments are directed at those who lack such qualms.) We may also adopt a principle for necessity, corresponding to that for contingency:

NP: For any state of affairs, S , with exemplifying constituent x and exemplified constituent ϕ , if x necessarily exemplifies ϕ , then S essentially incorporates a modal dimension.

Taking this “Necessity Principle” together with CP and PE, we arrive at the “Principle of Modal Ubiquity”:

PMU: For any state of affairs *S*, *S* essentially incorporates a modal dimension.

From PMU we can derive a very strong form of *modal primitivism*. Now, there is more than one way to formulate the primitivist view, so let’s have look at some attempts. Scott Shalkowski takes it as ‘the view that the world has a genuine modal character and that it does not possess this character in virtue of any nonmodal character it possesses’.¹⁹⁸ In his (2001), Stephen McLeod discusses this and other conceptions of modal primitivism.¹⁹⁹ ‘Minimal semantic primitivism’ is, he says, the view according to which ‘modal idioms are up neither for elimination nor for reduction to non-modal bases’, while ‘the ontological primitivist...holds that modality is in the nature of reality: actuality is construed as modal’ (p.27). Later on, primitivism is defined as the view that ‘some modality inheres in reality’ (p.87), and an apparently stronger version, which McLeod attributes to Fisk, has it that ‘*all* objective modality is grounded in the nature of things’ (*ibid*, n.1). Again, the ‘realist [modal primitivist]’ is defined as one who believes in ‘ontologically grounded necessities and possibilities (p.91).....there is modality in nature. There are irreducibly *de re* modal predicates properly attributable to natural objects...[and those predicates] concern irreducibly modal features of the world’ (p.101). In this last statement it looks as if McLeod is about to offer a more precise definition just at the point where he reverts to talk of modal *predicates*. That is a semantic notion and what we need is a thoroughly *metaphysical* characterisation of modal primitivism. Saying that those predicates ‘concern irreducibly modal features of the world’ is not of that much help. Louis deRossett goes into more depth:

¹⁹⁸ Scott Shalkowski, “Conventions, Cognitivism and Necessity”, p.376, *American Philosophical Quarterly*, 33, (1996), pp.375-392. Elsewhere, he describes it less precisely as the view that modality is ‘a primitive feature of the actual world’, “The Ontological Ground of the Alethic Modality”, p.688, *The Philosophical Review*, 103:4, (Oct., 1994), pp.669-688.

¹⁹⁹ Stephen K. McLeod, *Modality and Anti-Metaphysics*, (Ashgate, 2001).

Modal primitivism is a view about necessity and possibility. Necessity and possibility are part of the fundamental structure of the universe, and some modal claims, at least, would appear in even the most basic overall description of that structure. Modal primitivism is also a view about the relation between modal facts and non-modal facts. Here modal primitivism makes some negative claims: non-modal facts are no more basic or fundamental than modal facts; modal facts are not somehow composed or constructed out of non-modal facts; modal facts are not to be reduced to, or explained in terms of, non-modal facts; they do not supervene on non-modal facts; they are not “nothing over and above” non-modal facts; they do not have second-class metaphysical status with respect to non-modal facts, but rather enjoy the same metaphysical status; they are not dependent on non-modal facts.²⁰⁰

The claim that non-modal facts are no more fundamental than modal facts is, he thinks, ambiguous. It could be read as the claim that ‘*most* or *all* modal facts are as fundamental as any non-modal facts’ or the claim that ‘*some* modal facts are as fundamental as any non-modal facts’, and he intends the second reading.²⁰¹ Now, strictly speaking, nothing in what deRosset says above entails that there *are* any non-modal facts, although given that he never actually says that there are *no* non-modal facts, it would seem natural to read him as assuming that there are. But, without putting words in his mouth, what we can take from deRosset is the following characterisation of a weak modal primitivism:

WMP: Some modal state of affairs S_m is not reducible to any non-modal state of affairs S .²⁰²

It seems that one espousing this “Weak Modal Primitivist” or any other form of modal primitivism must explicitly state whether they believe in the reality of non-modal states of affairs – that is, primitivists must take a position on principles such as CP, PE, NP and PMU. Whatever about deRosset, let’s assume there are some

²⁰⁰ Louis deRosset, “Modal Primitivism”, unpublished MS., pp.1-2.

²⁰¹ *Ibid*, n.2, p.1.

²⁰² This is very close to a definition deRosset gives in his “Possible Worlds for Modal Primitivists”, unpublished MS., p.2, available at: <http://www.uvm.edu/~lдерosse/index.html>.

who subscribe to the kind of position expressed in WMP and who believe in non-modal states of affairs. They might state their position as follows:

WMP*: Some modal state of affairs S_m is not reducible to any non-modal state of affairs S , and some states of affairs are non-modal.

The position described in WMP* is inconsistent with PMU and this is, obviously, down to the commitment we find in WMP* to non-modal states of affairs. Note, however, that WMP is *not* inconsistent with PMU, nor is the slightly stronger formulation “No modal state of affair S_m is reducible to any non-modal state of affairs S ”.

The strong form of modal primitivism entailed by PMU may be formulated as follows:

SMP: For any state of affairs, S , S has an irreducibly modal dimension

This is about as strong and as stark as modal primitivism can get. PMU tells us that all states of affairs are essentially modal. Now, if a class of states of affairs, C_1 , is reducible to some other class of states of affairs, C_2 , then the feature of the members of C_1 which is not present in those of C_2 can hardly be essential to *all* states of affairs. Indeed it would be incoherent to claim that the states of affairs in C_2 do not have a feature which is essential to all states of affairs. Having a modal dimension is essential to all states of affairs. Therefore, if the aim of a reduction is to eradicate modal states of affairs *in virtue of their being modal*, then it cannot succeed. There cannot be a reduction class for modal states of affairs.

Of course, if the members of C_2 were *not* states of affairs, if they were, for example, particulars, then perhaps the reduction could be made work. But anyone willing to argue for such a reduction would be at odds with my position long before this point. They would dispute my (actually, Armstrong’s) Truthmaker Argument. But we may say this: generally, if a class of states of affairs is said to be reducible to a class of entities which are *not* states of affairs, then states of

affairs cannot be regarded as ontologically basic, as one of the fundamental ontological categories. It is simply a form of metaphysical malpractice to attempt to reduce a class of basic entities of one sort to a class of basic entities of another sort. Therefore, it must be admitted that if modality is essential to *all* states of affairs, and states of affairs are themselves basic entities, there cannot be a class of entities to which the class of modal states of affairs may be reduced.

We now have no options for modality other than the modal primitivism expressed in SMP. Given PMU, modal reductionism is impossible; modal non-cognitivism is ruled out by my arguments against the reality of non-modal states of affairs; modal error-theory (if there be such a thing) is ruled out the moment we assume that there are modal truths; and we are assuming a non-rejectionist position on modality, and to that extent is not an option here. Primitivism is all that is left. But much else apparently follows from PMU, although I shall leave discussion of those consequences until Chapter Four.²⁰³

As I mentioned earlier, although PMU entails modal primitivism, it seems primitivism does not entail PMU. One can, that is, believe in primitive modality without believing in the *ubiquity* of modality. Given that WMP* is *inconsistent* with PMU, one could clearly subscribe to that without subscribing to PMU; but given that the two principles cannot be true together, this is obvious. More meaningfully, one could adopt the WMP position and yet believe that there *are* non-modal states of affairs. Indeed, this seems to be the most popular form of

²⁰³ However, I shall note one consequence here that doesn't fit very easily into the discussions in Ch.4. In his (2007), Ch.2, Trenton Merricks argues against truthmaker theory in general. He says that if we formulate truthmaker theory in the only coherent way it *can* be formulated, then we must say that truths are *about* their truthmakers. And one of his arguments is that truthmaker theory comes a cropper over modal truths, for truthmakers are parts of *what is* (reality), but modal truths are not *about* what is – they are about what might and must be. So, truthmaker theory cannot supply truthmakers for modal truths because there are only the *actual* truthmakers and modal truths aren't about any of those. And, therefore, truthmaker theory is wrong in claiming that truths depend on reality, for there *are* some modal truths, and they don't depend on reality. But Merricks has stacked the deck against modal primitivism. If my arguments are good, then this line of argument against truthmaker theory is undermined. I am arguing that *all* states of affairs involve modality – what *is*, is modal (the truthmakers there *are*, the states of affairs which obtain, are one and all partially modal). Therefore, we can allow that modal truths need to be *about* their truthmakers. On my picture, if *p* is a de re modal truth involving any modal term “*M*”, and *S* is a state of affairs involving modality *M* and *S* is a proposed truthmaker for *p*, then if *p* is not about *S*, it will be for some reason *other* than *S*'s not involving *M*. I can agree with Merricks that actual truths have actual truthmakers, what we disagree about is the possibility of the latter involving modality.

primitivism – for example, deRosset and Shalkowski both adhere to something close to this position, as it seems does Colin McGinn.²⁰⁴

Another important point to be noted here is that PMU has some serious consequences for truthmaker theory in general. If one thinks truthmakers are states of affairs, one can – in light of PMU – no longer regard the problem of providing truthmakers for de re modal truths as a mere sub-problem of truthmaker theory on a par with the sub-problems of providing truthmakers for the truths of other problematic discourses – for example, moral and mathematical discourses. For any such problematic discourse with Φ as its (or a) distinctive predicate, if one believes that Φ -truths have truthmakers (if one is a Truthmaker Maximalist, one will automatically think this), then *whatever* truthmakers are recommended for Φ -truths will be partly modal. PMU tells us that every state of affairs has a modal dimension, and so whatever states of affairs we pick as our truthmakers for Φ -truths will be partly modal. So, if PMU is correct, then if truthmaker theory can provide truthmakers for *any* class of truths, it can provide truthmakers for de re modal truths. In a sense, then, a truthmaker theory in which the truthmakers are states of affairs becomes hostage to the fortunes of modal theory. We cannot claim to have provided truthmakers for some discourse without being able to *explain* the various aspects of the truthmakers. If there is, as PMU says, a modal dimension to *every* state of affairs, then truthmaker theorists using states of affairs better be able to say something about *how* the modality features within those states of affairs. Obviously, insofar as it entails SMP, PMU rules out the possibility of that explanation being a *reductive* one. Nevertheless, some form of metaphysical account is needed.²⁰⁵ Truthmaker theory *depends* upon our being able to provide that.

With modal reductionism ruled out, an important question now is whether I can employ *possible worlds* discourse at all. To say that the topic of possible worlds has been important within the philosophy of modality would be a gross

²⁰⁴ (1981), p176ff.

²⁰⁵ Kalhat (2008) argues that truthmaker theory cannot be employed in reductive accounts of modality for it involves primitive modality itself.

understatement. It has been such a popular topic that many regard the philosophy of modality as *nothing more* than the philosophy of possible worlds. But, as we saw with the examples from Lewis earlier on, possible worlds-based theories depend upon the notion of non-modal states of affairs. They analyse “It is possible for *a* to be *F*” as a matter of *a* participating in a non-modal state of affairs: *a*'s *being F at W*, where *W* is a non-actual possible world.²⁰⁶ So, am I proposing that the concept of possible worlds should play no part in our theory of modality? In short, I think it has a role to play, just not as serious a one as many possible worlds theorists would like to give it.

§2.3.1 Possible Worlds And Their Utility

We instinctively appreciate that the world might have been different in various ways, and that there are certain respects in which it could *not* have been otherwise than it is. And we can, it seems, smoothly translate back and forth between claims in which the “official” modal terms (“possible”, “necessary”, etc.) appear and those in which we talk of ways the world might have been. This applies not just in the context of professional philosophical discussions about modality but also, albeit perhaps to a slightly lesser extent, in everyday modal discourse. So we have, in most cases, two ways to say the very same thing – we can use the official modal terms or we can speak slightly less formally in terms of ways the world might have been.

Leibniz was the first to offer what we might call an orderly presentation of this intuitive idea. As is very well known at this stage, it was during the 1940s, 50s and 60s that Carnap, Hintikka, Kripke and others “rediscovered” the Leibnizian notion of possible world. They put that notion to use in the informal interpretation of the formal semantics they devised for modal logics. And in their use of it, the pioneers of possible world semantics in modal logic did not, I think, depart completely from Leibniz. Those early developers of formal modal semantics suggested that we should – informally – read the formal model-theoretic claims in terms of possible

²⁰⁶ The counterpart-theoretic analysis says it is a matter of a counterpart of *a*, *a**, participating in a non-modal state of affairs: *a**'s *being F at W*.

worlds. Using this imagery of possible worlds and accessibility relations holding between them helps us get to grips with that model theory – the models being, strictly speaking, nothing more than formal mathematical constructions (ontologically speaking, they commit us to nothing more than set theory does). We translate natural language modal claims into the formal language employed within the systems of modal logic developed by C.I. Lewis and others, and the Kripkean semantics (to give it its popular label) then allows us to interpret those formalised claims. But that interpretation is itself highly abstract and it is desirable that some informal semantic link be established between the model-theoretic claims and our everyday natural language modal claims, for *prima facie* the former don't seem to have much to do with the latter. When certain of the elements of the models are thought of as possible worlds, we can relate those abstract model-theoretic formulae to the intuitively appealing Leibnizian idea.

Now, the original Leibnizian idea certainly has intuitive appeal. And the fact that it helps in a most significant way in the provision of formal semantics for modal logics only serves to make that notion even dearer to philosophers of modality. The Kripkean interpretation of the Lewisian (and other) systems represents a very neat, highly developed and therefore *valuable* logical package. Modal logic today enjoys a great deal of respectability, to which the development of the Kripkean semantics contributed greatly; and that semantics employs the notion of possible world in a central, albeit informal, role. So it is not to be dismissed lightly. But the fact that we have in the Leibnizian ideas the makings of a *reductive* account of modality is, perhaps, the main attraction for many. As we discussed earlier, modal states of affairs are for many people *entia non grata* (to borrow a phrase from Quine²⁰⁷). But I have argued that *all* states of affairs are modal, that even the states of affairs we come across in everyday life in which things contingently exemplify properties involve possibility, and so deserve to be classified as modal states of affairs. I cannot, therefore, countenance any theory of modality which purports to reduce modal states of affairs to non-modal ones. More generally, I cannot countenance any theory of modality which presupposes the existence of non-

²⁰⁷ (1960), p.253.

modal states of affairs. And that is indeed presupposed in possible worlds theories. Briefly, the possible worlds terrain looks like this. The first question to consider is what *kind* of things possible worlds are. And there are two sorts of answer available here: we can say that they are things of the same type as the actual world, or we can say that they are *not* things like the actual world. The next question is *whether* possible worlds exist, and again there are two options: they do or they don't. The options are as follows:

Option 1: Possible worlds are things **like** the actual world and they **do** exist

Option 2: Possible worlds are things **like** the actual world and they **do not** exist

Option 3: Possible worlds are things **unlike** the actual world and they **do** exist

Option 4: Possible worlds are things **unlike** the actual world and they **do not** exist

In option 1 we find (*inter alia*) the “possibilist” realism of David Lewis.²⁰⁸ The other three options offer theses consistent only with an actualist outlook, according to which there is one and only one world and nothing exists outside of it. The claim in option 2 would usually form part of a wider anti-realist (e.g., fictionalist) strategy. Option 3 describes what has been called a “realist actualist” position, and option 4 an “anti-realist actualist” position. Obviously, it is a very complicated field and this is but the briefest of presentations, but the immediate point to be made here is relatively straightforward and doesn't require a deeper exposition. Possible worlds-based *reductive* accounts of modality can be built around the claims found in each of the four cases above. But in each case, *to what* would we be reducing? It is common to talk about the reduction of modal *claims*, and so our question would be: to what sort of claims are we to reduce modal claims? The usual answer is that we are to reduce modal claims to claims about the relations between possible worlds and/or their constituents. Given our commitment to truthmaker theory, we think that truths have truthmakers, and we have taken truthmakers to be states of affairs. So, let's imagine that the modal reductionist who wishes to employ the notion of possible worlds states the case as follows. (De re) modal truths are made true by modal states of affairs, which are reducible to

²⁰⁸ Lewis: 'You believe in our actual world already. I ask you to believe in more things of that kind', (1973), p.87.

states of affairs involving possible worlds, their inter-relationships and their constituents. And let's assume that the reductionist has found a way to avoid circularity and define the notion of a possible world without employing modal terms. In that case, the claim is that modal states of affairs are reducible to *non-modal* states of affairs (which is, of course, the aim for many). My contention, of course, is that such reductive accounts are impossible, for there are no non-modal states of affairs.

Consider David Lewis's counterpart-theoretic approach, which he uses to construct what he regards as a fully reductive account of de re modality. Leaving aside Lewis's general worries about states of affairs²⁰⁹ and certain other details of his theory not immediately relevant, the possibilist counterpart-theoretic analyses of de re modal claims go like this. There is a plurality of real concrete possible worlds, each a thing of the very same sort as the actual world. Each individual in each world has counterparts in some other worlds. An individual *a* is (merely) possibly *F* iff it (actually) lacks *F* but might have possessed it. And *a* might have been *F*, according to Lewis, iff in some possible world *w* (such that *w* ≠ the actual world)²¹⁰ there is an individual *a** which is sufficiently similar to *a* to be its counterpart, and *a** is *F* in *w*. More formally: It is (merely) possible for *a* to be *F* ↔ ∃*w*((*Ia*w* ∧ *Ca*a*) ∧ *Fa**) (there is a world *w* and *a** is an individual in *w* and a counterpart of *a*, and *a** is *F*). So, we have gone it seems from the modal state of affairs *a's being possibly F* to the non-modal states of affairs *a*'s being a counterpart of a* and *a*'s being F in w*. The first is reducible to the second two.²¹¹ Let's say that the first state of affairs is reducible to the single complex state of affairs *a*'s being a counterpart of a and a*'s being F in w*. But the question now concerns this apparently non-modal complex state of affairs. If *a** is a counterpart of *a*, *must* it be so? Is *a** necessarily a counterpart of *a*? I doubt Lewis envisaged counterparts being *necessarily* related in that way, but if for some reason he did,

²⁰⁹ See his "Critical Notice of Armstrong, D.M., *A Combinatorial Theory of Possibility*", *Australasian Journal of Philosophy*, 70:2 (Jun., 1992), pp.211-24.

²¹⁰ For the sake of simplicity here I shall assume that S5 is the appropriate logic for the kind of modality in question, and so we can omit accessibility clauses.

²¹¹ It doesn't, of course, need to be *a**, in particular, which is the counterpart of *a* possessing *F* – it could be any of *a*'s counterparts. What matters is that there is *some* counterpart of *a* which exists in a world other than *a*'s and which is *F* in that world.

the analysis would fail: we would not have reduced one modal state of affairs (*a's being possibly F*) to a (complex) non-modal state of affairs, for the first conjunct of that would itself be a modal state of affairs – *a*'s being necessarily a counterpart of a*. So, let's assume Lewis intended (as it seems he should anyway) that if *x* is a counterpart of *y*, *x* might not have been so. What about the other conjunct, *a*'s being F in w*, in the supposedly non-modal state of affairs? The counterpart relation must be symmetrical: if *a** is a counterpart of *a*, then *a* is a counterpart of *a**. But if *a** is F in *w*, and *a* lacks F in the actual world, then *a** has a counterpart which lacks F. Which is just to say that *a** might not have been F. And when something exemplifies a property but could have lacked it we say that it *contingently* exemplifies that property. The same can be said in the case of the other state of affairs, *a*'s being a counterpart of a*. If those two don't stand in that relation necessarily, then they stand in it contingently. So, both conjuncts of the complex state of affairs are states of affairs in which we find contingent exemplification. In the first conjunct *a** and *a* together contingently exemplify the relation *___ is a counterpart of ___*, and in the second *a** contingently exemplifies the property *being F*. The tacit assumption in all of this is that in non-modal states of affairs individuals exemplify properties or relations *simpliciter*. So, what Lewis has offered is a reduction of a modal state of affairs to a (complex) state of affairs involving contingent exemplification. But I think this is no reduction at all, for the latter state of affairs is every bit as modal as the former.

So, in ruling out reductive possible worlds-based theories, and indeed any other possible worlds theory which employs the notion of non-modal states of affairs, I seem to have ruled out at a stroke a great deal. I cannot go in for the possibilist counterpart-theoretic approach of David Lewis. Nor most of the usual actualist theories, regardless of whether the theorist's aim is for a fully reductive theory of modality or not. For example, according to Plantinga, possible worlds are maximal possible states of affairs²¹²; for Adams, they are maximal consistent sets of

²¹² Alvin Plantinga, "Actualism and Possible Worlds", *Theoria*, 42 (1976), pp.139-60, reprinted in his *Essays in the Metaphysics of Modality*, Matthew Davidson ed., (OUP, 2003), pp.103-21. See also Plantinga's *The Nature of Necessity*, esp. Ch.IV, (Oxford, Clarendon Press, 1974).

propositions ('world stories')²¹³; and for Forrest, they are uninstantiated complex properties ('world natures')²¹⁴. But in each case, although it may not be explicitly discussed, we find the concept of exemplification *simpliciter*. And yet, I *do* wish to employ the Leibnizian idea of possible worlds in my theory of modality. I am convinced of its utility in aiding our modal deliberations, in helping us to clarify and assess complicated modal claims. The second and fourth options in the list given earlier seem to be available to me insofar as I agree that possible worlds do not exist. The second option was that possible worlds are things like the actual world and do not exist, the fourth was that they are unlike the actual world and do not exist. What I agree with here, obviously, is the claim that non-actual possible worlds do not exist. But this is just the statement of an actualist position. So, the question now is how I am to employ the concept of possible worlds in an actualist manner *without* committing myself to the existence of non-modal states of affairs. This can be done, I suggest, by adopting a *fictionalist* approach to possible worlds.

§2.3.2 Fictionalism

The position was first presented by Gideon Rosen in his (1990)²¹⁵. The idea is to gain 'all the benefits of talking about possible worlds without the ontological costs'.²¹⁶ By 'costs' here Rosen primarily has in mind the costs supposedly associated with Lewisian realism. The benefits are gained, and costs avoided, by *deflating* possible worlds discourse. I will discuss the particular form of fictionalist deflationism Rosen describes (it's not clear whether he actually *subscribes* to it though) a little later; first, I will follow Daniel Nolan in distinguishing three forms

²¹³ Robert Merrihew Adams, "Theories of Actuality", *Nous* 8:3 (Sep., 1974), pp.211-231; on world stories see p.225ff.

²¹⁴ Peter Forrest, "Ways a World Could Be", *Australasian Journal of Philosophy*, 64:1 (Mar., 1986). Robert Stalnaker's position on possible worlds looks quite similar, and although Forrest discusses the latter (p.15, n.2) he doesn't comment on how much he regards their theories as being in agreement. See Stalnaker, "Possible Worlds", *Nous*, 10:1 (Mar., 1976), pp.65-75 and his forthcoming paper "On What There Isn't (But Might Have Been)". A not-*too*-distant cousin of Forrest's, Stalnaker's and Plantinga's accounts is Alan McMichael's actualism, which centres on the idea of *roles*, where the role of an individual is the conjunction of all its general properties (examples of general properties are *being a philosopher* or *being descended from a great leader*); see McMichael's "A New Actualist Modal Semantics", *Journal of Philosophical Logic*, 12:1, (Feb., 1983), pp.73-99 and "A Problem for Actualism About Possible Worlds", *The Philosophical Review*, 92:1 (Jan., 1983), pp.49-66.

²¹⁵ "Modal Fictionalism", *Mind*, 99:395 (Jul., 1990), pp.327-354.

²¹⁶ *Ibid*, p.330.

of fictionalism: broad, timid and strong.²¹⁷ The Broad Fictionalist recommends not only that we take a fictionalist stance on possible worlds talk, but also on modal talk in general. Nolan thinks this comes close to modal eliminativism. Although an eliminativist-fictionalist might believe there to be no *in re* modality, they might, Nolan suggests, nevertheless think that ‘talk [about] what was possible or necessary was a useful device, or shorthand for dealing with, for example, causation or deductive reasoning’.²¹⁸ I don’t hold such a low opinion of modal discourse, and so I won’t be taking a fictionalist stance towards it, whatever about possible worlds discourse. With that in mind, the next fictionalist option looks more promising. Timid Fictionalism says that

statements about possible worlds (or to be more precise, how possible worlds are described in the fiction) rely on the facts of modality, rather than the other way around.²¹⁹

This is in contrast with Strong Fictionalism, according to which modal claims are reduced to claims about possible worlds, and these in turn are given a fictionalist reading. The Timid Fictionalist is saying that modal claims are objectively true or false, and some are indeed true. Claims about what is true or false at possible worlds are then made true (or false) by the modal states of affairs. The Strong Fictionalist, however, is putting things the other way around – they say that a modal claim will be made true by a claim about what *the possible worlds fiction* tells us about how things are at given possible worlds. For example,

(1) Socrates might not have married Xanthippe

is (presumably) a true modal claim, the truth of which is grounded in that of

(2) According to the possible worlds fiction, there is a possible world at which Socrates is not married to Xanthippe

²¹⁷ See his “Three Problems for Strong Modal Fictionalism”, pp.261-3, *Philosophical Studies*, 87 (1997), pp.259-275.

²¹⁸ *Ibid*, p.262.

²¹⁹ *Ibid*.

And (2) is certainly true (at least on most accounts of possible worlds; counterpart theory would, of course, put things in terms of counterparts), although the statement falling within the scope of the fictionalist operator, “According to the possible worlds fiction,.....”, is taken to be false. More accurately, it is taken to be *probably* false; that is, given the supposed outlandishness of the possible worlds fiction (which for Rosen just is Lewis’s theory of concrete realism, as set out, e.g., in Lewis (1986)). So, the modal claim (1) can still be considered – still *is* – true, although we avoid commitment to a modal state of affairs, which may serve as its truthmaker, by grounding its truth in that of (2). And the truth of (2) does not require commitment to a plurality of real concrete possible worlds, just as the acceptance of

(3) In the Holmes stories, there is a brilliant detective living at 221b Baker Street

does not enjoin commitment to there being a great detective at that address, as

(4) There is a brilliant detective living at 221b Baker Street

would. Were we to accept (4) as true, we would (wrongly) be committing ourselves to the existence of such a person at that address. Were we to accept

(5) There is a possible world at which Socrates is not married to Xanthippe

as true, we would be committed to the existence of the possible world mentioned – as we are not in accepting the truth of (2). So, on this Strong Fictionalist theory we are gaining for ourselves the entitlement to use possible worlds talk in the analysis of modal discourse – the former is acting as reductive base for the latter – without paying the ontological (and other) costs associated with commitment to the reality of possible worlds. The Strong Fictionalist is, ultimately, using fictionalism to effect a reduction of modal discourse – we go from modal claims to claims about what is true in the possible worlds fiction, and these latter claims carry no cost other than those associated with the existence of the fiction itself.

The Timid Fictionalist, on the other hand, is *not* using fictionalism in this way. The idea here is not to reduce modal claims to claims about possible worlds, rather just to use possible worlds talk to *clarify* the modal claims. The Timid Fictionalist strategy is to admit commitment to modal states of affairs, use possible worlds talk in understanding modal claims, and yet avoid commitment to possible worlds. More precisely, the Timid Fictionalist will be committed to *finding truthmakers* for modal claims; whether they be modal states of affairs or something else it doesn't matter, as long as the truthmakers are not possible worlds (or relations between worlds, the items in those, etc.), for then the account would collapse into Strong Fictionalism. But given my view that truthmakers must be states of affairs, I shall take it that the Timid Fictionalist is committed to modal states of affairs as the truthmakers for modal claims. It is, then, these modal states of affairs which dictate what is to be true within the fiction. The truth-values of statements employing the fictionalist operator ("According to the possible worlds fiction,.....") are determined by the modal states of affairs. If it really is possible for Socrates not to have been married to Xanthippe, if there is a modal state of affairs to that effect, then we will ensure that our fiction includes the claim <There is a possible world at which Socrates is not married to Xanthippe>. On this account, we are not *reductively* analysing modal discourse. Instead, we are analysing it in a very much looser sense: we are clarifying it, we are setting up an aid to our thought about modal matters. Generally, where a necessity claim – a claim of the form " $\Box\alpha$ "²²⁰ – is true, and so where the relevant necessity-state of affairs obtains, a corresponding fictionalist possible worlds claim will also be true, that is:

Nec_{TF}: $\Box\alpha \rightarrow$ According to the possible worlds fiction, α is true at all possible worlds

And similarly for possibility claims:

²²⁰ In using " α " here the intention is to leave it ambiguous as to whether the modal claim is a de re or a de dicto one. Read " $\Box\alpha$ " as <a claim of the form " $\Box P$ " or of the form " $\Box\phi a$ ">, where " ϕ " is a property-variable and " a " a singular term.

Poss_{TF}: $\Diamond\alpha \rightarrow$ According to the possible worlds fiction, α is true at some possible world

Timid Fictionalism appears to be able to dodge at least some of the more common objections made against Strong Fictionalism. It doesn't make modality uncomfortably hostage to the contingent state of affairs of the possible worlds fiction having been thought up by someone. With Strong Fictionalism, so the objection goes, if no one had come up with the possible worlds fiction, nothing would have been possible or necessary, and that strikes us as wrong.²²¹ The Timid Fictionalist, however, can happily admit the possibility of no one ever having thought up the fiction, even though that fiction is useful to us. Had no one come up with the fiction of possible worlds, those who are actually Timid Fictionalists might merely be more perplexed by modality than they are. But look at the situation for Strong Fictionalists: they seem to have to admit the *possibility* of there being no possibilities. Therefore, in admitting the contingency of the existence of the possible worlds fiction, they seem to be allowing a modal state of affairs – the possibility of its not having existed – which lies outside the scope of the modal reduction their account aspires to. Another objection has it that the possible worlds fiction will not be large enough to allow for the reduction of *all* possible modal claims²²², but this again is no problem for the Timid Fictionalist. According to Timid Fictionalism, we can just build up the fiction as we need to – the modal states of affairs are identified (however it is we do that) and the corresponding modal claims are *clarified* by our adjusting the fiction so as to include a possible worlds claim which in turn corresponds to the modal claim. The possible worlds claim only serves to help us in understanding the modal claim. The final objection Nolan raises against Strong Fictionalism may, however, also apply to Timid Fictionalism.

It is the question of the status of propositions. The Strong Fictionalist cannot give an account of these in terms of possible worlds *à la* Lewis, who says that

²²¹ On this "artificiality" objection see Nolan (1997), pp.264-266.

²²² *Ibid*, pp.266-8.

propositions are sets of possible worlds, because possible worlds do not exist for the fictionalist, and so propositions would not exist either. But then the *fiction* of possible worlds, something composed of propositions, would not exist. And it seems that the Timid Fictionalist is in the same boat as the Strong Fictionalist here. We might simply chalk this down as one of the disadvantages of Timid (and Strong) Fictionalism, or we might respond that there is nothing *compelling* us to give a possible worlds-based account of propositions. That is just Lewis's method of accounting for those troublesome entities, but there are others.²²³ The Timid Fictionalist would, of course, have to specify which non-possible worlds-based theory of propositions they prefer and show that it is consistent with Timid Fictionalism itself. In this context, however, I cannot undertake such a lengthy digression. In any case, for the reason given above, I don't think the objection is all that worrying, so I shall assume Timid Fictionalism is a viable option in spite of it. According to Nolan, the Strong Fictionalist can take a Platonist line on propositions, thus avoiding this objection and, indeed, the other two objections also.²²⁴ I won't go into the details, just to say that one of his conclusions is that this Platonist approach might leave us burdened with propositions as primitive entities, and so the Strong Fictionalist would have

...just swapped primitive modality for equally mysterious primitive propositions – and if this is so, it is not clear that we have a net saving in the parsimony of our total theory.²²⁵

In a sense then, the Strong Fictionalist potentially ends up no better off than the Timid Fictionalist. The latter countenances primitive modality, the former primitive propositions. But the main claim so far of this dissertation has been that all states of affairs are modal, and so that a reduction of modal states of affairs is impossible. In that case, the motivations for and attractions of a position such as Strong Fictionalism, which embraces primitivism about propositions in order to avoid (as it must seek to do) primitive modality, appear to be abrogated.

²²³ One quite compelling worry about the Lewisian analysis of propositions as sets of worlds is that, intuitively, we don't think sets can be true or false, whereas truthbearing is one of the main jobs for propositions. For discussion of this see, for example, C.B. Martin, *The Mind in Nature*, (OUP, 2007), pp.28-29.

²²⁴ Nolan, *op. cit.*, pp.271-273.

²²⁵ *Ibid.*, p.272.

Both the Broad and Strong versions of fictionalism must include within their accounts a specification of *which* theory of possible worlds they are adopting, or perhaps just the details of the world-building principles they prefer. For example, Rosen's version of Strong Fictionalism takes Lewis's theory as its possible worlds fiction – that fiction is what is written down in *On the Plurality of Worlds*. Other Strong (and Broad) Fictionalists must do likewise. But it seems the Timid Fictionalist is under no such obligation. According to Timid Fictionalism, the possible worlds fiction gets built up on an *ad hoc* basis, as and when the modal states of affairs dictate. Such a fictionalist need not, therefore, identify any one particular theory of possible worlds as the fiction they will work from. Nevertheless, when actually endeavouring to clarify modal matters by engaging cognitively with instances of the fictionalist conditionals (**Nec_{TF}** and **Poss_{TF}**), it would, I think, be helpful to have *some* particular conception of possible worlds in mind. Why not pick the most literal one, Lewis's concretist possibilism? We can even ignore the counterpart-theoretic aspect of his system (with all of its associated problems, e.g., Kripke's Humphrey objection²²⁶), and freely allow transworld individuals – it is, after all, only a fiction.

One more, very important, matter remains: how can I subscribe to a theory (Timid Fictionalism) which employs the concept of exemplification *simpliciter*? Clearly, we would need to use that concept in defining the notion of “true-in”, which occurs in the Timid Fictionalist conditionals. In **Nec_{TF}** we find talk of “...true in all possible worlds” and in **Poss_{TF}** “...true in some possible world”. Is this not in direct conflict with the position I adopted earlier, according to which the postulation of states of affairs in which particulars engage in exemplification *simpliciter* is illegitimate, as all exemplification involves some modality? I don't think it is. A simple response here is to say that if employment of the notion of “true-in” enjoins commitment to exemplification *simpliciter*, then that too is part of the fiction. In reality, particulars don't exemplify *simpliciter*, but in the fiction they do. It is false to say that claims of the form “*a* is *F*” have truthmakers of the

²²⁶ *Naming and Necessity*, n.13, p.45. Cf. Ted Sider's “Beyond the Humphrey Objection”, forthcoming, available at: http://tedsider.org/papers/counterpart_theory.pdf.

form *a's being F*, that is, states of affairs lacking any modal dimension. But it is *true* to say that according to the fiction, "*a is F in W*" is made true by a state of affairs *a's being F in W*, and this involves no modality. So, the Timid Fictionalism I wish to adopt is, we might say, doubly fictionalist: it recommends that we employ the fiction of possible worlds *and* non-modal states of affairs in order to clarify modal claims. This makes it even more important to stress that the possible worlds talk is being used as a *heuristic* and nothing more. No serious metaphysical lessons should be drawn from possible worlds discourse. I am merely recommending that we suspend our disbelief in possible worlds and in non-modal states of affairs in order to untangle difficult modal claims and arguments. Slightly convoluted though this may be, it is, nevertheless, how I propose to allow the concept of possible worlds a role in my theory of modality. With this (extended) Timid Fictionalism we can, I believe, meet each of the three challenges set out at the close of the last section: we gain the heuristic advantages of possible worlds discourse without forsaking actualism or embracing non-modal states of affairs.

My attitude towards possible worlds has been heavily influenced by what Kripke has to say on the subject in *Naming and Necessity*. He consistently urges a deflationary view of possible worlds which could, I suggest, be seen as an embryonic fictionalism.²²⁷ He is certainly not realist about them, and doesn't

²²⁷ I suspect it is possible to invoke comments of Kripke's in *Naming and Necessity* in support of a variety of actualist positions. (Kalhat (2008), p.497, for example, takes Kripke to be presenting an "ersatzist" actualism in *Naming and Necessity*.) Nevertheless, the fictionalist reading has at least as much plausibility, in my opinion, as any other that may be offered. In his "Primitive Worlds", *Acta Analytica*, 17:28, (2002), p.20, Takashi Yagisawa comments that 'Kripke's "stipulativist" view of possible worlds...has remained sketchy and suggestive at best and in particular, he has not offered any metaphysically serious definition of a possible world'. I am suggesting that his view should be regarded as being suggestive of a fictionalist account. If this is correct, then it is inappropriate to demand of Kripke a 'metaphysically serious definition of a possible world', for he would not be putting that notion to any 'metaphysically serious' use – possible worlds would merely be fictional entities invoked as part of a heuristic package. Colin McGinn (1981) seems to read Kripke's comments on possible worlds in much the same way I do, although it should be pointed out that modal fictionalism had not been developed when McGinn was writing: 'What, then, is the status of possible worlds for Kripke...I think the only answer can be that we are to take such talk merely as evocative metaphor: its significance is purely heuristic'. (p.162) Without wanting to put words in McGinn's mouth, one certainly gets the feeling in reading McGinn's discussion (pp.160-3) of Kripke's views that if modal fictionalism *had* been developed at the time, he [McGinn] would have given serious consideration to a fictionalist interpretation of those views. He reads Kripke as recommending that possible worlds are merely 'imaginative mental constructions' (*ibid*), and this looks very close (at least in spirit) to the fictionalist position.

think of “possible worlds” as providing a *reductive* analysis in any philosophically significant sense, that is, as uncovering the ultimate nature, from either an epistemological or metaphysical point of view, of modal operators, propositions, etc., or as “explicating” them.²²⁸

And in his famous maxim, that possible worlds ‘are *stipulated*, not *discovered*’, don’t we have something quite close, at least in spirit, to a fictionalist view?²²⁹ In writing fiction we are stipulating, as we certainly are not when describing reality. If we stipulate the nature of possible worlds, then those worlds don’t exist independently of our stipulations – and for a realist this means that they simply don’t exist. In general, if we stipulate the nature of something *x*, then certainly *our stipulation* of *x* exists, as a mental or linguistic event, but *x* itself doesn’t, just as Sherlock Holmes doesn’t. Although I won’t attempt to do so here, perhaps this fictionalist reading of Kripke’s view could be developed. Fictionalism is a relatively young position and it be an important contribution to its ongoing legitimisation if it could be shown that it shares something with the outlook of one so prominent in the growth of the notion of possible worlds in modal philosophy.

There I shall leave consideration of possible worlds. But in recommending a Timid Fictionalist view one is, in a sense, only getting started. The big challenge remaining is that of actually giving an account of modal states of affairs. We must turn towards the difficult work of attempting to tell what Plantinga called the ‘sober metaphysical truth about modality’.²³⁰ I agree with Hale that many of the debates over possible worlds are ‘something of a distraction from’ the basic worries we have over modality: its clarity, function and source.²³¹ And the basic worry with which I am most concerned here is the source problem, the problem of giving a metaphysical account of modality. Having recommended Timid Fictionalism about possible worlds, we still owe such an account. What is required is a close examination of *how* exactly it is that modality occurs within states of affairs. Any theorist wishing to embrace modal states of affairs owes this sort of

²²⁸ *Naming and Necessity*, n.18, p.19.

²²⁹ *Ibid*, p.44.

²³⁰ Plantinga (1974), p.125.

²³¹ Bob Hale, “Modality”, (1997), p.504. Kripke talks about the ‘philosophical pseudo-problems’ which have grown up around the concept of possible worlds, *op cit.*, n.15, p.48.

account, but I owe it in an even more urgent way. I have argued that *all* states of affairs involve modality, that those in which particulars contingently exemplify properties are every bit as modal as those in which particulars exemplify the properties they must have. And in espousing this extreme form of modal primitivism I have alienated myself from a great deal of the modal theorising to be found in the literature. My account must, therefore, present a plausible picture of this thoroughly modal world. Constructing that account is the work of the next chapter.

§2.3.3 *The Source Question Again*

The real work begins with recognition of the fact that we cannot answer the source question – i.e., provide a metaphysical account of modality – without first getting to grips with the issue of *where* necessity and possibility are to be found. I call this the question of the *locus of modal status*, the question: to what does modal status attach? In the *de re* case, when *a* is necessarily *F*, what precisely bears the necessity here? More simply, to *what* do we ascribe modal status in ascriptions of *de re* modality? If we were, for example, investigating morality, we would surely want to clarify to *what* moral status may be properly said to attach (to actions? to persons? to intentions?, etc.). The same is – or at least *should* be – true when it comes to necessity and possibility.

We must begin with enquiry into where modality “fits in” with the other aspects of our general metaphysical picture of reality. *Every* world-view has its ontological commitments. The question how modality fits with one’s commitments is open to all. If we accept the reality of individuals (particulars, things), then how does modality “interact with” individuals? If we accept a distinction between individuals and properties, how does it stand to properties? If we countenance states of affairs, what relationship can there be between a state of affairs and a modality? Metaphysics is about investigating the structure of reality, and a metaphysical account of modality must tell us whether modal status has a place within that structure, and, if it has, the nature of its inclusion there.

I argued in the preceding sections that all states of affairs have a modal dimension, that there are no non-modal states of affairs. And the modal primitivism derived from that (from PMU) is, to my mind, the *only* genuine form of modal realism.²³² And although I will pursue such a realist line in what follows, I think the locus question can (and should) be taken by philosophers of modality of all inclinations. Reductionist anti-realists can answer that necessity attaches to Xs, but only in virtue of something else (in some sense more basic) being the case with regard to Xs. Modality, therefore, wouldn't have a "fully-fledged" part to play in the structure of reality, whereas what grounds it perhaps would. Error-theoretic anti-realists can say necessity attaches to Xs if it attaches to anything, but that in fact it does not attach to any Xs. A non-cognitivist might take their own version of the locus question, perhaps: onto what do we project modal status? And this they can happily answer as they please, although it is debatable whether non-cognitivism has yet supplied – or is indeed capable of supplying – any plausible account of *de re* modality. Even those rejectionists who doubt the very clarity of modalising should, it seems, at some stage in their deliberations consider what the bearers of modal status might be. Indeed any rejectionism *failing* to do this would be very much weaker for that failure, for surely it would lie vulnerable to the objection that it has not – prior to rejecting it – done everything possible to find a way in which modalising *could* be made intelligible. If it is the *utility* of modalising that is in question, then, similarly, the sceptic needs to address the locus question. The utility-sceptic concerning *de re* modalising should, I think, be asking why it is we seek to establish that Xs have this-or-that modal status; but she cannot *ask* this unless she has first confirmed (or at least argued) that it *is* indeed Xs that bear such status. So, the locus question has importance not only for those who believe that modality *has* a fully-fledged place in the structure of reality, but also for those who dispute that.

²³² The common practice of calling David Lewis's theory of modality "modal realism" is mystifying. That theory is intended to be fully reductive – it is meant to show that modality does *not* feature at the most basic level of reality. Ultimately, Lewis wants nothing more than sets and individuals. Plantinga makes this point in "Two Concepts of Modality: Modal Realism and Modal Reductionism", in his *Essays in the Metaphysics of Modality*, (OUP, 2003), pp.192-229.

I shall work below with the general metaphysical picture argued for in Chapter One. The categories I have adopted – those of universal, particular and state of affairs – will each be considered with a view to establishing which can supply the most plausible candidates for the role of bearers of modal status.

Chapter Three: The Locus of Modal Status

§3.0 Introduction

The aim of this chapter is to examine various possible answers to the locus question and, ultimately, to defend my own view – what I shall call the “Refined Copula-Modifier” account. I begin, in §3.1, by considering what motivation we might have for addressing the locus question. The first kind of response to the question which I consider, in §3.2, is that in which particulars are recommended as the bearers of modal status. I argue that although there is linguistic support for the idea that modal status should be *somehow* associated with particulars, there does not seem to be any plausible account of how particulars might literally themselves bear it. In §3.3 I consider the case for states of affairs as the bearers of modality. Again, however, it doesn’t seem as if states of affairs fit the bill. Talk of modal states of affairs is common, and although I accept that modal status must somehow be said to be found *within* states of affairs, too many difficulties arise with the literal account, according to which states of affairs are themselves necessary, possible, etc.. I conclude that our task is that of making precise the sense in which modality resides within states of affairs.

In the next section, §3.4, I examine the modal *properties* account, defended by David Wiggins (and others). It is an important proposal and my examination of it is necessarily a detailed one. I argue that it suffers from a number of problems: it offers an apparently counterintuitive account of possibility; it engenders revision of our conception of the complexity of particulars; and it runs into difficulties in accounting for contingency and exemplification. This last objection is rather complicated and I won’t attempt to summarise it here. Suffice it to say that Colin McGinn makes something close to the objection but, I argue, ends up begging the question against the modal-properties account. However, McGinn’s intuitions are, I suggest, correct, and so we end up having to challenge the modal-properties

theory head-on. The outcome is that in our search for the locus of modality we should, *pace* Wiggins, move away from predicates and towards the copula.

In §3.5 I discuss what I feel is an important point about the “behaviour” of universals in modal states of affairs. This is not intended as direct criticism of Wiggins’s or McGinn’s theories of the locus of modality, although it does seem to give us reason to think that particulars ought to have a bigger role than universals in the bearing of modal status. That is, modality ought to be more closely associated with particulars than with universals. And yet in §3.2 we see that particulars cannot themselves serve as the bearers of modality. What is needed, I suggest, is a theory in which the constituents of modal states of affairs *co-operate* in that work.

McGinn’s own (“Copula-Modifier”) theory is examined in §3.6. My fundamental disagreement with him is over his idea that it is the copula itself (in metaphysical terms, the exemplification relation) which bears modal status. I argue that his theory lacks intuitive support and is quite costly in terms of its ontological commitments. I also discuss the objection that he is unable to account for (mere) possibility. An asymmetry within the theory also emerges at this stage. McGinn’s response to the objection would, I argue, involve acceptance of a controversial metaphysics of negative properties, and doesn’t rectify the symmetry problem.

My own view, the Refined Copula-Modifier theory, is the subject of the final section of the chapter, §3.7. In §3.7.1 I present the core idea. Central to the account is a theory of contingency which involves the concept of *property rivalry*. I discuss the details of that in §3.7.2. I take possibility as primitive and define property rivalry in terms of that. In §3.7.3 I make a brief digression to consider how we might need to revise our modal logical practice in light of the proposed theory, but return to the metaphysics of rivalry and modality in §3.7.4. In the final sub-section (§3.7.5), I compare the Refined Copula-Modifier theory to the other locus accounts discussed throughout the chapter, and in the course of doing so I further elaborate certain aspects of the theory.

§3.1 *Motivating the Question*

The locus question (where are we to locate modality within modal states of affairs?) may seem straightforward enough but a problem here is the extent to which it has been neglected in modal philosophy. There is in the literature a dearth of explicit treatments of the problem. I have claimed that we must address this question if we are to formulate a precise account of the metaphysics (source) of modality, but why does it seem as if so few others have felt this way? The truth is, I think, that many philosophers of modality have considered logical and semantical versions of the question, but few have *explicitly* looked at it from a purely metaphysical perspective. Perhaps this is down to the prominence of the philosophy of language and logic during the twentieth century growth of the philosophy of modality as a discipline. In any case, the fact remains: almost no philosophers *have* openly dealt with this as a metaphysical problem. Nevertheless, I think that the metaphysical problem lurks behind the logical and semantical issues.

For example, in “Three Grades of Modal Involvement” Quine may be taken to be addressing a logical version of the locus issue. One of his intentions there is to demonstrate the horrors which result from employment of modal operators as open sentence operators. In this he sees himself as highlighting (putative) problems which arise when we try to formalise *de re* modal claims. He thinks that those who go in for quantified modal logic must find a technical strategy for avoiding the problems and/or adopt ‘Aristotelian essentialism’, which he describes as a ‘metaphysical jungle’.²³³ *He* cannot see any technical way around the problems, and he certainly doesn’t have time for essentialism, so the conclusion for him is that *de re* modalising is logically unclear, and therefore disreputable. Quine *reaches* this conclusion via consideration of how one would need to treat the modal operator in adequate formalisations of *de re* modal claims. But how do we judge if a formalisation of a natural language claim is “adequate”? It seems we must consult our *intuitions* to make that judgement, we must look to our pre-formal conception of what it is for some particular to be necessarily this-or-that, or

²³³ (1976), p.176.

for all particulars to be necessarily this-or-that, etc. And doing *that* just amounts to considering the locus issue. We can use Quine again here: his anti-essentialist conclusion is that ‘necessity resides in the way we talk about things, not in the things we talk about’²³⁴. But in the process of stipulating how we ought to formally render informal de re modal claims, consultation of our pre-formal intuitions about de re modality involves considering what it *would* be for necessity to reside in the things we talk about. Even Quine must do this – even he, who wishes to show that one cannot adequately formalise de re modal claims without running into logical difficulties, must undertake consideration of the mechanics (if you will) of de re modality. Perhaps, he thinks, de re modality could be understood in terms of de dicto modality. In that case, it’s up to the defender of modality in general to argue that de dicto modality is respectable. But that’s another day’s debate with Quine. The immediate point is that Quine cannot even come to such a conclusion without engaging with the idea that he ultimately wishes to denounce, the idea of necessity “residing in things”. And engaging with that idea is precisely what we do when we consider the locus issue. In order to answer the logical question as to how the modal operators, quantifiers, singular and predicate terms relate to one another, we must first consider the metaphysical issue of the relationships between modalities, particulars and properties.²³⁵ So, although it is not made explicit in his work that that is what he is doing, it seems clear to me that Quine *did* consider the locus issue. The problem, however, is that even if we do identify that aspect of his deliberations as a topic *for* deliberation in its own right, even if we do set up the locus issue as an important topic for consideration, and even if he *did* deliberate over it (as I am claiming he did), it is difficult to find concrete examples *of* him deliberating over it. I am claiming that he had (because he needed to have had) a theory of the locus of modal status. But that theory is almost an implicit premiss in his arguments concerning de re modality. He – like many others before and after him – simply assumes that if necessity resides in the things themselves, then it must have such-and-such a relationship to the things and their properties. He takes a certain conception of the locus of modal status for

²³⁴ (1976), p.174.

²³⁵ Obviously, Quine would question the metaphysical assumptions here concerning the reality of modalities and properties. But anyone without such qualms could agree that the logical and metaphysical issues correspond in the manner outlined above.

granted. And my concern at this stage is not to *object* to the conception he employs, to say that it's right or wrong, rather it is to highlight the fact that he doesn't share with us the *steps he takes* in his deliberations on this topic. We never find Quine explicitly considering how the modal status referred to in de re modal claims might be related to the particulars and properties referred to in those claims. And the failure of those major philosophers like Quine who *do* consider the locus issue to consider it *explicitly* makes it all the easier for us to overlook the question entirely. So, although the locus question *has* been considered by philosophers of modality, this has usually occurred in the background of their consideration of its logical correlates.²³⁶

And yet one might feel like replying here that many philosophers *have* investigated the metaphysics of modality – exclusively, and not just as part of some wider logical enquiry. If the locus question really is such an important one for metaphysicians of modality, why does it not feature widely in their work? The culprit here is, I think, the prevalence of possible worlds-based approaches to modality. If the aim is to employ the concept of possible worlds in order to build a reductive account of modal states of affairs, then what more is there to the metaphysics of modality than the investigation of the metaphysical status of worlds and their constituents? Why investigate the internal character of modal states of affairs if reality does not ultimately contain such states of affairs?²³⁷ It is this kind of thinking which has, I suggest, led those who seek to build reductive possible worlds-based accounts of modality to ignore the locus question. And for

²³⁶ There are many examples of treatments of logical cousins of the metaphysical problem of the locus of modal status. See, for example: Jonathan Lowe, "On the Alleged Necessity of True Identity Statements", *Mind*, 91, (1982), pp.579-584; Tom Baldwin's reply to that, "Lowe on Modalities De Re", *Mind*, 93, (1984), pp.252-255; more recently, Andrea Iacona, "Modal Predicates", *Australasian Journal of Logic*, 2, (2004), pp.56-69; David Kaplan, "Quantifying In", in A.P. Martinich (ed.), *The Philosophy of Language*, 3rd ed., (OUP, 1996); Paul Schweizer, "Necessity Viewed as a Semantical Predicate", *Philosophical Studies*, 52, (1987), pp.33-47.

²³⁷ Generally, modal reductionists need not be regarded as being hostile to the locus issue. Even though one may believe that *a* is only necessarily F in virtue of something non-modal being the case with *a*, still one may (and I think should) wish to clarify the modal picture. That is, in order to *precisely* state the reducibility of "*a* is necessarily F" to some other non-modal claim, I believe reductionists should clarify that *X* (which will be some constituent of the state of affairs truthmaking for this modal claim) bears the necessity here only in virtue of (and here one would insert the content of the non-modal claim to which the modal claim is to be reduced). The point is, however, that *in practice* modal reductionists (using possible worlds-based approaches or not) don't often go in for this sort of clarification.

those who offer *non*-reductive possible worlds-based theories the feeling seems to be that if one ends up with primitive modality in one's account, then there is not really much more metaphysics to be done.²³⁸ Those who countenance primitive modality within possible worlds-based theories seem to have already equated the metaphysics of modality with the metaphysics of possible worlds. And the usual way to countenance primitive modality within possible worlds-based theories is to say that the status of *worlds* as possible is being taken as primitive. So, if the metaphysics of possible worlds must stop there, that is where the metaphysics of modality stops. The locus question, as I am presenting it, simply doesn't arise.

My suggestion, therefore, is that the rarity of explicit treatments of the locus issue can be traced to two factors: first, the twentieth-century move away from metaphysics and towards logical and linguistic approaches to philosophical problems, and second, the dominance within the philosophy of modality of possible worlds theory. But it is time at this point to move on to consideration of the question itself.

When we look at discussions of modality, although we may not find very many philosophers explicitly considering the locus issue, we seem to find hints as to where we should start looking in our investigation of that. We find people talking about "modal states of affairs" (or facts), "modal properties", "possible objects", and so on. And yet a difficulty here is that we often find the one theorist using all of these phrases within a single discussion, or over the course of their work on modality. For example, McGinn talks of 'modal facts' and 'modal propert[ies]'²³⁹, as does Alan Sidelle²⁴⁰. So, it is not even clear how these philosophers might respond to the locus question. The only thing to do, it seems, is to consider in turn each of the categories of entities to which we find reference in these locutions – namely, states of affairs, properties and particulars. What we must do is to look at what kind of case might be made for each of these as the bearers of modal status.

²³⁸ This appears to be the kind of thing Lewis has in mind when he says (1986) that primitivism is a strategy for avoiding theorising.

²³⁹ McGinn (1981), pp.168, 165, 174.

²⁴⁰ Alan Sidelle, *Necessity, Essence and Individuation: A Defense of Conventionalism*, (Cornell University Press, 1989), for example, pp.67, 71.

§3.2 Modal Status and Particulars

A fairly natural way to interpret “*de re*” is as meaning “of the thing”. Our question is: when it comes to *de re* modality, of *which* thing is the modality? To which constituent of a modal state of affairs does the modality attach? Nominalists might hold that the only genuine entity referred to in “*a* is necessarily *F*” is the particular, *a*. Thus, some nominalisms (those in which states of affairs are rejected along with properties) may entail that modal status must be borne by particulars (if by anything) as there are no other *res* to serve as candidates for that bearing role. We might think then that those who believe in particulars and properties may choose between the two, and those who believe in states of affairs have a third option. But do they *really* have these other options? One might believe in the reality of properties and states of affairs but (usually) one would hardly wish to classify those as *things* in the same sense as particulars are things. It seems obvious to me that in the phrase “*de re*” we do not mean “of the thing” such that the *thing* may be a property or state of affairs just as easily as a particular. We clearly mean “of the *particular*”. With regard to claims of the form “It is possible for *A* to *x*”, Ian Hacking tells us that ‘the construction applies possibility to things and agents, and may therefore be properly called *de re*’.²⁴¹ But he doesn’t tell us much more and it is no easy task to understand precisely what it means to say that a modality is *of* the thing, that it *pertains to* the particular in a given modal state of affairs. In fact, the rest of this chapter is devoted to uncovering exactly *how* modal status may be said to pertain to particulars.

We could take things very literally here and say that the modal status found in a modal state of affairs attaches to (or is associated with) the particular *alone*, the particular in isolation from whatever else goes to make up the state of affairs. On the metaphysics I have adopted this would mean that the modality is associated with the particular but not with either of the other constituents of the state of affairs, namely, the universal or the exemplification relation. But what could this

²⁴¹ Ian Hacking, “All Kinds of Possibility”, p.326, *The Philosophical Review*, 84:3 (Jul., 1975), pp.321-337. He thinks of *x* (in “It is possible for *A* to *x*”) as something it is possible for the particular *A* to do; see his “Possibility”, p.164, *The Philosophical Review*, 76:2 (Apr., 1967), pp.143-168.

mean? How could modal status be a status enjoyed by the particular alone? It seems the only way would be if it were said to modify the particular's *existence*. But if we think that modality attaches to particulars with respect to their existence, then a particular would bear necessity by existing necessarily and possibility by existing possibly. This view has, however, counterintuitive consequences. Consider the claim:

(OH): Obama is necessarily human

We hardly want to say that what is necessary in the state of affairs which is the truthmaker for (OH) is *Obama* himself, in isolation from the other constituents of that state of affairs. It's absurd to think that our investigation of what it is that bears the necessity mentioned in (OH) could lead us to amend our conception of its truthmaker so radically that it is now no longer the state of affairs *Obama's being necessarily human*, but is instead the state of affairs *Obama's necessarily existing and being human* (or something similar). This *could* be a truthmaker for (OH) if Obama were a necessary existent for, presumably, if x is a necessary existent and x is F, then x will be necessarily F. But if Obama is a contingent existent, then the claim

(OC): Obama is a contingent existent

will be true. For (OC) to be true there needs to be a state of affairs *Obama's contingently existing*.²⁴² But that would not be compossible with the state of affairs *Obama's necessarily existing and being human*. Given that (OC) is true, the conclusion must be that if (OH) is also true, it must have some truthmaker other than *Obama's necessarily existing and being human*. And this state of affairs would – it seems – have to be considered the (or a) canonical truthmaker for (OH),

²⁴² In fact, any state of affairs in which a particular contingently exemplifies a property may serve as truthmaker for the claim that the particular exists contingently. Thus, *Obama's being president* is a truthmaker for (OC) because it is only contingent existents which can contingently exemplify properties. Necessary existents cannot do that. The import of this point is that we don't need to believe in such states of affairs as *Obama's contingently existing*, which look as if they involve existence occurring as a property much like any other. That is not, at least in my view, a very attractive idea.

if Obama himself is to be the bearer of the necessity mentioned in **(OH)**. So we must, I think, reject the idea that the necessity attaches to Obama himself.

The same kind of problem arises with possibility. Suppose Obama is an actually existing particular (as he is) but does not instantiate some property F, although it's possible for him to have been F – i.e., he contingently lacks F. The question now is how things would look if we say that the possibility attaches to Obama himself where it's possible for Obama to have been an F. The analysis might state:

(OP): It's possible for Obama to have been an F \leftrightarrow Obama possibly exists and is an F.

If the 'possibly exists' here means possibly existing in virtue of actually existing²⁴³, then the second conjunct on the right side, '...is an F', is false. Obama is, in actuality, *not* an F. Therefore, the right side is false. But the left side is – we are assuming – true. Hence the biconditional as a whole is false. Obama may possibly exist in virtue of actually existing but he does *not* instantiate F, even though it is possible for him to. If, on the other hand, 'possibly exists' means *merely* possibly exists – i.e. does not exist but might have done – then the first conjunct on the right side, 'Obama (merely) possibly exists', is false because Obama does more than merely possibly exist, he *does* exist. Thus, the right side is false whilst the left side is true, so the biconditional is again false. The analysis fails on either reading of 'possibly exists'. And, as with necessity, I can see no other way to cash out the idea of possibility attaching to the particular, other than in terms of the particular's existence. So, I shall come to the same kind of conclusion as above: possibility cannot be said to attach to the particular in modal states of affairs.

If we found some way to construe particulars as the sole bearers of modal status which does not involve them having to *exist* necessarily or possibly, then perhaps

²⁴³ Actuality implies possibility (*ab esse ad posse*). But it is highly unlikely that one would read "x possibly exists" as "x exists and, therefore, possibly exists". In terms of the example above, the only grounds for such a reading would be if it were explicitly stated in the left side of **(OP)** that Obama actually exists.

they could indeed play that bearing role. As I can see no alternative, I shall set the idea aside.

§3.3 Modal States of Affairs

Talk of modal states of affairs is very common within the philosophy of modality, but I doubt whether anyone would, if pressed, actually subscribe to the idea that it is *states of affairs* themselves which bear modal status. As I have said, *de re* modality involves a modal status being – somehow – associated with a thing, a particular. Most likely, by “modal state of affairs” people mean a state of affairs *within which* a modality is to be found, a state of affairs within which a modality (again, somehow) acts upon or modifies a particular. The alternative, whereby the state of affairs *itself* bears the modal status, would lead to similar counterintuitive results to those we saw above in connection with the idea that modal status modifies the existence of particulars. To say that the modality in the modal state of affairs *a*'s being necessarily *F* attaches to the state of affairs itself, would be to claim that that state of affairs *exists* necessarily. Obviously, that would lead to all kinds of problems, for example, if the particular *a* were a contingent existent.²⁴⁴ Apart from such consequences, the theory would go against the natural reading of “*de re* modality” – it would mean that there is no special association between the modality and the *thing* in the state of affairs, the particular *a*. The modality would be associated solely with the state of affairs, and the state of affairs is more than just the particular: on my metaphysics, it is the particular plus the exemplification

²⁴⁴ Suppose *a* must be *F* and *a* is a contingent existent. Are we to take it that the state of affairs *a*'s being *F* – as bearer of the modality here – exists necessarily? But if that state of affairs exists necessarily, so do *a* and *F*, its constituents. But one of our assumptions was that *a* exists contingently. So we must say either that contingent existents cannot have properties necessarily or that there are no contingent existents, only necessary existents. Neither option is very attractive. With the first we end up getting rid of modality entirely. If contingent existents cannot have properties necessarily, because necessity states of affairs entail the necessary existence of the particulars featuring in them, there are no *possibilities* for contingent existents either. If states of affairs bear modal status, a merely possible state of affairs would be one in which the particular merely possibly exists. Thus, we couldn't have an actual existent *a* which is merely possibly this-or-that. If *a* were merely possibly *F*, *a* itself would have to be possible but non-actual. And so a conflict is reached between the assumption that *a* does exist and the idea of a state of affairs serving as the bearer of possibility. The other option above – that there are only necessary existents – has similarly unattractive consequences, namely the death of contingency and possibility. If everything exists necessarily, then everything has the properties it does necessarily. It couldn't lack any of them or have any it doesn't have.

relation plus the universal. Nevertheless, there is still a good deal of confused usage of the phrase “modal state of affairs”. Look, for example, at what Mulligan & Correia (2007) say in the course of their inquiry into facts:

One ontological role for states of affairs and facts is to be the primary bearers of modality. Suppose that facts are obtaining states of affairs. Then we may distinguish the obtaining state of affairs that Sam is sad from the obtaining states of affairs that Sam is possibly sad, that Sam is probably sad, and that Sam ought to be sad. Here the modal properties qualify the property of being sad and so qualify Sam. They are *de re* modalities. And, so the view goes, the place of such modal properties is in states of affairs.²⁴⁵

This is a curious passage in that much of what is said seems to have an air of correctness about it, and yet much of it strikes me as being rather confused. It begins with the idea that states of affairs²⁴⁶ might be ‘the primary bearers of modality’, and this is a relatively straightforward claim. However, it would be a straightforward claim to which there are obvious objections, such as those outlined above (to the idea that modal status attaches to states of affairs *themselves*). Confusion creeps in with their claim that ‘the modal properties qualify the property of being sad’. Modal status now seems to be borne by first-order *properties*, and not by states of affairs. Perhaps they mean that properties are the secondary bearers of modality. I’m not sure, but if they *don’t*, then their position looks quite confused. The “modal properties”, they go on to say, qualify a property of Sam’s (*being sad*), ‘and so qualify Sam’. Is this meant to suggest that Sam is, in some sense, playing the role of a *tertiary* bearer of the modal properties, or even the “ultimate” bearer of the modality? Again, it’s difficult to be sure what the authors intended, and the final line doesn’t help matters any, telling us that modal properties are to be found ‘in’ states of affairs. Is this what they meant at the start by saying that modality is borne by states of affairs? If it is, then surely states of affairs are not the primary but rather the tertiary bearers of modality – i.e.,

²⁴⁵ Kevin Mulligan & Fabrice Correia, “Facts”, in *The Stanford Encyclopaedia of Philosophy* (Winter 2007 edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/entries/facts/>.

²⁴⁶ I’ll ignore the distinction Mulligan & Correia draw between facts and states of affairs as (i) it’s not relevant to the points I wish to make about the passage and (ii) I won’t require any such distinction in what follows. “State of affairs” is, for me, just another name for a fact.

wouldn't first-order properties be the primary bearers and their exemplifiers (the particulars) the secondary bearers?

I can agree that the locus of modal status may be said to be *within* states of affairs, but as it stands this is imprecise. The mission here is to find the most plausible way of making it precise. Brief and perhaps slightly confused as it may be, the Mulligan & Correia passage is a rare explicit consideration of the question of what bears modal status and, as such, it is welcome. And in examining it we have come across the idea that the bearing of modal status might not be something which is simply undertaken by one of the constituents in a state of affairs, but rather it might be something *jointly* achieved by all (or at least by more than one) of the constituents, which is an interesting idea in itself and one which will be pursued later on.

Another suggestion is that modal status is associated with *properties*, and, as with modal states of affairs, talk of modal properties is very common in the philosophy of modality. The basic idea in the modal-properties account is that if *a* must be F, *a* has a modal property *being-necessarily-F*, and if *a* might be F, then it has the property *being-possibly-F*. In the next section we consider this kind of answer to the locus question.

§3.4 The Modal-Properties Account

We have many ways, it seems, of saying the same thing: “*a* must be F”, “*a* is necessarily F”, “it is necessary for *a* to be F”, “*a* is F of necessity”, and so on. In §3.2 I said that having particulars bear modal status by themselves does not look like a very plausible option. Besides the arguments advanced in that section, that implausibility seems to be confirmed by the fact that, *prima facie*, none of the locutions here naturally reflects that idea. We might, however, regard the second one (“*a* is necessarily F”) as being reflective of the idea that when *a* must be F, *a* has a “modal property”: *being-necessarily-F*.

The suggestion is that properties may serve as the bearers of modal status not by existing possibly or necessarily, but by literally being modal properties, having modality within them. Thus, when *a* must be F *a* would have the property *being-necessarily-F*, and when it might be G it would have the property *being-possibly-G*. This kind of account was defended by David Wiggins in the 70s and 80s²⁴⁷ and in those defences we find him asking what is in effect the logical correlate of our metaphysical question “what is the locus of modal status?”, namely: ‘what is the logical form of “Socrates must be a man”?’.²⁴⁸ His account takes off....

....from a *must* in English which is both manifestly de re, and manifestly modifies predicates and relations. It is present in “The number of planets, which is nine, must be greater than seven” (*ibid*, p.293)

He continues.....

Cleaving to the de re use of “must”, nothing could now seem more natural than to read essentialist statements as having the form

(5) [Nec[(λx)(Man *x*)]], [Socrates].

(6) [Nec[(λx)(Heavenly body *x*)]], [Hesperus].

²⁴⁷ More recently, Sidelle (1989), p.71ff, employs a modal-properties view in his argument for modal conventionalism: ‘De re attributions are modal predications. They are ascriptions of modal properties’. In his (1981) Colin McGinn seems to suggest something resembling the modal-properties view, although he regards his comments as being explicative of the notion of *modes*, conceived of as ‘ways of possessing properties’ (p.163 [emphasis in original]). His view that modality consists in modes (p.164: ‘mode[s] of property instantiation’) finds, I think, better expression in his “mature” theory, according to which modal terms modify the copula (discussed below), than it does in a modal-properties account. Bernard Linsky, “Truthmakers for Modal Propositions”, *The Monist*, 77:2, (Apr., 1994), might be read as offering a modal-properties view, although it is not entirely clear whether this is how he would wish to be read. He certainly *talks* about modal properties (e.g., p.195), but he must be seen as departing from the Wiggins-style modal-properties account when he talks of *facts* being necessary, possible, etc.. However, it is not clear whether he *means* to make such a departure, or indeed whether he has anything *like* the Wiggins-style account in mind at all.

²⁴⁸ David Wiggins, “The *De Re* ‘Must’: a Note on the Logical Form of Essentialist Claims”, p.289, in G.Evans & J.McDowell (eds.), *Truth and Meaning: Essays in Semantics*, (Oxford, Clarendon Press, 1976), pp.285-324 (including an appendix by Christopher Peacocke). See also Wiggins’ “Contingency, Identity and De Re and De Dicto Necessity”, in J.Dancy (ed.), *Papers on Language and Logic*, (Keele University Library, 1979), pp.35-53.

Anything that is Socrates must be a man. Anything that is Hesperus cannot help but be a heavenly body. (*ibid*; numbering in original)²⁴⁹

Now, my purpose here is not to argue against Wiggins in the sense of arguing that his account fails in its principal aim – that of saving *de re* modalising from its enemies' charges of opacity, etc. (he has Quinean worries very much in mind). Rather, I wish to challenge Wiggins' move towards *predicates*²⁵⁰ in his investigation of the scope of 'Nec', his idea that that should be a predicate modifier. I have two types of worry concerning this predicate-modifier / modal-properties account. One is over the modal properties which we must countenance as constituents of states of affairs serving as truthmakers for claims having the logical form of (5) (and (6)) above, when such claims are read as Wiggins does – i.e., as involving properties such as *being-necessarily-a-man*, or *being-a-man-necessarily*. The other worry is that, *pace* Wiggins, the *de re* "must" does *not* 'manifestly modif[y] predicates and relations'. That is, his reading of statements of the form "*a* must be F" is *not* the most natural one available.

Aside from those worries, Wiggins' account succeeds in preserving certain important modal asymmetries. He gives the example of the set α , {Eiffel Tower, Crystal Palace}. The claim " α must contain the Eiffel Tower" is true but "The Eiffel Tower must be a member of α " is false: ' α would not have existed if the Crystal Palace had not existed. But the Eiffel Tower would have'.²⁵¹ The theory I favour over Wiggins' should do no less than his in being capable of accounting for such asymmetry. I shall show that it does below, but first to the metaphysical problems with Wiggins' modal-properties theory.

²⁴⁹ I shall ignore here Finean worries about Wiggins' conflation of essential and necessary properties and shall assume throughout that wherever he uses "essence" or its cognates he means simply necessity. On the relationship of essence to modality see below, §4.4.

²⁵⁰ Strictly, predicate *abstracts*; see "The De Re Must", p.304.

²⁵¹ Wiggins (1979, pp.35-54). The interest here is in the inability of the standard formulations (in which " \Box " serves as a sentential operator) to capture this asymmetry. " $\Box(\text{Eiffel Tower} \in \alpha)$ " might be thought to adequately represent the claim that the Eiffel Tower must be a member of α , but it might also be offered as a formalisation of the claim that α must have the Eiffel Tower as a member. But the first claim is true and the second false, which suggests their formalisations should differ somehow.

There is certainly something correct about the idea that if it is (merely) possible for *a* to be *F*, *a* does not in fact *have F*. But although that intuition is not inconsistent with the modal-properties account, there is a sense in which the latter violates the spirit of that intuition. When something is *merely* possibly *F*, we think that it *lacks* a property. We don't in general think that *a*'s being merely possibly *F* involves *a* in having some property in addition to all of those it contingently or necessarily exemplifies. But the modal-properties account (on which modal status is located *within* properties) says it does – it says that *a* has the property *being-possibly-F*. On the usual understanding, in being merely possibly *F* *a* is not exemplifying any further property, but on the modal-properties view it is. This worry doesn't seem in itself to be enough to condemn the modal-properties theory, but the approach does appear to lose credibility as we reflect on how greatly inflated *a*'s property-set is on this conception. If we say that its being possible for *a* to be *F* is a matter of *a* exemplifying *being-possibly-F*, we will have to say the same for each possibility for *a*. But there are infinitely many possibilities for *a*, so we shall have to say that *a* engages in infinitely many exemplifications of properties of the form *being-possibly-___*. The particular *a* now looks like a very much more complex, heavily-burdened entity than we would usually envisage it to be. And for the modal-properties view, this is hardly an appealing consequence.

Another problem may be brought out as follows. The modal-properties account will, presumably, say that modal properties are exemplified in the one and only way properties *can* be exemplified – let's call it "exemplification *simpliciter*".²⁵² So, exemplification *simpliciter* is what holds between particulars and both the modal *and* non-modal properties they have. Suppose now that *a* is *G*, but not necessarily *G* (in which case it would exemplify *being-necessarily-G*) and not merely possibly *G* (in which case it would exemplify *being-possibly-G*). The only option left, it seems, is for *a* to be *G* contingently. So, when a particular exemplifies a non-modal property it does so contingently. And non-modal properties are exemplified *simpliciter*. Therefore, exemplification *simpliciter* must be contingent exemplification. Now, we have already said that *modal* properties

²⁵² Wiggins gives us no reason *not* to so characterise how things have properties.

must also be exemplified *simpliciter*, so are we to conclude that modal properties are exemplified contingently? In that case, were *a* necessarily F it would only contingently exemplify the modal property *being-necessarily-F*, which is to say that it might have lacked that modal property. But if *a* could have lacked that, then the modal claim “*a* must be F” would need to have much less *force* than we think it does. But we *know* that this claim amounts to an impossibility under which *a* labours – the impossibility of having lacked (of lacking) something it *does* have. The conclusion is, then, that if the modal-properties theory employs the notion of exemplification *simpliciter*, understood as contingent exemplification, the theory is unable to furnish a proper account of necessity claims.²⁵³

But let’s go back for a moment to *a* having the non-modal property G. I think we can all agree that on the modal-properties view *a* must be said to exemplify G *simpliciter*. And I think we can agree further that any *modal* properties *a* has must also be exemplified *simpliciter* – it is, after all, a central tenet of the modal-properties theory that modalities modify predicates (properties) not the copula (exemplification relation). But consider now the claims:

(I_G): *a* is G

(N_G): *a* must be G

(P_G): *a* might be, but is not in fact, G

If (N_G) and (P_G) are both false and (I_G) is true, then *a* has G but could have lacked it. Now, it was on this basis that we concluded above that the exemplification of G by *a* must be contingent, and so that exemplification *simpliciter* must be contingent exemplification. But it seems the modal-properties theorist can offer another account of matters – one which employs exemplification *simpliciter* but which doesn’t involve that being construed as contingent exemplification, thus

²⁵³ Of course, if the account were to say that all exemplification is *necessary*, then contingency would be eradicated, which is hardly more desirable – as we saw earlier in connection with Baxter’s (and Armstrong’s) view of exemplification.

avoiding the difficulties just discussed. The alternative account explains the joint truth of (I_G) and falsity of both (N_G) and (P_G) by saying that a has – exemplifies *simpliciter* – the property *being-contingently-G*. So it is not a 's exemplification of G that is contingent, rather it is a matter of it having a modal property which is not a necessity-property nor a possibility-property. So exemplification can remain in all cases exemplification *simpliciter*, without that undermining the modal-properties explanation of necessity claims. This looks like a promising strategy for the modal-properties theorist, but there are some problems.

Suppose that some other particular b did not have G but might have done – i.e., suppose it is merely possible for b to be G . On the modal-properties view we would have to say that b has the modal property *being-possibly-G*. But, intuitively, where a has G but might have lacked it, and b lacks G but might have had it, we think that a has – it possesses – what b only merely possibly has. And if a has *being-contingently-G*, then it must be that same property which b merely possibly has. So, we would need to say that b is possibly *being-contingently-G*, which the modal-properties theorist is forced – by his own lights – to interpret as a matter of b having a modal property (for if x is possibly ϕ , x has the modal property *being-possibly- ϕ*). But this will be a rather strange property, something like *being-possibly-contingently-G*. And apart from the fact that that would be a very odd property for b to have, which is a problem in itself for modal-properties theory, there is also the question of how the modal-properties theorist would go on to account for a 's being possibly G in virtue of being *actually* G . For no one, to my knowledge, denies that actuality implies possibility (that $\Box(p \rightarrow \Diamond p)$). Again, the theory says that modalities are always a matter of modal properties. So, would it say that a has some property like *being-contingently-and-possibly-G*, or *being-contingently-possibly-G*? If it did, it would need to differentiate between *being-contingently-possibly-G* and the property b has, *being-possibly-contingently-G*. And how it would do that is far from clear. Is there some kind of internal structure to these complex properties in terms of which the one differs from the other? Does the contingency element in some sense “govern” in *being-contingently-possibly-G*, whereas the possibility element governs in *being-possibly-contingently-G*? With

such a complicated metaphysics, modal-properties theorists have a lot to explain. I said earlier that because each possibility for a particular must, on the modal-properties view, involve that particular exemplifying a modal property, particulars emerge as very much more complex entities than they are *prima facie*. And now we see that the modal-properties account has the same consequence for properties: they emerge as far more complex entities than we would otherwise have thought. In fact, it might not be going too far to say that they emerge as *inscrutable* entities. And this is surely an unappealing consequence of the modal-properties view.

Colin McGinn disagrees with Wiggins' modal-properties account, which he calls the "predicate modifier" account, looking at things as he is from a logical point of view. One of his objections is that

the predicate modifier treatment does not quite capture the force of a modal proposition like "Socrates is necessarily a man" [because] it leaves open the *way* in which Socrates has the property predicated of him. What we are told is that Socrates has the property of being necessarily a man, where the copula here is modally neutral.....So we can intelligibly ask whether Socrates has this modal property necessarily or contingently. But the original statement looks as if it already settles that question: Socrates has the property predicated of him in the mode of necessity.²⁵⁴

The conclusion is that the predicate modifier approach doesn't capture the sense of the original claim "Socrates is necessarily a man". McGinn will, of course, go on to claim that his own theory – the copula-modifier account – *can* capture its sense. The objection above is related to the one I made earlier, namely: if modal properties must be exemplified *simpliciter* and so, contingently, then the account of necessity claims is unsatisfactory insofar as particulars must be said to be capable of lacking necessary properties. This is different from McGinn's objection that the modal-properties approach leaves the question of the mode of exemplification *open* when it should settle the matter, yet the two are related. Both are worries about how modal-properties theory deals with exemplification. I think my objection was incorrect insofar as it assumed that the contingency we detect

²⁵⁴ Colin McGinn, *Logical Properties: Identity, Existence, Predication, Necessity, Truth*, p.76, (Oxford, Clarendon Press, 2000); see ch.4 "Necessity".

(when (I_G) is true and (N_G) and (P_G) are both false) ought to be located with the exemplification relation. This would be to beg the question against the modal-properties theory, the central contention of which is that modality ought to be located within properties. I sought to construct a better objection based on the idea of properties of the form *being-contingently*____. That *would* present difficulties for the theory, but at least the objection was not question-begging and the idea more in-keeping with the spirit of the modal-properties view. In his objection, however, McGinn ignores the spirit of the modal-properties theory and begs the question in favour of his copula modifier approach. He assumes that the copula in “Socrates is necessarily a man” is not modally neutral and faults the modal-properties theory for failing to account for this. But, again, one of the tenets of that theory is that modality does *not* reside in the copula, but rather within properties. The modal-properties theorist will, therefore, deny McGinn’s assertion that ‘we can intelligibly ask whether Socrates has [the property of being a man] necessarily or contingently’.²⁵⁵ So, it is I think preferable to object to the modal-properties theory as I did, by highlighting the metaphysical headaches which come with the postulation of properties of the form *being-contingently*____, which the theory must postulate in order to account for the joint truth of (I_G) and falsity of (N_G) and (P_G) .

McGinn’s other objection is that the copula modifier theory ‘better captures the intuitions behind the predicate modifier treatment’.²⁵⁶ But it would, I think, be more accurate for McGinn to say that he wants to *dispute* the veracity of the intuitions motivating that treatment, and promote those which motivate his treatment. And (perhaps ironically) although I want to join him in disputing the modal-properties theorist’s intuitions, and although the theory I favour is very close to McGinn’s copula modifier theory, I want to argue that *my* theory better captures the intuitions lying behind *his* copula modifier account. In sum: the modal-properties theorist’s intuitions are wrong, McGinn’s are (broadly) right, but his theory doesn’t capture those as well as mine does. So, the first thing we must do is to dispute Wiggins’ claim that the modal-properties account is a natural one.

²⁵⁵ *Ibid.*

²⁵⁶ *ibid*, p.75

Wiggins's claim is that "must", as, for example, it occurs in

(NP): The number of the planets, which is nine, must be greater than seven.

'manifestly modifies predicates and relations'.²⁵⁷ I shall try to reconstruct what I think was Wiggins' route to this conclusion, although, obviously, we can't be absolutely certain of the accuracy of the reconstruction in the absence of comment from Wiggins himself.

Note first that we can call the relation modified in (NP) "___ is greater than ___". This is a name for the non-modal relation *being greater than*. The second step is to note that a natural way to read (NP) makes it semantically equivalent to:

(NP¹): The number of planets, which is nine, is necessarily greater than seven.

Now, the modal word "necessarily" seems to occur *within* the relation term in (NP¹). The inference Wiggins seems to have made is from this point, together with the semantic equivalence of (NP) and (NP¹), to the conclusion that the modal words in both serve to modify the non-modal relation *being greater than*. But look again at the name for that relation, "___ is greater than ___". Syntactically, there are four elements to this name: the first is the left-hand space (slot) which may be filled by any singular term, the second is the copula "is", the third is the relational expression "greater than", and the fourth is the right-hand space, which obviously has the same function as the left-hand one. Now it seems to me that it is the relational expression which does the bulk of the semantic work in linking the name "___ is greater than ___" to the item in reality *being greater than*. The achievement of *that* name naming *that* relation cannot (in any very important way)

²⁵⁷ "The De Re 'Must'", p.293.

be down to the role played by either of the blank spaces or the role played by the copula in that name, for they also appear in names for *other* relations, e.g., in “___ is taller than ___”.²⁵⁸ They have a neutral structural role in the name, and its succeeding *as* a name for the relation *being greater than* must be associated with the role played in that name by the relational expression “greater than”. The point now is that in (NP¹) the modal word “necessarily” occurs within the *structure* of the name for the relation *being greater than*, but not within the semantically most important part of that name – i.e., not within the relational expression itself. If it had, maybe there would be a case to be made that we have a linguistic basis for the metaphysical thesis that modality resides within properties. Although I am reluctant to ever move from linguistic premisses to metaphysical conclusions. But, in any case, the fact is the modal word occurs outside of the relational expression, and so there is not even this linguistic motivation for the modal-properties theory.

But even if the predicate-modifier theorist were to feel uneasy with this line of thought about what is and isn't semantically important in the name for the relation, we can still make the following point. Although (NP) is semantically equivalent to (NP¹), it is surely also equivalent to:

(NP²): The number of the planets, which is nine, necessarily is greater than seven.

In (NP²) we may not have the most elegant expression of the matter, but it doesn't strike me as being ungrammatical and its meaning seems perfectly clear. Indeed, that it is semantically equivalent to (NP) and (NP¹) looks very obvious to me. Now, the predicate-modifier theorist will focus on (NP¹) being a semantic equivalent of (NP), because in the former the modal word is right, so to speak, in the middle of the relation term “..... is greater than.....”. And this is where it is

²⁵⁸ If the copula term *were* part of the semantically important part of the name “___ is greater than ___”, then wouldn't we have to say that what the copula itself names is part of what the relation name names? That is, wouldn't we have to say that the exemplification relation is part of the relation *being greater than*? If “ γ ” is a semantically important part of the name “ Φ ”, then isn't γ (what is named by “ γ ”) part of Φ (what is named by “ Φ ”)? And how could the exemplification relation be part (in whatever sense) of a given relation or property? It is, after all, what *links* relations to their terms and properties to their exemplifiers.

wanted, if the conclusion is to be that modality resides within properties and relations – as in the relation *being-necessarily-greater-than*. But notice now that there is more reason for one to focus on (NP²) as an equivalent of (NP), for the former is *syntactically* closer to (NP) than (NP¹) is. In (NP²) the modal word comes *before* the copula term, as it does in (NP), whereas in (NP¹) the modal word comes *after* the copula term. On the basis of surface grammar, therefore, we should surely regard the modal words in (NP) and its equivalent (NP²) as modifying the *copula* rather than the relational expression. The predicate-modifier theorist has chosen to focus on the *semantic* equivalence of (NP) and (NP¹), because it suits the ends of that predicate-modifier theory. But the syntactic similarity of (NP) to (NP²) would suggest that it is more appropriate to focus on (NP²), which is (if you will) just as semantically equivalent to (NP) as (NP¹) is. In opposing the predicate-modifier theory, the copula-modifier theorist can, therefore, use the predicate-modifier theorist's own data. So we have no reason to believe that Wiggins' reading of (NP) – such that the “must” there ‘manifestly modifies’ the relation term “...is greater than....” – is the most natural one available. In fact, we have good reason to think of his opponent's reading of it, whereby the “must” modifies the copula, as the most natural one.

There is, however, a less technical objection to the predicate-modifier view. McGinn makes the point that we might begin by

remarking that Socrates is a man and then, when our thoughts turn modal, we want to know whether this property inheres in Socrates in the necessary way or in the contingent way: *how* is he a man? What we are interested in is the *mode of instantiation*.²⁵⁹

We are simply not satisfied by modally neutral copulas. The modal-properties theory deprives us of the kind of rational episode described by McGinn. And it is, for me at least, beyond doubt that we engage in such episodes (particularly in philosophical contexts but also in everyday life). The modal-properties / predicate-modifier theory would, therefore, involve revision of a very common and deeply ingrained aspect of our intellectual lives. It would need to say that it is not that we

²⁵⁹ *Logical Properties*, p.78.

want to know whether Socrates has the property in this or that mode, but rather that we want to know *which* property Socrates has. Does he have *being-necessarily-a-man* or *being-contingently-a-man*? This seems to me like too much of a revision to swallow. So the predicate-modifier theory loses some of its appeal, especially in light of the fact that there is a competing theory (copula-modifier theory) which doesn't involve us making this questionable revision. And we should say that the copula-modifier theory is *at least* as strong as the predicate-modifier theory in terms of linguistic motivation. In fact, it is stronger, if what I said in the preceding paragraphs is accurate.

So, let's take stock of our treatment of the modal-properties / predicate-modifier theory. The first objection was that the theory appears to violate our intuition that when a particular *a* is merely possibly F, *a* lacks a property, rather than having some modal property. The thought is that in property terms, mere possibility is about absence rather than presence. The second objection was that with all these possibility properties – properties of the form *being-possibly- ϕ* - particulars now look very much more complex than we would normally imagine them to be. We then came to the worries over exemplification *simpliciter*, as I called it. If all exemplification is *simpliciter*, and if this means it is all contingent, then problems arise with the idea of contingently exemplifying, for example, properties of the form *being-necessarily- ϕ* . But I stepped back from making this objection, as it appears to beg the question against the modal-properties account. The theory still had to explain, however, how to deal with contingent property possession when all exemplification is *simpliciter*. I argued that it needed to embrace properties of the form *being-contingently- ϕ* . But in doing so, it ran into the problem of giving an account of properties such as *being-possibly-contingently- ϕ* . To explain contingency, the modal-properties theory needs, in other words, to embrace a very complex and unintuitive metaphysics. I then went on to say that McGinn's objection to modally neutral copulas (what I had called "exemplification *simpliciter*"), which the modal-properties theory must embrace, was flawed insofar as it begged the question against the modal-properties view in the same way my earlier (abandoned) objection did. But that worry about exemplification *simpliciter*

remained, and so what McGinn and I needed to do was to directly challenge the modal-properties theorist's core intuition. That intuition is that, where it occurs, "necessarily" modifies predicates; modal words are not directly associated with the copula. I disagreed with Wiggins that it is 'manifest' that the "must" in (NP), "The number of the planets, which is nine, must be greater than seven", modifies the predicate "___ is greater than ___". I took his idea to be that, looking at (NP), the "must" seems to occur *within* the very predicate itself. And looking at its semantic equivalent (NP¹), "The number of the planets, which is nine, is necessarily greater than seven", we see the same thing: "necessarily" is right in there in the middle of the predicate. My argument was that neither the "must" nor the "necessarily" is in the "middle" of the predicate – they occur outside, if you like, the "core" of the relational expression "greater than". The conclusion is, then, that it is *not* manifest that "must" modifies the predicate in (NP). And if we are looking for linguistic clues to help us with the metaphysical puzzle of the locus of modality, it is in fact the copula-modifier theory, the opponent of the predicate-modifier view, which is more successful. The semantic equivalence of (NP) and (NP²), "The number of the planets, which is nine, necessarily is greater than seven", taken together with the syntactic similarity of these, suggests that the "must" in (NP) actually modifies the copula there, not the predicate. Finally, we had McGinn's own challenge to the predicate-modifier theorist's intuitions. He highlighted our engagement in intellectual episodes in which we consider property possession first in non-modal and then in modal terms. That we *do* engage in such consideration is, I said, beyond doubt. Thus, the predicate-modifier view would involve a serious revision of our inventory of our intellectual practices. McGinn seems to believe that such a revision is not warranted, and I agree. And the fact that the copula-modifier theory does not require such revision counts in its favour, and so counts against the predicate-modifier view.

With that we shall end our consideration of the predicate-modifier / modal-properties account. It seems clear to me that it is an unattractive theory in a number of respects. It is in tension with certain of our intuitions about modality; it calls for an elaborate and, at times, seemingly inscrutable metaphysics; it has very little linguistic motivation, and, finally, it precludes an apparently common feature

of our intellectual lives – the turn in thought from appreciation of property possession in non-modal terms to consideration of it in modal terms. In §3.6 I shall examine McGinn's theory in detail, but before doing so I would like to discuss what I consider to be an important point about the way in which constituents of modal states of affairs relate to one another. A presupposition in what follows is that properties are not modal in the way recommended by Wiggins. It should, therefore, be taken as a point to be acknowledged and dealt with by anyone wishing to *reject* that modal-properties account, although we have, I think, seen that there are good reasons to make such a rejection.²⁶⁰

§3.5 Exemplification and (In)Dependence in Modal States of Affairs

We can say that *a* is contingently F, that it is necessarily F, that it is possibly F, or that it is impossibly F. In each case, we find the 'is' of predication, but only in two of these cases do we find property *possession*. Intuitively, where *a* is possibly or impossibly F, *a* does not possess the property of being F. That is, of course, when we read 'possibly' as meaning merely possibly, rather than actually and therefore possibly. Where *a* is merely possibly F, it does not possess F but might do. Where it is impossibly F, it does not possess F nor can it. But where it is contingently or necessarily F, *a* does indeed possess F. Continuing with these thoughts would naturally lead us to, for example, Kant's question about what must be 'added' to the possible to constitute the actual.²⁶¹ For now, let's just take it that a property may only be *possessed* in either of two ways: contingently or necessarily. So, where a property is possessed, we will have a state of affairs in which a particular either contingently or necessarily exemplifies a property. Take now the two states of affairs:

²⁶⁰ Michael Tooley (in the Introduction to *Necessity and Possibility*, (Taylor & Francis, 1999), p.ix) says that 'to be a modal realist, one must postulate irreducible, modal states of affairs, and this, in turn, requires the postulation of irreducible modal properties'. I agree entirely with everything before the 'and' but, in light of what I have said in §3.4 above, I strongly disagree that modal states of affairs require modal *properties*. Tooley's claim betrays, I suspect, a lack of attention on his part to the locus issue.

²⁶¹ B284 *Critique of Pure Reason*, trans. Norman-Kemp Smith, (Palgrave, 1929).

S₁: *a*'s being contingently *F*

S₂: *a*'s being necessarily *F*

It is clear that the difference between S₁ and S₂ is a modal one. They have, otherwise, the same constituents: *a*, *F* and the exemplification relation.²⁶² But although they differ modally, the universal here, *F*, seems to participate in S₁ in just the same manner as it does in S₂. And this will be important when it comes to identifying the modality-bearing constituents of states of affairs.

If a particular *a* exemplifies a universal *F*, *a* bears the exemplification relation to *F*. And there must be a *direction* to this relating, otherwise *F* may be said to exemplify *a* just as much as *a* does *F*, which would contravene the Aristotelian principle that a particular (substance) may exemplify but never itself be exemplified. The exemplification relation must, in other words, be non-symmetrical. And, going with Russell, where *R* is a non-symmetrical relation and *xRy*, *y* bears the *converse* of *R* to *x*. Thus, where *a* bears the exemplification relation to *F*, *F* will bear the converse exemplification relation to *a*: the relation “____ is exemplified by____”.²⁶³

Now, in S₁ the universal *F* must be said to bear the relation “____ is contingently exemplified by____” to *a*. And in S₂, *F* must bear “____ is necessarily exemplified by____” to *a*. The point is that *F* seems to bear this relation in exactly the same manner. It seems to matter not to *F* whether it bears the one or the other to the particular *a*. Why do I say this? Well, in S₁ the particular *a* depends upon *F* to a certain degree, it has a certain amount *invested* in its possession of *F*. Where it contingently possesses *F*, it would make *some* difference to it were it cease being *F*. Obama, for example, contingently possesses the property of being exactly *n_{mm}* tall at time *t*. (Leave aside here, for the sake of argument, questions of vagueness.)

²⁶² Ignore for now the fact that a property necessarily held by some particular *a* could not be contingently held by any other particular *b*, and a property contingently held by *a* could not be necessarily held by any other particular *b*.

²⁶³ Even if one holds a non-relational account of exemplification, one must still (somehow) account for the lack of symmetry. Armstrong: ‘the fundamental tie or nexus holding between thin particular and properties appears to be *asymmetrical*’, in *Universals: An Opinionated Introduction*, (Westview Press, 1989), p.62.

Obviously, from his birth he has gone through many “height-states” – he was such-and-such a height at certain times, another height at other times, and so on. But in changing from one height to another, he *did* undergo some change. His being n_{mm} tall at t , and n^*_{mm} at some later time, t^* , is a matter of his having possessed the property *being n_{mm} tall* at t , having ceased possessing that property and having gained the property *being n^*_{mm} tall* at t^* . And being of such-and-such a height at some given time is *part* of what Obama is at that time. Perhaps not, admittedly, a very important part but a part all the same. The degree to which it is important to Obama at t to be n_{mm} tall, the degree to which that property characterises what it is to be Obama at t , will determine the degree to which Obama may be said to depend, at t , upon the property *being n_{mm} tall*. A particular depends upon a property relative to the extent of change which the particular would undergo if it were to cease possessing the property. Of course, how we would measure the “extent of change” a particular undergoes in ceasing to possess some property and gaining some other property is not immediately clear. But *that* particulars undergo varying degrees of change is surely beyond doubt. So let’s just stick to that intuition without worrying here about the principles which might govern the determination of extents of change. The urgent point is that although it would make *some* difference to Obama were he to cease being n_{mm} tall, it would make *more* difference to him were he to cease being, for example, human. The latter property he holds of necessity. If he is human, he cannot *be* otherwise. He cannot fail to be human and still exist. The question of whether or how particulars gain or lose necessarily held properties is a delicate one, but for now let’s just ride roughshod over the subtleties and say that if Obama were to lose the property of being human, he would cease to exist. Thus, he depends far more on the property *being human* than on the property *being n_{mm} tall*. If he were to lose the latter property he would undergo a change; that is clear. But if he were to lose the former property he would undergo a change – if we can even call it that – of the deepest kind: he would cease existing. The change would be destructive of Obama, whereas losing the property of being a certain height would enjoin a far less significant change in Obama. In general, if a necessarily exemplifies F and only contingently exemplifies G, then the loss of F would be serious in the extreme for a , but the loss of G would be (so to speak) tolerable for a . a is capable of enduring

the degree of change which would be concomitant with its loss of G, but could not endure that which would accompany its loss of F. So, it would seem that it makes a difference – maybe all the difference in the world – to a particular whether it holds some property necessarily or contingently. That is, the modal difference between the states of affairs above, S₁ and S₂, is of great importance for the particular involved. In S₁, *a* contingently exemplifies F, so there is far less riding – metaphysically speaking – on its maintaining its F-ness than there would be if S₂ were the case, in which it necessarily exemplifies F. How *a* “relates” to F in S₁ will, then, be different from how it does in S₂.

But bear this in mind and think now of how F relates to *a* in both scenarios. Well, in S₁ if *a* were to cease being F, would this have important consequences for F? I don't see why it should. If Obama were to cease being *n_{mm}* tall at some time *t*, wouldn't the property *being n_{mm} tall* still exist? It seems so. Would the property even undergo any change in this circumstance? It seems not.²⁶⁴ Indeed, how could it? By its nature, the universal *being n_{mm} tall* may be simultaneously exemplified by any number of particulars. But if that property were to somehow change when it ceases to bear the converse-exemplification relation to one of the particulars exemplifying it, wouldn't all the other particulars exemplifying it now have a *different* property to that which they had before? That is, if F is exemplified by *a*, *b* and *c*, and *a* were to cease being F, then if we say that F itself must endure some change as a result of *a*'s ceasing to exemplify it, such that F is now F*, what property is it that *b* and *c* now exemplify? If it is F*, then the change in *a* has caused changes in *b* and *c*. But why should Bill undergo a change in height just because Obama has?²⁶⁵ Why should Obama's ceasing to be *n_{mm}* tall have any bearing at all on what height Bill is? It seems that Obama's exemplification of a certain height-property should have nothing whatever to do with Bill's exemplification of whatever height-property he has – even if they are the *same* property. But if *b* and *c* can't be said to have F* as a result of *a* losing F, they must

²⁶⁴ James Van Cleve: 'if an apple ceases to exemplify redness there must be some attendant intrinsic change in one or other of the relata [of the exemplification relation]; presumably it will be in the apple'. "Predication Without Universals", p.584, *Philosophy and Phenomenological Research*, 54:3, (Sep., 1994), pp.577-590.

²⁶⁵ See Armstrong "How Do Particulars Stand to Universals", p.144.

have what they had before, namely, F. But they can't have F if F *itself* has changed as a result of *a*'s ceasing to exemplify it. The line to take here is, of course, that F has *not* changed in itself as a result of *a*'s losing it, and that the property *b* and *c* have after that event is the very same one they had before it: F. In other words, properties are not affected when the particulars contingently exemplifying them cease to exemplify them. The most we might say is that they undergo a "Cambridge" change of sorts, in ceasing to bear the converse-exemplification relation to the particulars ceasing to exemplify them.²⁶⁶

Look now to the other type of state of affairs, S_2 , where *a* necessarily exemplifies F. And again, leave aside worries about how a particular might be said to cease holding a property they must hold. It seems to me the very same arguments may be made here as were made above in the case of contingently held properties. If *a* is necessarily F, *a*'s ceasing to be F would spell disaster for *a* – but for F, what difference could it make? Were we to say that F itself changes whenever one of its exemplifiers ceases to exemplify it, we would have to believe that entirely distinct existents could substantially affect one another in highly implausible ways – as Obama would affect Bill where both exemplify the same height-property at a given time and Obama ceases to exemplify it at some later point. But it's even more serious than that in this case, for the properties we have in mind are *necessarily* held properties. Thus, if Obama's ceasing to exemplify *being human* means that that property changes in itself, then Bill can no longer have the property of being human. He must have some *other* property – i.e., some other property than one he *had* to have. Would Bill survive this change in properties? I can't see how he would. So in ceasing to exemplify *being human*, Obama would be substantially affecting Bill to the extent that Bill would no longer exist! Here we have what I regard as a *reductio* of the idea that a necessarily held property changes within itself as a result of its ceasing to bear the converse-exemplification relation to one of its exemplifiers.

²⁶⁶ The idea of Cambridge change was introduced by P.T. Geach in *God and the Soul*, (Routledge, 1969).

The conclusion, then, is that a universal bears the converse-exemplification relation to a particular in just the same manner whether that particular exemplifies it contingently or necessarily. The modal difference between states of affairs in which particulars contingently exemplify universals and those in which particulars necessarily exemplify particulars is not one which has any import for the universals involved.²⁶⁷ A necessarily held property will relate to its exemplifier in exactly the same manner as a contingently held property would relate to its exemplifier. How now does this help us in our investigation of the locus of modal status? Well, it tells us something important about how the constituents of modal states of affairs relate to one another. It tells us that our account must give particulars more of a role in bearing modal status than that to be assigned to universals. But having seen in §3.2 that particulars cannot by themselves be the locus of modal status, our ultimate goal now is the construction of an account in which the constituents of modal states of affairs co-operatively undertake the bearing work. The labour wouldn't be shared equally between particulars, properties and the exemplification relation connecting those. Although modal status is only borne within states of affairs, and so only where universals are present, it is less closely associated with universals than it is with particulars. Universals *do* have a role to play in the bearing of modal status, just not as big a role as that played by particulars. What we saw above was that there is a definite sense in which the universal *F* will be independent of the modality occurring in the state of affairs *a's being necessarily F*. Universals are, so to speak, oblivious to the modalities occurring in states of affairs in which they feature. And it is most definitely *not* the case that particulars are independent of modalities in this way.²⁶⁸ Particulars are proportionately as sensitive to modality as universals are insensitive to it. And I take this to be an indication that we should look towards particulars in our search for the bearers of modal status.

²⁶⁷ Nicholas Wolterstorff, "Are Concept Users World Makers?", p.251, *Philosophical Perspectives: Vol I*, (1987), seems to say much the same: 'though cats may possess [the property of being a cat] essentially, that property is not exemplified essentially'.

²⁶⁸ We have here, perhaps, another motivation for agreement with Lewis's comment (quoted earlier, from "Tensing the Copula", p.5) that '[i]f a relation stands between you and your properties, you are alienated from them'. I know, of course, that this is not what Lewis had in mind; he seems to have intended his comment purely as a criticism of relational theories of exemplification. Still, we can say that we are alienated from our properties *at least* to the extent that they retain a degree of independence from modalities that is not enjoyed by particulars.

Having digressed in order to make this point about how the constituents of modal states of affairs relate to one another, it is time to pick up where we left off. In §3.4 we considered various problems for Wiggins' modal-properties approach, some of which were raised by McGinn. In the next section I shall examine McGinn's own 'Copula-Modifier' theory.

§3.6 *The Copula-Modifier Theory*

McGinn and I are largely in agreement on how to understand the move from (I_F) to (N_F). He says:

When we convert "is" to "must" we incorporate the modality right into the copula grammatically, and this is the natural way to express modal claims outside of stilted philosophical usage. Just as we express tense by copula modification, as with "was" and "will be", so we express modality this way. The ease and naturalness with which we do this is evidence that modality is conceived as mode of instantiation.²⁶⁹

But we need to be careful here. Strictly speaking, we don't convert "is" to "must", rather, we convert it to "must be". Consider the move from

(I_F): *a* is F

to

(N_F): *a* must be F

Taking him at his word we might think that McGinn believes that the "must" in (N_F) is itself a copula term. But, clearly, "be" is the copula term there. Of course,

²⁶⁹ *Logical Properties*, p.78. By 'convert "is" to "must"' I take it McGinn has in mind the kind of rational episode described towards the end of the last section. Having established that *a* exemplifies F, we "convert" (I_F) to (N_F) when we further establish that it necessarily exemplifies F.

we can call “must be” a modal-copula term, if we like. But the distinction must be made between

- (i) a modal term *itself* serving to bind the predicate term and the singular term, in which case the copula (metaphysically: the exemplification relation) would have to be said to be “enveloped”, in some sense, by the modal term (the modality)

and

- (ii) a modal term *modifying* the binding work done by “be” in (N_F), in which case neither the modal term nor the copula would be thought of as enveloping the other.

And it seems as if the “must” in (N_F) works in the latter way. We might say that (i) characterises what goes on in locutions such as “*a* necessarily Fs”.²⁷⁰ For example, in “Socrates necessarily rationalises” we seem to find no copula term. But the modal term is not doing the copula’s work here. That work seems to be done within the predicate term “rationalises” (as a transitive verb). If it were not, the claim “Socrates rationalises” would be ungrammatical, which it isn’t. So, I don’t think the (i)-type scenario is all that likely – the copula might not feature explicitly, but its work will not be undertaken by any modal term which does feature. In any case, I don’t think McGinn had a (i)-type scenario in mind for (N_F). I think he would acknowledge that in (N_F) we find the copula term “within” the modal term in the sense that “be” is part of what we might call the modal-copula phrase, “must be”.²⁷¹ But, ultimately, we should say that the modal word “must”

²⁷⁰ These are not the sort of locutions in which we would find Quine’s predicate-forming device “izes” (with which we form a predicate from part of a singular term) at work, as it is in “ $\exists x(x$ Pegasizes)”. For where that device is employed, we wouldn’t find a singular term like “*a*”. Eliminating the need for such terms was, after all, the very point of introducing that device. See Quine’s “On What There Is”, in his (1980).

²⁷¹ However, at one point he talks of ‘the modally committed copula words “must”, “could”, etc.’ (p.78), and this would suggest that he *is* thinking of the copula being incorporated into the modal term. If he *has* such a (i)-type picture in mind, I think it is open to the criticisms made above. And yet he later says that ‘[t]he mode is....internal to the instantiation’ (p.81), which would suggest that it is the exemplification relation which envelops the modality, rather than exemplification

has a distinct role from that of “be” in (N_F), and neither role is subsumed under or incorporated into the other. Although their referents – the modal status of necessity and the exemplification relation – are intimately connected in the state of affairs *a*'s necessarily being *F*, that modal status is not “in” the exemplification relation, nor is that relation “in” that modal status.

Broadly, McGinn and I agree that in the state of affairs truthmaking for (N_F), the modality is very intimately connected with what binds *F* to *a* – the exemplification relation.²⁷² He talks of non-modal properties being possessed in different modes (p.77), of exemplification as something which comes in modes (p.80), and I am in agreement with him here. But, for me, the idea of exemplification coming in modes is just the idea that properties are possessed in modes, and I'm not sure McGinn has, at all points in his discussion, quite the same understanding of this as I do. So long as we are speaking rather loosely it seems to me fine to say that modal terms modify the copula; but if our intention is to achieve the greatest possible precision, and that is my intention, then I'm not so comfortable with the idea of modal terms being said to *literally* modify the copula itself. My perspective is, first and foremost, the metaphysical one. So my worry is over the idea of the exemplification relation being *itself* the locus of modality. The problem arises when we try to make precise McGinn's idea of modality being 'a matter of the strength of the instantiation relation' (p.77). My feeling is that what comes in modes is the particular's *participation in* the exemplification relation, and this seems to me to be different from saying that the exemplification relation *itself* comes in modes. With the latter idea, we would seem to have one relation holding between *a* and *F* in the state of affairs *a*'s being necessarily *F*, and a different relation holding between *a* and *G* in *a*'s being contingently *G*. This appears, although it is difficult to be certain here, to be what the latter view amounts to – when something exemplifies a property necessarily it will bear a relation of exemplification to that property which differs from that which it will bear to a

enveloping the modality. And that metaphysical picture would not find linguistic motivation where the modal term is said to take over the work otherwise done by copula terms. So, his position on this minor point is not all that clear.

²⁷² The root intuition here is, I believe, a widely held one – that, as Loux puts it (in his “Metaphysics and Modality”, in his (1979), p.31), ‘an ascription of de re modality specifies the modal status of an object's exemplification of an attribute’.

property it exemplifies contingently. But we just don't seem to have any intuition which would support the postulation of such a variety of exemplification relations, as many as there are modes. And in the absence of such it looks difficult to justify this rather baroque metaphysics. With the former view, however, whereby it is the particular's participation in the exemplification relation which comes in modes, rather than the exemplification relation itself, we have but one relation of exemplification – the concept of that relation is univocal. Modality is then, to paraphrase McGinn, a matter of the strength of a particular's participation in the (one-and-only) exemplification relation. Let's call this view – the one I wish to recommend – the “Refined Copula-Modifier” (RCM) view. According to RCM, modality is intimately associated with the exemplification relation but just not in as wooden a sense as it is said to be on the copula-modifier (CM) account. Modal status does not literally modify that relation, rather it modifies the particular's bearing of that relation to a property. And yet, it seems, it is also difficult to say here that we have any strong and distinct intuition to the effect that this *is* indeed how things are – that there is one and only one relation of exemplification. There may not be intuitive support for CM but this is not enough in itself to justify adoption of RCM. RCM needs to actually have positive intuitive appeal, and if we can identify intuitions which would give RCM that kind of appeal, then it would be ahead of CM on points. And remember, RCM already has a distinct advantage in being less ontologically costly than CM – whereas CM must embrace a plurality of relations of exemplification, RCM posits only one. So intuitive support for RCM would, given its antecedent theoretical appeal, be enough to secure it the decisive edge. And perhaps we can find the traces of such support in McGinn's own words.

Earlier, in connection with the modal-properties theory, we saw how McGinn highlighted the fact that we often engage in intellectual episodes in which we begin by appreciating (or learning, or otherwise thinking of) the fact that *a* is F. Then, ‘when our thoughts turn modal’, we focus on whether it is so necessarily or contingently.²⁷³ But doesn't it now seem correct to think that what we start out

²⁷³ McGinn, *Op. cit.*, p.77.

with, before our thoughts turn modal, is a *univocal* concept of the exemplification relation? The thought that *a* is *F* is (or is very close to being) a fully formed thought²⁷⁴, and is – apparently – distinguishable from the thought of *a*'s being necessarily *F* or that of *a*'s being contingently *F*. And we would, I think, be hesitant in agreeing to the idea that it is a *different* relation we have in mind in each of these three thoughts – one in the initial non-modal thought, one in the necessity thought and another in the contingency thought. For there just doesn't seem to be any phenomenological difference between, on the one hand, having in mind the exemplification relation we do when we think of *a* being *F* and, on the other hand, having in mind that found in either *a*'s being contingently *F* or *a*'s being necessarily *F*. We certainly register a *modal* difference when our thoughts turn from one of these to the another, but that difference doesn't seem to equate to a substitution of the thought of one exemplification relation for the thought of another. Turning from the non-modal to a modal thought (or vice-versa) doesn't seem to involve this kind of substitution. Intuitively, we can move between these different thoughts without adjusting our conception of the relation holding between *a* and *F*.²⁷⁵ And doesn't this amount to our being intuitively amenable to a metaphysical picture in which there is but one exemplification relation? There certainly seems to be some tension between this phenomenology of the turn from non-modal to modal thought and the idea of there being a plurality of exemplification relations. And this is a stronger claim than that which we felt justified in making above – viz., that we simply *lack* any intuition which would support the pluralist CM idea. I shall take it, therefore, that we have established that theories according to which there is but one exemplification relation, such as RCM, are *at least* “weakly” intuitively satisfying, and that those postulating a plurality of exemplification relations corresponding to the various modes, such as CM, are *at least* “strongly” lacking in intuitive motivation – and by this I mean that they are verging on being downright *counterintuitive*. RCM has, then, at least a weak intuitive appeal. It agrees with commonsense, insofar as it is even plausible

²⁷⁴ At least, it seems that it should qualify as such on an intuitively adequate account of the degrees of formation of thoughts.

²⁷⁵ It might be objected by a CM theorist that the substitution *does* happen but is simply too subtle for us to detect. But the burden of proof would, I think, be with the CM theorist here – it would be down to him or her to show that the substitution happens, given our intuition that it doesn't.

to say that there *is* a commonsense view on this. And this is the problem here: we are looking for the intuitive support for RCM which would give it the decisive edge over CM, but intuitions are thin on the ground in this context. The topic is too abstract, mercurial even, for there to *be* many intuitions which would help us decide things. However, I believe that in the foregoing we have identified one of that rare breed. We find intuitive support for the monistic view of exemplification, inherent in RCM, in the fact that we do not seem to substitute one concept of exemplification for another in the move from a non-modal to a modal thought, or indeed in the move from one kind of modal thought to another. Our concept of the relation binding a property to a particular stays constant whether we are concentrating on the modality involved or not. And with that in mind, let's call this the "Constancy Intuition". It is, I believe, the best we will do here intuitions-wise. The difference between CM and RCM may be metaphysically important, but it is for all that a subtle difference. And intuitions are usually quite blunt instruments with which to do philosophical battle – they help us most often to decide between very obviously differing positions. But I think we buck that trend here; the Constancy Intuition clearly supports a position (RCM) only very subtly different from its rival (CM).

So, I shall take it that RCM is intuitively preferable to CM. And it is, as I have already said, theoretically preferable insofar as it engenders a leaner ontology. There is, therefore, good reason to consider RCM the better of the two theories. But leaving this, I would like to note that the Constancy Intuition, to which I have made appeal in support of RCM, is one to which others also may appeal. It could be used against the CM view by any of the other theories we have considered. It is consistent with the predicate-modifier account, and so could be used by Wiggins (for example) in opposing the CM view. Of course, CM has other distinct intuitive advantages over the predicate-modifier theory, so such an appeal on Wiggins' part would not, I think, be enough to sway the matter in his favour. And RCM has just as many advantages over the predicate-modifier view as CM does; therefore, the Constancy Intuition would still leave RCM in the lead from CM. Those who believe that modal status resides within particulars, properties or states of affairs (in the sense of those being said to exist in the various modes) may also make

appeal to the Constancy Intuition in opposition to CM. But CM has strong intuitive *and* theoretical advantages over each of these three theories, so it is – again – unlikely that it will be scuppered on these grounds. And yet, as before, RCM has just as many advantages over the rivals as CM does. So, once again, in virtue of its being able to appeal to the Constancy Intuition, RCM must be regarded as the overall frontrunner.

Before moving on to consider RCM in more detail I would like to briefly discuss a different sort of objection to CM. This is the objection that McGinn's CM theory is deficient, or at least incomplete, in that it fails to offer an account of how to deal with claims involving *mere* possibility. The complaint is made by both John MacFarlane and Gregory Fitch in their reviews of McGinn's *Logical Properties*. McGinn's own discussion of this is very brief. He says that where "*a* is possibly *F*" is true but *a* does not actually have *F*,

...we cannot be saying in what mode the object *has* the property, since it doesn't have it. Instead, we are saying that the object possibly instantiates the property, where again the modal expression modifies the copula, as in "Socrates possibly-is a man".²⁷⁶

MacFarlane thinks that here McGinn is 'countenancing a *third* mode of exemplification. Yet he claims in the main text (p.80) that exemplification comes in *two* modes, necessary and contingent, and '[i]t is always one or the other'.²⁷⁷ And, as Fitch remarks, this third mode of exemplification cannot be construed as (say) "weak exemplification", for 'it is not instantiation at all. At least this is what McGinn seems to imply in the footnote' (quoted above).²⁷⁸ So, McGinn must either admit that there are three, and not two, modes of exemplification, and go on to give an account of possible exemplification, or he must stick to his guns and renounce this third mode. It seems to me as if he is trying to do *both* in the footnote (quoted). On the one hand he says *a* 'doesn't have' *F*, and in the next breath he says it 'possibly instantiates' *F*. Fitch gets it right, I think, in saying that

²⁷⁶ *Ibid.*, footnote 6, p.77.

²⁷⁷ John MacFarlane, "Review of Colin McGinn, *Logical Properties*", p.464, *The Philosophical Review*, 111:3, (July, 2002), pp.462-465.

²⁷⁸ Gregory Fitch, "Discussion – *Logical Properties*", p.433, *Philosophical Studies* 118, (2004), pp.425-437.

‘[t]he possible-instantiation relation is on a par with a fake diamond – neither are what they seem’.²⁷⁹ Either way, McGinn is in trouble. If his intention is to admit this as a genuine third mode of exemplification, he fails to tell us how it works, and so his account is incomplete. If he wants to say that possible exemplification is *not* really exemplification at all, that there is no such mode of exemplification as possible-exemplification, then possibility does *not* modify the exemplification relation, and so his CM theory is unable to cope with mere possibility – an aspect of the modal spectrum which all adequate theories of modality must accommodate. One reason to think that in footnote 6 (quoted above) he *did* in fact intend possible exemplification as a genuine third mode of exemplification is the following. Replying to Fitch, he says that even if the object doesn’t have the property ‘we can still suppose that the modal expression [viz., “possibly”] modifies the copula’.²⁸⁰ But he admits that

this introduces a disagreeable asymmetry into the overall treatment, since we cannot then say that all modal ascriptions are about modes in which objects (actually) instantiate properties.²⁸¹

But the problem is, if we *don’t* say that “possibly” modifies the copula in the same way that “necessarily” and “contingently” do, then we introduce an even deeper asymmetry into the theory. CM theory interprets “*a* is *M*-ly F” (where *M* may be any mode) as the claim that *a* *M*-ly satisfies the predicate F. This in turn is cashed out in terms of *a*’s *M*-ly exemplifying the property denoted by “F”. But if “possibly” does not modify the copula, the CM theorist cannot say that for any mode *M*, a particular *M*-ly satisfies a predicate iff it *M*-ly exemplifies the property denoted by that predicate.²⁸² The case of mere possibility constitutes a counterexample to this. So, in effect, the CM analysis would collapse. His solution, which he says had not occurred to him when writing the book, is to say that where *a* is not F but might have been, *a* is not-F in the mode of contingency. So, his solution is to jettison this proposed third mode of exemplification. This

²⁷⁹ Fitch, “Discussion”, p.436.

²⁸⁰ McGinn, “Replies to Discussion on *Logical Properties*”, p.457, *Philosophical Studies* 118, (2004), pp.453-61.

²⁸¹ *Ibid.*

²⁸² $\forall x \forall M (x \text{ } M\text{-ly-satisfies } \phi \leftrightarrow x \text{ } M\text{-ly-exemplifies } \phi)$.

frees him of the obligation to explain how possible exemplification might work, and so he escapes the first horn of the dilemma I posed above. But does he escape the second? He is now saying that where *a* is not F but it is possible for it to be F this is *not* a matter of possibility inhering in a special relation of exemplification connecting *a* to F. So should we not say that his theory fails to cover the full extent of the modal spectrum? He might respond that although possibility is not itself to be found within the exemplification relation, this is, nevertheless, consistent with the claim that in the truthmaker for a statement involving a modal term, the exemplification relation will be itself modal. A truthmaker for “*a* is (merely) possibly F” is, after all, the state of affairs *a*’s *contingently-exemplifying not-F*, and here the exemplification relation is indeed modal. That response may be (strictly) correct but there is still an asymmetry in the account, for it is not now true to say that all modal terms modify the copula – “possibly” does not modify the copula in “*a* is (merely) possibly F”, or at least not directly, as “necessarily” or “contingently” do. The mode of possibility is not, unlike the modes of necessity and contingency, ‘internal to the instantiation’.²⁸³ McGinn can rightly deny the charge that his account is unable to cope with possibility; he can say that it *does* cover the full modal spectrum. Although he seems to escape the second horn of the dilemma above, he does so at the expense of his account’s symmetry.

And there is another, perhaps more serious, problem. His solution requires him to admit negative properties, such as *being not-F*. At an earlier point in his text he disagreed with Quine that properties are ‘creatures of darkness’, but there is surely something of the night, so to speak, about *negative* properties.²⁸⁴ In fairness, he doesn’t actually tell us (anywhere in the book) his views on this, so he may see no problem whatever with negative properties. But if that is the case, he would need to say so and say why. Given the extent of the controversy which surrounds negative properties, it is simply not good enough to just breezily adopt such

²⁸³ *Logical Properties*, p.81. But maybe it *is* internal to the exemplification – maybe McGinn has taken the wrong option in running from possible exemplification. I don’t doubt that that would cause problems when it is understood as he understands it, but there is another way to understand it, as we shall see below.

²⁸⁴ *Ibid*, p.56.

properties in the course of solving the possibility problem.²⁸⁵ Of course, one of the big questions there is over the idea of particulars' property-sets being as large as they must be if there are negative properties. Apart from all of a thing's "positive" properties, it would also have an extremely large stock of negative properties. Is it *really* at all plausible to say that Obama has the property *being a non-centipede*?

And apart from any metaphysical woes they may engender, we could also complain that his solution to the possibility problem runs counter to our modal intuition that when *a* is merely possibly *F*, *a* lacks a property, rather than having a property – be that a negative property or not. I made this objection earlier to the predicate-modifier account (according to which *a* is (merely) possibly *F* iff *a* exemplifies the modal property *being-possibly-F*), and it seems to apply just as well here. By McGinn's solution, mere possibility is a matter of the exemplification of a negative property. But unless he motivates such a revision of our intuitions, his solution looks decidedly *ad hoc*.

Any plausible theory of modality must tell a convincing story about mere possibility. In my opinion, CM fails to do that. In order to accommodate mere possibility it sacrifices symmetry across the modals, imposes a controversial doctrine of negative properties and, counterintuitively, makes mere possibility into a matter of (negative) property possession. And perhaps here we have a more resilient dilemma facing the CM theorist: adopt McGinn's solution in terms of negative property possession or admit a relation of possible-exemplification. Either way, one would be going against this intuition. Taking the first horn means that mere possibility will entail actual exemplification (of possibility-properties), and taking the second means that particulars must – somehow – actually bear the relation of possible-exemplification to properties they might, but yet do not, have. And what is to stop us regarding this also as a form of actual exemplification? McGinn tries to account for mere possibility by replacing his idea of possible-

²⁸⁵ There is, however, no need for me to get into the details of those controversies here. Armstrong features heavily in the debate (see, for example, his (1978)). He rejects negative properties (universals) for two reasons: first, they don't ground genuine similarities and, second, they could not ground any causal powers. For Armstrong, genuine properties must do both.

exemplification relations with that of contingent exemplification of negative properties; but the latter is every bit as counterintuitive as the former.

The question now is, of course, whether the Refined Copula Modifier theory (RCM) can do any better. It may trump the CM view in other respects but if it cannot account for mere possibility in a more satisfactory manner than CM does, then in the final analysis it will be just as badly off as that theory. Its plausibility as a theory of modality depends heavily upon its being able to provide a good account of mere possibility.

§3.7 *The Refined Copula-Modifier Theory*

RCM involves a *co-operative* view of how it is that modal status is borne. It is not borne by any one constituent of a state of affairs, nor by the state of affairs itself. Rather, the constituents co-operate in bearing it. But they do so to differing degrees. At the heart of my view here is exemplification, and I regard exemplification as a sort of activity. RCM is simply the view that particulars engage in this activity *in different modes*. To put it the other way around, the modalities are the different ways in which particulars engage in exemplification. The crucial difference between RCM and the Copula-Modifier view (CM) is that, on RCM, we have but *one* relation of exemplification. That relation does not come in modes, as CM says. Rather, particulars *participate in* that exemplification relation in different modes.²⁸⁶ And, I shall say, *that* particulars do so is a metaphysically primitive matter. Let's have a closer look at how this works.

²⁸⁶ Daniel Bennett, "Essential Properties", *Journal of Philosophy*, 66:15, (Aug. 7, 1969), p.488, seems to assume something close to the CM and RCM views of de re modality (the context of his comments is not relevant here):

It is not particularly helpful...to invoke at this point a doctrine of de re modality...because the idea of adverbial modification is too obscure to explain the difference [between de dicto and de re modal claims]. Adverbial modification itself needs explanation. To invoke it is doubly obscure if the adverb in the case of de re modality is assumed to modify predication [because the] idea of predication is something for which there is a clear theory in theory of quantification [and that] clarity is lost when de re modalities get tacked on.

He seems to take it that in de re modalising what goes on is adverbial modification, even though he himself thinks that an obscure practice. And he seems to think further that what might be modified is 'predication' – metaphysically: exemplification. Quinean scruples ground his distaste for de re modality, but the point here is not to dispute his rejection of de re modality. Rather, it is to note that

§3.7.1 Participating in Modes

If *a* must be F, the RCM view is that *a* participates in the exemplification relation, *ER*, in a specific manner. It makes a deep “investment” (so to speak) in its exemplifying of F. Even more metaphorically, it clings to F with all its strength. We say nothing more than this in defining necessity in terms of possibility and negation. When we say that if *a* must be F, it’s not possible for it to lack F, we mean nothing more, I believe, than that *a* participates in *ER* with F in what we might call a particularly “fervent” manner. Its very existence depends upon its exemplifying F, and this is reflected in the manner in which it does so. But *a*’s necessarily exemplifying F is not *reducible* to some more basic fact involving *a* and F. Given my earlier commitment to the Principle of Modal Ubiquity (PMU, see §1.2 above), and the fact that within PMU we find a strong form of modal primitivism, necessarily exemplifying universals must be taken as a metaphysically primitive phenomenon.

The route into my account of possibility begins with contingency. In §2.2.2 above I discussed the nature of contingency, but I must now consider it in a little more depth. If *a* is F but might not have been, if it is contingently F, then *a* engages in the exemplification of F with less “fervour” than it would were it necessarily F. It is less committed to possessing F. Part of contingency is the possibility of *absence* – absence of the property in fact possessed. *a* contingently exemplifies F if it is possible for F to be absent from *a*’s property-set (the set of all properties *a* exemplifies, regardless of mode). But F, we assume, does some “job” within *a*, it plays some *role* within *a*’s character. *Being a philosopher* plays a role within Socrates – he must occupy his time *somehow*, and he occupies it by being a philosopher. But he could have occupied it by being a plumber. So here we have two properties: *being a philosopher* and *being a plumber*. Both can serve as *ways* Socrates occupies his time – both can play that same role within him, just not (let’s

as a rejectionist about de re modality, Bennett obviously regards the adverbial account of that as the most prominent or promising or threatening (from his perspective). And that is surely a badge of honour for RCM, CM and any other adverbial accounts of de re modality. It is also interesting insofar as Bennett was writing in the late 1960s and seems well-aware of the adverbial account. This goes to show that it is, if nothing else, an approach with some philosophical pedigree.

assume) at the same time. At any given time he can have that role filled by either property but never simultaneously by both. What I suggest is that the properties *being a philosopher* and *being a plumber* are rivals. They both vie to play the same role within particulars, and in this they rival one another. At any given time, Socrates contingently exemplifies *one* out of the *range* of properties which rival each other in each being suited to playing that role. That he *does* exemplify whichever he does has no bearing on his existence (hence his exemplifying it with less fervour than he would a property he must have), but he *must* exemplify *one* of the properties vying for that role. Having that role to be filled within him is essential to Socrates – he could not be what he is and fail to occupy his time in some way (i.e., exemplify some property which *is* a way of occupying time, such as *being a plumber*).²⁸⁷ So, within his contingently exemplifying *being a philosopher* we find the possibility for Socrates of his having lacked that property. But, as I said, the role played by *being a philosopher* within Socrates is a role that *must* be filled. And there is a vast range of properties suited to that job. These are the rivals of *being a philosopher*. Hence, we can regard the possibility of Socrates' having lacked that property as one side of a coin, the other side of which is the possibility of the *presence* within Socrates' property-set of one or other of those rivals – such as *being a plumber*. But “possibility of presence” is ambiguous: it can mean the possibility of the presence of a property which Socrates *does* have, or it can mean the possibility of the presence of one he *doesn't* have. The latter is “mere” possibility, the former possibility-in-virtue-of-actuality. So, where *a* is contingently F, within the contingency here we find the possibility of the presence of the property actually exemplified, F, the possibility of its absence and the possibility of the presence of one of F's rivals. The last two possibilities are forms of “mere” possibility” – *a* does *not* lack F, so we must say it *merely* possibly lacks F, and it does *not* have any of F's rivals, so it merely possibly has each of those. Suppose G is a rival of F's. Then we might say that the (mere) possibility of *a* lacking F and the (mere) possibility of it having G really just amount to the *one* possibility. For *a* cannot simply do without a property to play the role played by F (the property it contingently exemplifies). To use the possible worlds imagery, in

²⁸⁷ Properties like this are, of course, not simple (atomic) properties. I use these as examples because the point I wish to make is more readily grasped when put in such everyday terms.

any world in which it lacks the property, F, which it actually has, it will have some *other* property, some rival of F's. So, within contingency we find possibility in virtue of actuality and a complex (or perhaps, "two-sided") *mere* possibility. If it is (merely) possible for *a* to be G, then *a* has some property F, such that G and F are rivals – they play the same role in the particulars exemplifying them.

Contingency has emerged as quite a complex metaphysical phenomenon. Possibility lies at its very heart. But the theory of property rivalry presented is not intended as an *analysis* of possibility. Possibility will, on my account, remain metaphysically primitive. Let's try to get clear on how everything links up here and on exactly what we are taking as primitive.

§3.7.2 Rivalry, Roles and Modality

If F and G are rivals, they play the same role within particulars exemplifying them. So, if *a* is contingently F and *b* is contingently G, then F plays the same role in *a* as G does in *b*, and vice-versa. Property rivalry is to be understood in terms of identity of roles. F and G are rivals insofar as they play the same role in particulars. But they play the same role only in the sense that it is possible for any particular exemplifying the one to exemplify the other *instead*. In the example, *a* is contingently F and G is a rival of F's. So the idea is that F and G play the same role in virtue of the fact that *a* could exemplify G instead of F (the property it does exemplify). Generally, the members of a set of properties are rivals because they play the same role in particulars exemplifying them. Of course, not all sets of properties are sets of *rival* properties. For example, the set {*being a philosopher*, *being 5kg*} is not one in which the members are rivals, for these properties play different roles in particulars. But where a set *S* of properties is a set of rivals, this will be because the members of *S* all play the same role in particulars exemplifying them.

$$\mathbf{PR:} \forall \phi \forall \phi' [((\phi \in S \wedge \phi' \in S \wedge \phi \neq \phi') \rightarrow RIV(\phi, \phi')) \leftrightarrow$$

$$\forall x \forall y ((ER_{\text{cont}}\langle x, \phi \rangle \wedge R^1\langle \phi, x \rangle) \wedge (ER_{\text{cont}}\langle y, \phi' \rangle \wedge R^2\langle \phi', y \rangle) \rightarrow R^1=R^2)]$$

In **PR** (“Property Rivalry”) we define S as a set of rival properties. It states that the members of set S are rival properties iff for any particular x , if x exemplifies some member of S , ϕ , such that ϕ plays role R^1 within x , and any other particular y exemplifies any other member of S , ϕ' , and ϕ' plays role R^2 within y , then roles R^1 and R^2 are identical. Which is just to say that the members of S are rivals iff all the members of S play the same role in the particulars which exemplify them. But they will only share a role if, for any particular x , if x exemplifies some member of S , then it is possible for x to exemplify any *other* member of S in its place. That is, where it is possible for any member of S to replace any other in that role in any given particular. Supposing that all the members of S play role R in the particulars exemplifying them, we may formally state the connection between property rivalry/role identity and possibility as follows:

$$\mathbf{RivPoss:} \forall \phi \forall x ((\phi \in S \wedge R\langle \phi, x \rangle) \rightarrow (\forall \phi' (\phi' \in S \wedge \phi' \neq \phi) \rightarrow \Diamond R\langle \phi', x \rangle))$$

So, if x exemplifies any member ϕ of S such that ϕ plays role R in x , then it is possible for x to exemplify any other member ϕ' of S such that ϕ' plays role R in x . More simply, it is possible for x to exemplify some other member of S instead of ϕ . Were x to cease being ϕ , it would (in some sense of the word) “commence” exemplifying some other member of S , and that latter property would have *replaced* the former one. Clearly, a particular will not be able to simultaneously exemplify more than one member of any range of genuine property rivals. If a particular exemplifies one from that range, then the role the members of that range play is filled by that property, and two properties cannot simultaneously play the one role within a particular. That should, I believe, be taken as an axiom in the theory of property rivalry.²⁸⁸

²⁸⁸ For example, “Nothing can be simultaneously red and green all over”. *Being red* is a property which may play the colour role for the total surface of some object x . *Being green* can play the same role in x . But the two properties cannot simultaneously play that role in x .

§3.7.3 Logical Revisions

We must briefly digress here to consider some logical issues. Now, in one sense, the possibility operator (\diamond) occurs in the usual *de re* manner in **RivPoss**, in that it comes within the scope of the quantifiers binding our property- and particular-variables, “ ϕ ” and “ x ”. But in another sense, we depart from standard practice. Because the operator comes before a formula in which the members of an ordered pair are said to stand in an asymmetrical relation, R (“ $__$ plays the R -role within $__$ ”), we might expect to read “ $\diamond R\langle\phi', x\rangle$ ” as “It is possible for ϕ' to play the R -role within x ”. But the possibility which we are trying to represent in **RivPoss** is one for particulars, not properties. It will be associated with values of x , not values of ϕ' . So, although we should read formulae of the form “ $R\langle v, v^*\rangle$ ” (where “ v ” takes properties as values and “ v^* ” takes particulars as values) in the usual way, that is, as stating that v plays the R -role within v^* , we must apply a different reading where such formulae are governed by a possibility operator. Formulae of the form “ $\diamond R\langle v, v^*\rangle$ ” should be read: “It is possible for v^* to exemplify v such that v plays the R -role within v^* ”.

If we step back a little, it seems that if what has been said so far is true, then a number of revisions to our standard logical practice might need to be made. At the most general level, acceptance of a relational view of exemplification, such as that recommended in Chapter One, may occasion a reassessment of the standard representation of exemplification claims. “ a is F ” is usually rendered “ Fa ”, but if exemplification really *is* a relation between a and the property *being* F , then shouldn't our logic reflect this, or at least reflect it more explicitly? I have been using the “ $ER_{\text{cont}}\langle x, \phi\rangle$ ” form as a substitute for the “ ϕx ” form but to adopt this (or something like it) as the standard would be to substantially revise familiar quantification theory. Of course, there would also be the major question whether *all* logic now becomes *modal* logic. If, as I claim, contingent exemplification involves possibility, and so has a modal dimension, then how could we regard a logic employing the “ $ER_{\text{cont}}\dots$ ” form as a *non-modal* logic? On the usual understanding, (quantified) modal logic has as its subject matter the interaction of

the modal terms with quantifiers, predicates and singular terms. And in this it is seen as a distinct field of study from the logic in which we omit consideration of modality and simply investigate quantification and predication on their own. Modal logic is regarded as an *extension* of “classical” logic. But how can this be so if a central element of what is studied within classical, supposedly non-modal, quantified logic – viz., predication – represents a metaphysical phenomenon – viz., exemplification – which is at its core modal? Now, it is important to note that I have nowhere denied that we may (and do) make non-modal *claims* – claims like “Socrates is wise” and “All prime numbers are numbers”.²⁸⁹ So, perhaps there *is* room for logical investigation of the kind of reasoning we engage in which features only non-modal claims. Such a question, however, calls for far greater logical expertise than mine. Whatever about what is currently taken to be non-modal logic, it seems clear to me that there will be need for revision of the way we represent modalities logically. In the popular systems of modal logic we find modal and non-modal formulae, such as “ Fa ” and “ $\Diamond Fa$ ”, and the former are (generally) intended to represent the claim that a is contingently F . But, again, according to the theory of modal ubiquity defended in Chapter Two, contingent exemplification involves possibility. Would it not then be incorrect to construe “ $\Diamond Fa$ ” as anything other than the representation of *an aspect* of what is represented in some other formula, either “ Fa ” or “ ϕa ” (where ϕ is one of F ’s rival properties)? If it is possible for a to be F , then we either have (i) the possibility of a exemplifying the property it does (namely, F), or (ii) the possibility of it exemplifying one of F ’s rivals, or (iii) the possibility of it exemplifying F where it currently exemplifies one of F ’s rivals. And these possibilities are, on my account, features of cases of contingent exemplification. But such connections between possibilities and contingent exemplifications are not standardly assumed within modal logic. As representational instruments, the box and diamond seem to me to be simply too blunt to capture the nuances of the modal landscape.²⁹⁰ If my account is correct, then one is not representing the same kind of claim in “ $\Diamond Fa$ ” as one is in “ $\Box Fa$ ”.

²⁸⁹ I have said that there may be pragmatic considerations lying behind the making of such claims; we are simply not always *interested* in what modal dimensions there may be to the aspects of reality we are *striving* to represent.

²⁹⁰ David Lewis (1986), pp.12-13: ‘If this language of boxes and diamonds proves to be a clumsy instrument for talking about matters of essence and potentiality, let it go hang’.

Necessity is one of the modes, along with contingency, in which particulars participate in the exemplification relation. But possibility is not itself a mode in which something may *have* a property. It is, rather, an *aspect* of a particular's contingent exemplification of a property. (Correspondingly, impossibility is an aspect of a particular's necessary exemplification of a property.) And in the preceding few paragraphs I have attempted to illustrate the sense in which the possibility-aspects of a particular's contingent exemplification of a property are metaphysically primitive. The point here, however, is just that our logic would need to reflect the difference between necessity and possibility: one is a mode in which particulars exemplify, the other an aspect of a mode in which particulars exemplify. In using the form " $ER_{nec}...$ " I have, tacitly, suggested that it is perhaps the box (\square) which should be made redundant. We can use that indexed exemplification relation predicate to deal with cases of necessary exemplification, and so would have no need for the box operator. And we might then use the diamond (\diamond) as I did above in **RivPoss**, that is, to represent possibility-aspects of cases of contingent exemplification. But making all of this precise would, of course, require an enormous amount of logical work, not to mention ingenuity. My concern in this dissertation is metaphysics, not logic, so I shall leave the matter there. The way I have used the diamond as a possibility operator in **RivPoss** ought to be taken as merely suggestive of one kind of revision we might make to our modal logical practice.

§3.7.4 Modality and Rivalry Again

Let's return now to the metaphysical matters. Property rivalry is based upon identity of roles across a range of properties. And that in turn is based upon the possibilities which exist for particulars. A set of properties sharing some role is determined by the possibilities there are for the particulars exemplifying those properties. Imagine the simple case where a contingently exemplifies F and b contingently exemplifies G . We will declare F and G rivals only if they share the same role R . But they will only share role R if it is possible for a to have G replace F , and possible for b to have F replace G . Strictly speaking, the truthmaker for the

identity claim, “F plays the same role as G”, is the complex state of affairs, *a contingently exemplifying F and b contingently exemplifying G*. That complex state of affairs makes the identity claim true in virtue of the possibility-aspects of each of the conjuncts there: in the case of the first conjunct, the possibility for *a* to lack F and have G instead, and in the case of the second conjunct, the possibility for *b* to lack G and have F instead. The possibilities we find *within* the contingencies are what really ground that identity.²⁹¹ The sequence looks like this. The first thing is to establish what possibilities there are. In the example, what we have are the two possibilities: its being possible for *a* to have G instead of F, and possible for *b* to have F instead of G. But it is only *because* these possibilities exist that we would declare F and G to have the same role (do the same job) within whatever particulars exemplify them. And we classify them as rivals on the basis of the identity of their roles. To concretise things a little, consider the example used earlier concerning Socrates and the properties *being a philosopher* and *being a plumber*. The basis upon which we judge these properties to be in competition with each other, to be rivals, is the existence of the possibility for Socrates of being a plumber instead of a philosopher. We *first* uncover the possibilities, and then use the modal data to determine the rivalries holding between properties. But the possibilities themselves are, as I have said, primitive. They are a primitive feature of states of affairs in which universals are contingently exemplified. We certainly cannot get to the heart of possibility *via* the theory of property rivalry, for rivalries are grounded in possibilities.

It is now open to us to deal with necessity in the following way. If *a* necessarily exemplifies F, then there is no property ϕ such that ϕ is a rival of F’s for the role played by F within *a*. For it to be possible for *a* to have ϕ within its property-set, ϕ would need to be capable of playing the role which is played by F. ϕ would need to be able to replace F in *a* without that replacement “process” having any negative

²⁹¹ Of course, we could have a complex state of affairs *a’s being contingently H and b’s being contingently K* and the properties H and K might *not* share a role. That is the case in the state of affairs *Bob’s being 2.5m tall and Jill’s being brown-eyed*. The property *being 2.5m tall* does not perform the same role in Bob as the property *being brown-eyed* performs within Jill. The complex contingency state of affairs only truthmakes for the role-identity claim where the relevant possibility aspects are present within that complex state of affairs.

impact upon a 's existence. That is, ϕ 's being present in a should not *threaten* the existential stability of a . And if a must be F , this threat would be present, for any given property ϕ distinct from F . Where Socrates must be (say) a man, *being a man* plays a certain role within him. But Socrates could not have that role played by another property, for example, *being a number*. The loss of *being a man* from Socrates' property-set would be *destructive* of Socrates, and the possibility of the presence of *being a number* in his property-set engenders the absence (through loss) of *being a man* from that property-set. Therefore, no property could rival *being a man* for the role which that property plays within Socrates.

But although we may so define *de re* necessity using the notion of property rivalry, this is not a reduction of the modal to the non-modal, for property rivalry is grounded in possibility, and possibility is a primitive metaphysical phenomenon. We never reach the (mythical) non-modal bedrock.

It is because possibility lies, as I say, at the heart of contingency that I construe contingency itself as a *mode* of exemplification. I take it to be a mode in which particulars can exemplify properties, just as much as necessity is. Property *possession* means either contingently possessing or necessarily possessing. A particular does not *possess* a property ϕ if they (merely) possibly exemplify ϕ or if they *impossibly* exemplify ϕ . Indeed, the notion of *a possessing* ϕ where it *impossibly* or *merely possibly* exemplifies it is very obviously incoherent. If it is impossible for a to be G , then a possesses some other property, F , which it *necessarily* exemplifies, and F plays a role in a similar to (or perhaps the same as) the role played by G in some other particular b . Thus, Socrates cannot be a number. But 2 can, and indeed must be. Socrates must be a man, and *being a man* plays a similarly fundamental role in Socrates as *being a number* plays in 2. So, Socrates cannot be a number in just the same sense as 2 cannot be a man. Impossibility is not a mode of exemplification, rather it is an *aspect* of exemplification as that occurs necessarily. Impossibilities are aspects of states of affairs in which things necessarily exemplify properties. Just as we may regard possibility (in its various forms) as an aspect of states of affairs in which

something *contingently* exemplifies a property. So, there is a nice symmetry to the account – possibilities go with contingencies and impossibilities with necessities. Here, then, is a summary of my account of modal claims:

Nec: *a* is necessarily F iff there are no rivals to F for the role it plays within *a*.

Cont: *a* is contingently H iff there is some property G which is a rival of H for the role it plays within *a*.

Imposs: *a* is impossibly K iff there is some property F such that *a* is necessarily F and K plays the same [or a similar] role within some particular *b* as F does in *a*.

And our definition of inter-property rivalry is:

RIV: property ϕ is a rival of property φ iff there is some particular *a* such that it is possible for *a* to have ϕ play role R within it and it is possible for *a* to have φ play role R within it.

When it comes to possibility, however, we can offer no analysis, for that is primitive. We could, however, offer the following as an attempt to illuminate possibility somewhat:

Poss: *a* is (merely) possibly G iff there is some property H such that *a* is contingently H and G is a rival of H for the role H plays within *a*.

If this helps us in our thinking about possibility, good and well, but it must be borne in mind that we cannot understand property rivalry or contingency without reference to possibility. Thus, what we find in **Poss** is not a genuine analysis of possibility, nor is it intended to be. Nevertheless, it is sometimes helpful to think about what is basic in terms of what is not, and that is the intention behind **Poss**.

To reiterate what was said earlier, modality is primitive for the following simple reason. If a exemplifies F in some mode, we have a modal state of affairs – call it “ S_m ”. And if modality is *not* a primitive feature of reality, there will need to be some *non*-modal state of affairs, S , such that S_m is reducible to S . But what are we to say of the exemplification in S ? If the particular in S (let’s assume it is a first-order state of affairs) exemplifies the property in S necessarily, then S is clearly itself a modal state of affairs. If it exemplifies it contingently, then there are possibility-aspects to S , and so, again, S would have to be considered a modal state of affairs. And there are no other forms for S to take. A state of affairs involves exemplification, and exemplification is either engaged in necessarily or contingently. If one believes that every state of affairs involves either necessity or contingency, and contingency is taken to be a mode of exemplification, then one must accept the irreducibility of modal states of affairs. Again, the simple reasoning is that if there are no non-modal states of affairs, then there are none to which modal states of affairs could be reduced.

And that is the Refined Copula-Modifier view. It locates modal status with the exemplifier’s participation in the exemplification relation.²⁹² The view agrees well,

²⁹² Bernard Linsky (1994), pp.194-195, considers the idea that ‘the truthmakers for modal sentences...are primitive features of necessity and possibility so that a ’s being necessarily F is just the obtaining of a relation between a and F , $N(a, F)$. Consider, however, what happens when the modality is iterated. Is there a new relation between N , a and F , say $N(a, F, N)$? Necessity seems to be simultaneously a two and three place relation.’ First of all, this is not the view Linsky ends up defending. Second, leave aside the question of the details of the rather opaque quasi-modal-properties outlined here. The point of interest is the idea that a *de re* modality can be *iterated*. I can see no basis for such an idea. *Of course*, we say things like “He *must* be necessarily (possibly) F ” or “She *might* be necessarily (possibly) G ”, but, usually at least, such claims involve a *de re* modality preceded by a *de dicto* modality of the epistemic or logical sort. They seem to be nothing more than informal ways of making *de dicto* modal claims where the truth of *de re* modal claims is said to be necessary or possible, in these epistemic or logical senses. That is, they are *de dicto* modal claims in which *de re* modal claims fall within the scope of the *de dicto* modal operator “It is necessarily (possibly) true that.....”. Such claims, therefore, would not involve the iteration of *de re* modality. Indeed what could we even say about the idea of a being possibly necessarily F , or necessarily necessarily F , etc., where the modality is said to be uniformly *de re*? I certainly cannot see how we would account for that on the RCM theory adopted here, nor on McGinn’s CM theory; indeed, this was the basis of an objection I made to the modal-properties account (“what are we to make of properties such as *being-possibly-contingently-F*”, etc.) – the objection being that insofar as the modal-properties account seems to *need* such properties, involving apparently iterated *de re* modality, then this detracts from its plausibility or appeal. But I don’t think that being unable to account for iterated *de re* modality is a mark against RCM and CM, for I don’t think we have any reason to believe that such iteration of modality *goes on in reality*.

I think, with our modal intuitions. It gives us a natural way to read claims of the form “ x must be ϕ ” – we say that this means that x exemplifies ϕ in a particularly strong manner, reflective of its dependence upon ϕ . Its being necessary for Socrates to be a man involves Socrates being “deeply committed” to his engagement in the activity of possessing the property *being a man*. The account tells us that if Socrates might have been some way he is not, then there is some property which could replace one that he in fact has. It also sits well with the intuition that properties *qua* universals are modally insensitive. Socrates can commit to his engagement in the activity of exemplifying *being a man* all he likes, but that property would not be effected in itself were he to lose his grip on it. Socrates may cease to exist but the property would go on, as it were, oblivious. The same applies to those properties he contingently exemplifies – he may cease to exemplify the property *being a philosopher* without altering or destroying it (one of his followers, Plato, managed to exemplify that very property after Socrates was gone). Let’s look now at how RCM weighs up against the other accounts considered.

§3.7.5 Comparing Theories

Firstly, the RCM approach is clearly preferable to the idea, considered briefly in §3.2, that it is particulars themselves which bear modal status. We saw how that would mean particulars bearing it with respect to their existence: a ’s being necessarily F would mean that a is F and exists necessarily. But RCM avoids the problems afflicting that view. RCM is a *co-operative* account of the bearing of modal status. Even though it centres on the particular, it doesn’t make the particular carry the burden on its own. Modal status, RCM says, is to be found within a particular’s exemplification of a universal. And, quite obviously, that involves both the exemplification relation and the universal. Thus, it is *associated* with all the constituents of a state of affairs. The linguistic motivation for the modal-particulars view could just as easily be a motivation for the RCM account. That modal-particulars idea arose with the interpretation of “*de re*” as meaning “of the thing” (of the particular). But on RCM, *de re* modality is very much *of the*

particular. Modal status attaches to the particular's participation in the exemplification relation – particulars exemplify in modes. So, it is certainly true to say that according to RCM, *de re* modality is modality pertaining to the particular. The difference, of course, is that with RCM we avoid the very serious problems facing the modal-particulars view. Not the least of those is its fundamental lack of plausibility, something which also afflicts the modal states of affairs view (discussed in §3.3). On RCM, we can readily understand the sense in which states of affairs are *modal*. In virtue of the fact that modal status attaches to the particular's participation in the exemplification relation, that status becomes associated with *all* aspects of states of affairs. States of affairs are modal in the sense that modality is spread throughout them. And this is a far more plausible picture of how modality is associated with states of affairs than the idea of them *existing* necessarily or contingently or possibly.

Regarding Wiggins' modal-properties (predicate-modifier) view, we saw how that ran counter to the intuition that mere possibility centrally involves a particular *lacking* a property, rather than positively exemplifying one. Locating mere possibility *within* contingency states of affairs, as RCM does, is consistent with this intuition. Mere possibility is the flip-side of the possibility of absence of some property contingently possessed. It doesn't involve a doubling-up of positive exemplification, as it does on the modal-properties account, where apart from the exemplification of the property actually possessed we also have the exemplification of a possibility-property.

One admirable thing, however, about Wiggins' modal-properties account was its ability to maintain certain modal asymmetries. The claim that the set α {Eiffel Tower, Crystal Palace} must contain the Eiffel Tower is true, but the claim that the Eiffel Tower must be a member of α is false. Wiggins had enough resources within his theory to reflect this, but so does RCM. Let "*e*" stand for the Eiffel Tower, " \in " for the relation *__is a member of__* and " \in_{con} " for the converse of that: *__has as a member__*.

(1) $ER_{nec} \langle \langle \alpha, e \rangle, \in_{con} \rangle$

(2) $ER_{nec} \langle \langle e, \alpha \rangle, \in \rangle$

(1) says that the α necessarily bears the relation *__has as a member__* to e . That is, set α must have the Eiffel Tower as a member. And that is true. (2) says that e necessarily bears the relation *__is a member of__* to α , that the Eiffel Tower must be a member of set α , and that claim is false. The point is simply that in the RCM theory we can express the difference. So, Wiggins' theory has no advantage over RCM in that respect.

Although it does well in being capable of capturing such asymmetries, Wiggins' modal-properties theory has plenty of problems. Its explanation of mere possibility would lead to greatly (implausibly) inflated property-sets for particulars, and so it would engender an elaborate (and perhaps, in places, inscrutable) metaphysics. RCM has no such consequence. Furthermore, it seems to have more linguistic support than the modal-properties view – common locutions of the forms “ a must be F ” and “ a might be G ” appear to be more naturally read as RCM suggests than as the modal-properties account does. Then there was McGinn's objection that the modal-properties theory cannot account for intellectual episodes in which we acknowledge something's having some property and proceed to wonder about the modality involved – whether it has it necessarily or contingently. His point was that we don't seem to wonder which *property* it has, whether it has *being-necessarily- F* or *being-contingently- F* . McGinn's CM account and the RCM account both seem to do equally well in meeting this intuition, given the emphasis in those accounts on the exemplification relation, but RCM is ahead of CM in other respects.

For one thing, we saw that there was little intuitive evidence for the kind of plurality of exemplification relations – one corresponding to each mode – postulated by CM. This is not a problem for RCM, as it employs a univocal conception of exemplification; what varies is how that relation is participated in.

And in corresponding better to our intuitions about exemplification than CM does, RCM avoids the inflation of our ontology which would follow from CM's commitment to a plurality of exemplification relations. McGinn also had a serious problem when it came to mere possibility. That must, for him, either be a mode of exemplification ("possibly-exemplifying"), which would be an extremely difficult notion to explain, or not, in which case his account suffers from a worrying asymmetry. If mere possibility does not characterise an exemplification relation, then his general claim – that modal terms modify the copula – is false, and so he must make an exception for mere possibility and deal with it some other way. His solution was that *a* is merely possibly F iff *a* contingently exemplifies not-F. But this does nothing to rectify the asymmetry, and it also means that CM is committed to a controversial metaphysics of negative properties. And the solution means that mere possibility involves a doubling-up on positive exemplification – the particular must exemplify whichever properties it does in fact exemplify but must also exemplify the negative properties. Where *a* is merely possibly F, *a* must exemplify whichever properties it does and also the negative property not-F. Intuitively, though, mere possibility does not involve this kind of increase in exemplification activity. Using the theory of property rivalry, RCM avoids such an increase. *a*'s being merely possibly F is an *aspect* of *a*'s contingently exemplifying some property it does.

I make the point above that McGinn's general claim, that modal terms modify the copula, will be false unless he countenances a third form of exemplification: possibly-exemplifying. But it might be objected that *my* general claim, that modal status attaches to the particular's participation in the exemplification relation, is similarly falsified unless I admit that particulars may *possibly* participate in the exemplification relation. I have said, however, that the exemplification relation is only present where universals are *possessed*. That is, there are no states of affairs in which particulars do nothing more than merely possibly exemplify universals. And this is just the commonsense reaction against the idea of particulars exemplifying universals without possessing them – having them without having them, as it were. But my theory is not that where *a* is contingently F we have *a* contingently exemplifying F and *a* possibly exemplifying some other properties.

Rather, it is that contingent exemplification is a – *complex* – mode of participating in the exemplification relation such that the particular *possesses* the property in question but does so in what might be characterised as a “weak” manner. It has the property and yet does not commit itself fully to retaining it. The particular maintains associations with other properties, it “reaches beyond” the property it has to other properties. *a*’s being (merely) possibly *G* is *part of* how *a* exemplifies *F*, the property it does have. Possibilities are aspects of *a*’s participation in the exemplification relation with the properties it contingently exemplifies.²⁹³ In a sense then, we could say that contingency and necessity are the primary modalities, and possibility and impossibility the secondary ones. The former have the latter as aspects. Necessarily exemplifying a property means having it such that association with other properties is not maintained – the particular does not reach beyond a property it must have. Our concept of impossibility answers to this eschewal of other properties in favour of the one it must have. And our concept of possibility tracks the willingness, if you will, of the particular to maintain links with properties it does not possess, at the expense of the one it has. So, the *precise* statement of my position is: modal status either characterises the particular’s participation in the exemplification relation or an aspect of that participation. Necessity and contingency do the first, possibility and impossibility do the second. Certainly, no description of the core idea here – that of particulars participating in the exemplification relation in different modes – will eliminate all obscurity. There will always be a certain amount of inscrutability to the concept of particulars relating to universals in different manners. I accept that and, on the basis of my arguments for the Principle of Modal Ubiquity and my arguments against the various other options in the field (the modal-properties account, CM theory, etc.), I think that anyone who is sympathetic to the kind of general metaphysics I espouse has very little choice but to also accept that residual inscrutability. By way of *very* rough analogy, think of how a person might be said to arrive home in a certain manner or mood. That kind of event is *extremely* complicated; to understand it we would need to consider the person’s reactions to a host of other events, their possible reactions to other events (how they are disposed to react), and how all of

²⁹³ States of affairs are, on this picture, very far from ‘proposition-shaped entities’ (Barry Smith & Jonathan Simon, “Truthmakers and explanations”, (forthcoming), p.2).

those reactions and possible reactions differ from those the person would have were they to arrive home in some other mood. Of course, participating in the exemplification relation is not an activity in the same sense as arriving is an activity. Those activities occupy different metaphysical strata. And yet there is a comparable degree of complexity in both cases. Describing how particulars stand in the exemplification relation to properties in different manners (modes) is no less difficult, indeed it is perhaps *more* difficult, than describing what it is we do when we undertake everyday activities in various moods. So, in saying that modal status *attaches* to particulars' participation in the exemplification relation, I am merely giving a *précis* of a very complicated story. Possibility *does* attach to particulars' participation in the exemplification relation in the sense that it partially constitutes the manner of the participation.

One man who does go into great detail in his investigation of states of affairs, exemplification and related metaphysical matters is Gustav Bergmann. I have mentioned him a couple of times above, but only in the most cursory way – merely to note that he too maintains a relational view of exemplification. Now, there certainly *seem* to be affinities between Bergmann's theory and my own, but it would be impossible for me to trace those here. Bergmann's work is (in)famously difficult and relating it to what I have argued for above would require a long and extremely detailed study. Nevertheless, I *regret* that I cannot undertake such a study here, for it would, I think, be an extremely profitable exercise. With issues as abstract and stubborn as the nature of exemplification and states of affairs, and how modality might relate to those, one *must* begin with a rather vague and oversimplified picture, and then gradually make that more precise – precise enough that possible concerns about the theory are answered – whilst trying to avoid incoherence and inconsistency at each step. But if one has *faith* in one's original outlook, rather simplistic and imprecise though that may be, then embarking upon the precisification (and thereby, defence) of one's position is something less than a chore. And that is just what I would need to do before I could begin to relate mine and Bergmann's views on exemplification and proximate topics. But I *do* have faith in my rather roughly-hewn view of how exemplification, states of affairs and modality mix together. And so I *would* be

grateful for the opportunity to set out upon an extended study of how that view is to work in detail. Unfortunately, that cannot happen here.

I shall, however, say a few words about Richard Aquila's (1977) discussion of Bergmann's views on facts and modality.²⁹⁴ For in that discussion Aquila considers something very close to the RCM position for which I have argued – and seems to present some problems for such an account. He is interested in these matters only insofar as they are relevant to the topic of intentionality. They relate as follows.

Given the thought that *a* is *F*, there must, Bergmann argues, be a relation between that mental act and the fact *a*'s *being F*. But if *a* is not *F*, then to what is the – mistaken – thought that *a* is *F* related? Bergmann says it is related to a possible but non-actual state of affairs – that in which *a* is *F*. So, for every belief, there is a fact to which it is related: true beliefs are related to actual facts and false beliefs to possible facts. Aquila's questions are: what *are* possible facts, and how do they differ from actual facts? His conclusion is that Bergmann cannot forge a plausible theory of facts which would allow him to (i) distinguish actual and possible facts and (ii) retain his relational account of intentionality. I shall only go as deep into Aquila's discussion as is strictly necessary here, for issues of intentionality are, obviously, quite distant from the concerns of this dissertation.

For Bergmann, the fact that *a* is *F* has two constituents – *a* and *F* – and they are connected by the 'nexus of exemplification', which is somewhat similar to my exemplification relation.²⁹⁵ Whether *a*'s *being F* is an actual or a possible fact, Bergmann thinks, the nexus is present. So, as Aquila says, Bergmann cannot distinguish actual from possible facts in terms of the presence or absence of the nexus. Aquila thinks he has two options when it comes to making that distinction:

²⁹⁴ His argument there is taken, almost word-for-word, from his earlier "Intentionality and Possible Facts", *Nous*, 5:4, (1971), pp.411-417.

²⁹⁵ Bergmann (1967), p.26.

1. He can say that if *a's being F* is a possible fact, then *a* is connected with *F* by exemplification in the mode of possibility (exemplification-_P), and if it is an actual fact, *a* is connected with *F* in the mode of actuality (exemplification-_A).
2. He can say that if *a's being F* is a possible fact, then the mode of possibility is a feature of that fact as a whole, and not just a mode of what connects *a* and *F*; and if it is an actual fact, actuality is a mode of the fact as a whole.²⁹⁶

Obviously, option 1 is where things come close to my RCM (and McGinn's CM) theory, so it is Aquila's discussion of this first option that is of the most interest in the present context. But apart from that, I don't think we need go any further than his discussion of option 1, for his argument is that Bergmann cannot take that option, but I think there is a way for Bergmann to stop that argument in its tracks.

Now, Aquila thinks that if Bergmann takes that first option, he runs into trouble very quickly. When I mistakenly judge that *a* is *F* (that is, when *a* is not *F*), it cannot be a possible fact, *a's exemplifying-P F*, that I intend, for the constituents of that fact are ordered differently than they are in my judgement. What I intend is the actual fact *a's exemplifying-A F*, not *a* being connected by this other mode, exemplification-_P. So, possible facts cannot be the objects of intention in cases of mistaken judgement. But Aquila thinks a counter-objection might be made here. The possible fact is *not* ordered differently; rather, the ontological status of the nexus is in a different mode in that fact than it is in the actual fact *a's exemplifying-A F*. These are not *two* different exemplification ties, but rather the one tie in different modes of existence. Aquila thinks that for this objection to work, the exemplification nexus must be an entity in its own right, additional to *a* and *F* in the fact *a's being F*. This is, he thinks, the only way to make sense of the idea of the nexus having different modes of existence. If Bergmann takes this route, as he does, then, Aquila believes, he must say either that it is part of the nature of the exemplification nexus that it be connected with *a* and *F* themselves,

²⁹⁶ Aquila (1977), p.74.

or it is *not* part of its nature to be connected to those $[p \vee \neg p]$. If he says the latter, then the nexus will be “indifferent” to a and F , and we will need something further to pull all of these disparate elements together. And going down that road leads to the Bradleyan regress problem. Aquila seems to think is a complete dead-end for relational theories of exemplification. (And here is a point on which we might want to challenge Aquila, by invoking the kind of arguments given earlier (in §1.4.7) or whichever others we find strongest. But let’s assume we don’t make such a challenge – assume we agree that the Bradleyan objection is decisive against relational theories.) Bergmann appears to think as much, for his response to the problem posed by Aquila is to say that the nexus is of a different ontological category to a and F . It is “radically dependent” upon entities from the categories to which a and F belong, but the latter sorts of entities are not dependent on other entities in any corresponding manner.²⁹⁷ Entities of the categories to which a and F belong need something further to tie them to other entities, but entities from the category to which the nexus belongs do not. The nexus can connect a and F – and so be itself tied *to* a and F – without any further entity being needed between the nexus and a and the nexus and F . Thus, the regress is halted. But, Aquila thinks, the only sense we can make of this dependence is to say that it is within the nature of the nexus to be connected with a and F . And now we have a problem, for the fact a 's being F seems to be dependent upon a and F in just the same way as the nexus is. With that, we lose the *distinction* between facts and nexus. If the nexus is an entity in its own right, we end up being unable to tell the nexus from the fact, and so we have reached an incoherent position: the nexus is distinct from a , F and the fact a 's being F , but yet cannot be distinguished from that fact. Some other minor details aside, Aquila concludes that Bergmann cannot take option 1. He cannot say that in a possible fact we have the nexus existing in the possibility mode and in an actual fact we have the nexus existing in the mode of actuality. He cannot say that and yet maintain that the nexus is distinct from the fact – which he *must* do if he is to locate the modality with the nexus, and thereby distinguish possible from actual facts. And he must do the latter if he is to maintain his theory

²⁹⁷ *Ibid*, p.75.

of intentionality. I think Aquila's argument may be challenged on a couple of fronts.

First, why can Bergmann not simply say that although the nexus depends upon *a* and *F* (in some appropriate ontological sense of "depends"), and the fact *a's being F* also depends upon *a* and *F*, the fact *also* depends upon the nexus? That is, why not have it that the nexus depends upon *a* and *F* and the fact depends upon *a*, *F* and the nexus? The nexus does not depend (in the relevant sense) upon the *fact*, although the fact depends upon the nexus. This would come close to my view. For me, the exemplification relation is only instantiated when it connects exemplifiers and universals, and so *depends* upon those. And the state of affairs *a's being F* depends upon *a* and *F* in that it could not exist if *a* and/or *F* did not exist, but that state of affairs is just the *presence* of the exemplification relation between *a* and *F*, and so there is a sense in which we can say it "depends" upon the exemplification relation. (It cannot be the presence of it between those and yet exist *without* it.) The exemplification relation is, for me, a universal, albeit a special one. It is *sui generis* in that it is multiply-instantiable (and so is a universal²⁹⁸) but may connect to entities without mediation (and so is a "special" universal). It is, in that last respect, like Bergmann's nexus. But because the exemplification relation is a universal, it can be real without being instantiated where it happens to be instantiated.²⁹⁹ So, if we have the state of affairs *a's being F*, the exemplification relation is present between *a* and *F*. But, assuming *a* is a contingent being, that state of affairs might *not* have existed. And this is the point: the exemplification relation – the very one we find in *a's being F* (there is, after all, only one exemplification relation universal) – might yet have been instantiated in some other states of affairs. In fact, if there are *any* other states of affairs (and, presumably, there will need to be *some* others), the exemplification relation is instantiated – that is, it is real. So, the exemplification relation can not be said to depend for its reality upon some particular state of affairs which happens to obtain.

²⁹⁸ And there is no reason to think it does not also have whatever other features we think are essential to universals – such as grounding similarities. The exemplification relation grounds the similarity of *a's being F* and *b's being G*, in that it is what is common to those states of affairs (assuming $a \neq b$ and $F \neq G$).

²⁹⁹ Indeed, on a Transcendent Realist view, if it is a universal, then it is a *necessary* existent.

But each and every state of affairs will depend upon the exemplification relation. So, *pace* Aquila, there *is* a way to distinguish the exemplification relation (or Bergmann's nexus) from states of affairs (facts).

Aquila's criticism was of the idea that the nexus is an entity in its own right. I replied to that criticism because I too wish to construe what connects exemplifiers and exemplified as an entity in its own right: my exemplification relation is not reducible to the constituents of the state of affairs nor to the state of affairs itself. But I do not come to this view in the same way as Bergmann does. He must take that position because that is the only way of making sense of the idea that the nexus exists in different modes in possible and actual facts.³⁰⁰ I, however, do *not* think that the exemplification relation exists in different modes in possible and actual facts. For one thing, I reject the assumption that there *are* non-modal actual facts. I have argued that possibilities are *aspects* of facts involving contingent exemplification. But, besides that, I do not believe the exemplification relation exists in different modes in *a's being contingently F* and *a's being necessarily G*. Rather, the particular *participates in* the exemplification relation in different modes in those states of affairs. So, it seems to be available to Bergmann to distinguish possible and actual facts by taking option 1 and saying that, rather than the nexus *existing* in different modes in *a's exemplifying_P F* and *a's exemplifying_A F*, what happens is that the particular *a* participates in the nexus in different modes in these two facts. If he did that, then he would not face the problems Aquila finds with the idea of the nexus being an entity in its own right. Or, he could take the route he does take – saying that the nexus exists in different modes in the different facts – and yet employ the kind of response I gave above. Either way, Aquila's challenge to option 1 is blocked.

It seems as if there may well be a good deal in common between my position on exemplification and Bergmann's. Unfortunately, pressures of time and space

³⁰⁰ I regard the exemplification relation as an entity in its own right because I *must* do so, given my account of states of affairs. For me, *a's being F* is just the *presence* of the exemplification relation between *a* and *F*. But *a*, *F* and the exemplification relation can all exist without *a's being F* existing, and so I must distinguish the exemplification relation and the state of affairs.

prevent me from exploring that common ground in any more detail than I have in the rather brief foregoing discussion.

Summary

I wish to recommend the Refined Copula-Modifier theory. It has intuitive appeal and engenders no ontological commitments additional to those with which we began. My answer, therefore, to the locus question is that modal status attaches to the exemplifier's participation in the exemplification relation. In the next chapter we shall see how this account affords us solutions to both the source and function problems of modality. I shall also discuss some consequences of the account for truthmaker theory and modal epistemology, along with offering some thoughts on the nature of essential properties.

Chapter Four: Reflecting On The Theory

§4.0 Introduction

The aim of this chapter is to present and discuss certain consequences of the theory of modality set out over the preceding three chapters. In the first section, I offer a response to the source question, the question which led us to consideration of the locus question. I argue that the Principle of Modal Ubiquity (PMU) affords us a very straightforward, if perhaps deflationary, response to the source question. PMU also features prominently in §4.2, where I offer a direct response to the function question (with which I initially dealt in §1.2). I also consider how the response might be characterised in terms of the taxonomy of response-types proposed by John Divers. The third section concerns the epistemology of modality. The argument will be that PMU gives us reason to reconsider the status of modal epistemology. We must, I argue, revise our conception of the relation of modal to general epistemology, and of the relation of modal epistemology to the epistemologies of other supposedly problematic discourses. In the course of investigating what revisions might be appropriate, various important epistemological issues arise. The conclusion is that PMU, along with certain other considerations, gives us reason to question whether genuine knowledge can ever have a wholly non-modal source.

§4.4 is somewhat different from the first three sections. In Chapter Two, I argued for a substratum (“bare particular”) theory of particulars. The argument was in fact that we are forced to accept substratum theory if we wish to construe properties as universals, as I do. But I did not offer any thoughts at that stage as to the nature of the bare particulars which we must accept. This is, of course, a venerable metaphysical topic and seemingly no less difficult to get to grips with now than it ever was, in spite of all the work that has gone into it. In §4.4, I consider how a theory of essence can help us in our thought about the nature of the substratum. I say that it seems to work the other way also – that consideration of the nature of

bare particulars can enhance our understanding of essence. In §4.4.1, I argue, primarily against Kit Fine, for a modal account of essence. I present a modal essentialism which is, I believe, immune to Fine's criticisms in his "Essence and Modality". The analysis at the centre of my account involves the notion of individuation, and exploration of this leads naturally to the question of the nature of particulars, which is the subject of §4.4.2. I argue there that the concept of bare particulars is intimately bound-up with that of essential properties. Clarification of the former facilitates a better understanding of the latter, and yet the account of particularity presented in §4.4.2 can only be formulated in terms of aspects of the essentialist theory presented in §4.4.1. So, in §4.4, I am developing (at least the outlines of) theories of both essence and particularity, and using each in my efforts to clarify the other.

§4.5 is closer in type to the first three sections of the chapter. Here we hark back to the discussions (in §3.6) of contingency, possibility and property-rivalry. I argue that we may use the theories developed there in building a response to the problem of the truthmakers for negative truths. The account proposed seems to allow us to avoid postulation of both negative states of affairs and negative properties, and I suggest a way in which it might be extended to cover negative existential truths. In the very final section of the dissertation, I make my concluding remarks.

§4.1 A Response To The Source Question

In §1.3 I introduced the source question. I said that it should be taken loosely, that is, simply as the demand for a metaphysics of modality. Rather than assume it is only fully answered by a reductive account of modality, in which case modal anti-realism would be presupposed by one of the basic questions in the philosophy of modality. And such prejudgement is clearly undesirable. Taking it in a sufficiently loose sense, we can now see that the Principle of Modal Ubiquity (PMU) affords us an answer of sorts to the source question. In adopting PMU it became possible to answer as follows: the source of modality is the same as the

source of any fundamental feature of reality. Modality is a primitive feature of the world, every state of affairs essentially involving a modal dimension. And reality, presumably, has other primitive features, other irreducible metaphysical phenomena. If it does, then surely all will share the same “source”. Surely all of these features of reality arise in the same manner. To whatever extent it is meaningful to say that primitive aspects of reality have origins, it must be the case that they all have the *same* origins. For how could one primitive feature come to play whatever role it does within reality (be that constitutive, modificatory, or some other form of role) in one way, and yet another primitive feature take a different route? How, for example, could the universality of universals form part of the ultimate structure of reality in a different manner from that in which modality forms part of that structure? I, for one, cannot begin to imagine a way in which that might happen. The question is, however, not one on which we need dwell for long. Indeed, it is *so* abstract, or even abstruse, that our powers of expression are severely tested in asking or attempting to answer it. (Dare I say it is the kind of question which gives metaphysics a bad name?) My point here is only that if we wish to be sticklers about things, then the source of this primitive feature of reality – if that is even a coherent concept – must be the same as that of any other primitive feature. Now, when the source question is taken as I have been taking it, as merely representing the demand for a metaphysical account of modality, and one subscribes to a principle like PMU, then this kind of answer is not really called for at all. We are better to simply concentrate on the response given to the locus question, for that is where the real metaphysical detail lies. But not everyone will endorse PMU, and so not all answers to the source question will be as unenlightening as the one offered here – it is not, I admit, very informative to say that modality arises in the same way as all other primitive features of reality arise. Nevertheless, this is, in the strictest sense, my answer to the source question. But let us revisit now another of the basic problems in the philosophy of modality, that of the function of modalising.

§4.2 A Response To The Function Question

Again, as we have just seen in connection with the source question, acceptance of the Principle of Modal Ubiquity gives us a straightforward, if perhaps somewhat deflationary, answer to the function question. That was the question what role modalising has in our practical or intellectual lives, why we go in for modal judgement at all. My response is that we go in for *de re* modalising in order to build *comprehensive* representations of states of affairs. In light of my endorsement of PMU, this response is substantive although it may seem at first glance to be less than illuminative.

Divers discusses what he calls the ‘bluntly cognitive response’ to the function question:

A bluntly cognitive response to the question of the function of modal judgment has it that the function of modal judgment is to tell it how it modally is – to get the modal facts right, to state the modal truths. The response is as unhelpful as it is compelling.³⁰¹

It is unhelpful, according to Divers, because for any discourse with “ Φ ” as (one of) its central predicate(s), we may say that Φ -discourse has the illocutionary role of stating the Φ -facts.³⁰² Modal discourse is, or at least should (we think) be, no different in this respect. Therefore, in responding to the function question by saying that we modalise in order to state the modal facts, isn’t one failing to address the real question here as to the *distinctive* utility of modalising? And in light of my acceptance of PMU, isn’t my response of this ‘bluntly cognitive’ kind? If all states of affairs are modal, then in “building representations of states of affairs” won’t we just be building representations of *modal* states of affairs? In other words, won’t we just be stating the modal facts? Strictly speaking, yes, but “stating the modal facts” means something different in this context from the reading given it by Divers. As he understands it, and as it would commonly be understood, stating the modal facts is an activity on a par with stating the

³⁰¹ Divers, “Modal Commitments”, (forthcoming), p.15.

³⁰² Leaving aside here the non-cognitivist type of objection to such a declaration.

mathematical or meteorological or economic facts. But in saying that a state of affairs (fact) is modal we are, according to my proposal, saying no more than that the state of affairs has a feature that it must have. Really, we are just saying that the state of affairs is a normal state of affairs (ignoring here the question how a state of affairs might be *abnormal*). The exemplification relation is only participated in in modes, and states of affairs *just are* exemplifiers participating in the exemplification relation with universals. The function of modal discourse is to pick out the modal aspects of states of affairs, and all states of affairs *have* modal aspects. But nothing comparable may be said about (for example) economic discourse. We use characteristically economic predicates in order to state a particular sort of fact – namely, those involving economic properties and relations. The economic facts are a proper sub-set of the set of all facts; but the modal facts aren't. So, in saying that we employ de re modal discourse in order to state the modal facts what we are really saying is that we use modal discourse in order to pick out a kind of feature to be found in *all* facts. We use modal discourse to build representations³⁰³ of states of affairs *of any kind*, representations in which we reveal more about those states of affairs than we would were we to limit ourselves to the use of singular terms, predicates, the copula, etc.. In using de re modal terms we are representing the modal aspects of states of affairs, and it is essential to all states of affairs that they have such aspects. So, the motivation to modalise is the desire to be thorough in our representations of states of affairs. It is *not* the desire to pick out some particular class of states of affairs.

As a response to the function question this is, I believe, more substantial than the 'bluntly cognitive response' which Divers considers. He takes it that that kind of response constitutes (or may form part of) a strategy for *avoiding* the function question. But certainly in what I have said – that we engage in de re modalising in order to reveal a kind of feature present in all states of affairs – I don't regard myself as attempting to avoid the question. I see this rather as a form of *instrumentalist* response to the function question. We engage in de re modalising in order to enhance our representation of the states of affairs we encounter. If we

³⁰³ Be they mental or propositional or linguistic representations (assuming propositions to be non-linguistic entities).

were happy to ignore the modal aspects of states of affairs, then we would have no reason to employ de re modal language. But, at least in the context of philosophical theorising, we have, I believe, a desire to capture as much detail as possible concerning the subjects of our representations. If that *is* so, then the reason we modalise is that we wish our representations of states of affairs to achieve a certain degree of elaborateness. Using de re modal vocabulary is a way for us to ensure that our representations meet that standard.

§4.3 A New Status For Modal Epistemology?

The Principle of Modal Ubiquity has also, it seems, important consequences for the theory of modal knowledge. In the last section I argued that in using modal language to pick out the modal aspects of states of affairs we are doing something quite different from what we do when we use (say) moral terms in our representation of moral states of affairs. In the one activity, we are striving to represent essential features of states of affairs *qua* states of affairs, in the other, our aim is to *distinguish* moral states of affairs precisely by representing them *as* moral states of affairs. My claim now is that a similar sort of distinction suggests itself when it comes to the epistemology of modality. It seems as if we have reason to distinguish the epistemology of modality from the epistemology of other (so-called) problematic discourses. The basis of the distinction being that investigation of our de re modal knowledge is not comparable to investigation of our knowledge of moral or mental propositions³⁰⁴.

³⁰⁴ Or whatever we take to be the proper objects of knowledge. I shall assume it is propositions and that propositions are, in most cases, constructed with the intention of representing (in a sense I shall leave undefined) states of affairs. Of course, this presupposes that propositions and states of affairs are native to different metaphysical strata, which is not uncontroversial. (For example, King, (1995), "Structured Propositions and Complex Predicates", claims that propositions are facts.) Nevertheless, I think the argument to be made can be easily re-phrased according to one's tastes in these matters.

Modal epistemology is usually (or at least often) taken to be somehow distinguishable from general epistemology.³⁰⁵ When we investigate our epistemic access to modal states of affairs (our knowledge of de re modal propositions³⁰⁶) we are, it is widely thought, investigating our epistemic access to a *particular kind* of state of affairs. Within general epistemology we find various kinds of investigation. Some epistemology is concerned with the necessary and sufficient conditions of knowledge in general, which is where, for example, we get people proposing things such as that knowledge is justified true belief. Another area of investigation has as its focus the sources of knowledge: perception, reason, etc.. Roughly, general epistemology attempts to sort out the various different kinds of sources of knowledge and formulate principles which in various respects govern our thought about those sources. But an epistemology of some supposedly problematic discourse is (often) in large part the study of the source(s) of our knowledge of propositions involving the characteristic terms of that discourse.³⁰⁷ Thus, the epistemology of mathematics is largely concerned with uncovering the source(s) of our knowledge of mathematical propositions – propositions featuring whatever are considered to be the distinctively mathematical concepts (numberhood, sethood, geometricality, etc.). And it is usually thought that the epistemology of modality is like this too. There our main concern is to study the sources of our knowledge of propositions involving the modal concepts. When we ask how it is we *know* that something is necessarily or possibly thus-and-so, we are usually asking after the source of that kind of knowledge. So, the epistemologies of problematic regions (the mathematical, the modal, the moral, etc.) are, in a sense, *applications* of the field of general epistemology in which we investigate the sources of knowledge.

And I agree that we may roughly characterise modal epistemology in these terms. But the point I wish to make is this. Let's say that the source of our modal

³⁰⁵ Van Inwagen (1998, 75): "Modal epistemology is a subject about which little is known...[but]...I know a good deal about the epistemology of non-modal statements". Bob Hale, "Knowledge of Possibility and Necessity", *Proceedings of the Aristotelian Society*, 103:1, (2003), p.2:

"[K]nowledge of necessity and possibility goes beyond knowledge of what is actually the case".

³⁰⁶ That is, propositions involving the modal notions in the de re manner.

³⁰⁷ Or: "...involving the concepts for which the characteristic terms of the discourse play a representational role". How we couch things here depends on our view of propositions, but I won't get into that debate here.

knowledge is S^M . Then part of the source of our knowledge that (say) Obama is necessarily human will be S^M – the modal part (at least) of that proposition is known to us S^M -ly.³⁰⁸ But, given the Principle of Modal Ubiquity (PMU), *all* states of affairs have modal aspects. So, it seems we must say the following: for any proposition p , if p is intended to represent some state of affairs, and p is known by some epistemic agent, a , then S^M will form part of the source of our knowledge of p . If we assume that *every* proposition represents some state of affairs, we can put the matter more simply: if p is known, then S^M will be at least part of the source of our knowledge that p . And the point here is just that the same cannot, it seems, be said in the case of the other problematic regions. There are states of affairs which feature *no* mathematical entities (mathematical objects, properties or relations); and the propositions representing those states of affairs will, presumably, feature no mathematical terms (or concepts). Therefore, if we know some such propositions, the source of that knowledge *need* not be the same as (or partially composed of) the source of our knowledge of propositions which *do* feature mathematical terms. Suppose that mathematical knowledge is *a priori*, and think now of the proposition “Obama is brown-eyed”. It seems fairly safe to say that at least part of the source of our knowledge of this proposition will be experience, not pure reason. But the source of our knowledge of that proposition *will*, given PMU, be at least partially S^M – the (unspecified) source of our *de re* modal knowledge. And the same kind of thing can, apparently, be said with regard to the other putatively problematic regions – morality, the mind, etc.. In each case we will be able to identify examples of knowledge the source of which differs from (or does not involve) that of our knowledge of propositions involving characteristically moral, mental, etc. vocabulary. But if PMU is correct, then we cannot find propositions the source of our knowledge of which wholly differs from that of our modal knowledge. Two issues suggest themselves at this stage.

First, perhaps S^M will turn out to be identical to the source of our knowledge of the propositions of some other problematic discourse. For example, maybe the source of modal knowledge is the same as that of mathematical knowledge. Call that

³⁰⁸ Purely rationally (*a priori*), empirically, etc.. I don’t wish to actually go into what the source of modal knowledge is – this remains a dissertation in the *metaphysics*, not epistemology, of modality.

source “ S^{M^*} ”. In that case, we could make the following observation. Although the source of our knowledge of all propositions will be at least partially S^{M^*} , this will not be in virtue of the fact that S^{M^*} is the source of our *mathematical* knowledge. It will be in virtue of the fact that that is the source of our modal knowledge. (Where the proposition happens to be a mathematical one, we might say that the source of our knowledge of it is S^{M^*} *jointly* in virtue of that being the source of our mathematical *and* modal knowledge.)

Second, what are we to say about our knowledge of propositions in which no modal terms occur? Surely we know a lot of propositions of the form $\langle a \text{ is } F \rangle$ and $\langle a \text{ is } R\text{-related to } b \rangle$, where no mention is made of necessity or contingency. Why then must part of the source of our knowledge of such propositions be S^M ? Well, consider the proposition

BB: $\langle \text{Obama is brown-eyed} \rangle$

If we know this proposition, then, on most accounts of knowledge, it is *true*. That is, **BB** cannot be known unless it is a true proposition. And that appears to mean that in stating **BB** we cannot be taken to be claiming that Obama exemplifies *simpliciter* the property of being brown-eyed. The reason is, in order to truly claim that, there would need to be a certain kind of *truthmaker* for **BB**. And truthmakers are states of affairs (or so I am assuming). So, there would need to be a state of affairs *Obama's being brown-eyed*, and the exemplification here would need to be *simpliciter* if this state of affairs is to truthmake for the claim that Obama exemplifies *simpliciter* the property of being brown-eyed. But, of course, given PMU, there just are no such states of affairs. In every state of affairs the exemplifier will participate in some or other mode in the exemplification relation.

It is not, however, immediately clear what our conclusion ought to be here. Perhaps we should say something along the following lines. We are misled by incomplete *statements* of propositions. The proposition $\langle \text{Obama is brown-eyed} \rangle$ is not in fact what is known; we are misled by the statement “Obama is brown-eyed”, and that what is *really* known is the proposition $\langle \text{Obama is contingently brown-}$

eyed>. *This* is the real object of our knowledge. But then what about cases in which we are unclear as to the mode in which the exemplifier exemplifies? For example, suppose there is some dispute about the Kripkean thesis of the necessity of origin. Suppose that the Kripkeans hold (as they do) that if *a* is the child of *b* and *c*, then *a* is necessarily the child of *b* and *c*, and the anti-Kripkeans deny this, saying instead that one has one's parents merely contingently. (And let's assume that there are substantial arguments given on both sides.) The problem is that it seems possible in such circumstances for someone to say that although they know (e.g.) the proposition that Bertrand is the child of John and Katharine, they do *not* know either the proposition <Bertrand is necessarily the child of John and Katharine> *or* the proposition <Bertrand is contingently the child of John and Katharine>. They cannot claim knowledge of either of these because they don't know whether or not it is true that all children are necessarily descended from their parents. And they don't know this because the philosophers haven't settled the matter – the Kripkeans and anti-Kripkeans are still battling it out. Perhaps a solution here would be to say that what is *really* known is the disjunctive proposition <*either* Bertrand is necessarily the child of John and Katharine *or* Bertrand is contingently the child of John and Katherine>. Or maybe we should just say that this is not a case of genuine knowledge at all. There is no truth-bearing entity <Bertrand is the child of John and Katharine>, therefore there is no such object of genuine knowledge. Or perhaps we could say that it is a case of *partial* knowledge of the proposition <Bertrand is *M*-ly the child of John and Katharine>, where the *M* stands for the modal term we would insert in accordance with the outcome of the dispute between the Kripkeans and anti-Kripkeans. If the Kripkeans won, we would insert “necessarily”, and if the anti-Kripkeans won it would be “contingently”. What is known would then merely be that Bertrand *somehow* exemplifies the relation ___*is the child of*___ to John and Katharine, and this would be an example of incomplete knowledge.

This is a difficult question, and it warrants much deeper consideration than I can afford to undertake here. My inclination, however, is that the final proposal given above is along the right lines. If propositions *do* represent states of affairs, and all states of affairs involve modal aspects, then how can we have knowledge of

propositions that is wholly *non*-modal knowledge? The idea above is that we can have *partial* knowledge of propositions and that this need not be modal in character. But no real headway can be made on this difficult issue without addressing a vast range of epistemological, metaphysical and linguistic issues. Considering PMU together with the idea that true propositions represent *all* the major aspects of states of affairs, I am convinced that what is called for is a re-examination of the notion that there are genuine propositions which are, nonetheless, wholly non-modal *and* of which we can have genuine (full) knowledge. I am suspicious of the idea of there being instances of genuine or complete knowledge the sources of which wholly differ from that of our *de re* modal knowledge. Nevertheless, I have not considered the question in very much depth here, for it is very much an epistemological question, and this is a dissertation in metaphysics. Epistemological horses must be exercised on epistemological courses. I shall, therefore, stop short of concluding that the status of modal epistemology deserves to be altered in reflection of the fact that *all* knowledge involves modal knowledge. Altered, that is, from its current state, whereby modal epistemology is merely an application (or extension) of general epistemology on a par with the epistemologies of other problematic regions. Instead, I shall conclude that PMU gives us some reason to think that all knowledge *might* involve a modal component, and so that modal epistemology *may* be a different kind of extension of general epistemology than the other problematic epistemologies are. If it *were* to be shown that there is a modal element to all instances of knowledge, then there would, of course, be very serious epistemological consequences. For one thing, would there then be *any* knowledge which could be accounted for on the causal model?³⁰⁹ And what, in those circumstances, would be the status of epistemological worries over modality? If modal knowledge is a component of all knowledge, then difficulties in accounting

³⁰⁹ Mcleod (2005, 237) notes that '[m]odality and mathematics are commonly held to be epistemologically akin in that a causal model of knowledge can accommodate neither'. McGinn (1981, 185) says that '[t]he epistemological problem with modality is...that we cannot represent modal facts as causally explaining our knowledge of them.' He goes on to say that '[t]his tension between the metaphysics of modality and the requirements of an intelligible epistemology is, of course, precisely analogous in form to that described by Benacerraf (1973) in respect of mathematics.' I agree that there may be this kind of kinship between them, but if my arguments are good, then there is nevertheless an important sense in which the epistemology of modality is very much *unlike* that of mathematics.

for aspects of our epistemic access to modality would have to be regarded as *general* epistemological difficulties. Either that or leave the door open for an unappetising general scepticism.³¹⁰ The champion of modality would be able to make a strong claim: if all knowledge involves modal knowledge, and if *some* knowledge is possible, then *some* modal knowledge is possible. For now, though, the conclusion is that PMU gives us reason to look again at the status of modal epistemology.

§4.4 *Essence, Modality And The Particular*

In Chapter One I argued that if we construe properties as universals, then we must accept a substratum account of particulars. Much of that section was taken up with an exploration of the problems facing the bundle-of-universals account of particulars. Having made various arguments against that view and considered possible lines of defence for it, I concluded that my commitment to universals engenders acceptance of a substratum view of particulars. I said that the challenge is to make that view precise, to explain the “core of particularity” lying within each particular. The time has come to marshal some thoughts on this issue.

It must be made clear at the outset, however, that in exploring this concept of a core of particularity (a substratum, a bare particular), we are not seeking a reductive analysis. To believe in a core of particularity is just to rule out the possibility of particularity being a non-basic, reducible metaphysical phenomenon. My suggestion here is that in thinking about the topic of *essence* we may be able to shed some light on the matter. What I would like to do is to offer some thoughts

³¹⁰ I don't mean to suggest, of course, that there *aren't* problems in the epistemology of modality. What I have said is consistent with there being just as many problems there as there are said to be in the most severe assessment. McGinn (1981, 177) thinks that ‘it is the epistemology of modality which is the source of the discomfort induced by modal realism’ (and by ‘modal realism’ he does not intend David Lewis’s theory of modality, but rather a form of modal primitivism). My point is that *if* there is a modal element to all knowledge, shouldn't this detract from the legitimacy of such aversion to modal realism? In those circumstances, surely our dissatisfaction is better located with epistemology in general than with realist metaphysical accounts of modality, for modal epistemology is now not just a problem for modal realists, but for *all* epistemologists.

about how essence, modality and particularity relate to one another. I shall not be offering a fully developed theory of essence, for that would be well beyond the scope of this dissertation. Rather, I shall outline a conception of essence which may, I believe, be helpful to us in reflecting upon particularity. Besides the possibility of gaining insight into the concept of the bare particular, there is another, more straightforward, reason for considering the topic of essence here. It has long been thought that there is some connection between modality and essence, and given the philosophical prominence of essentialist discourse, it is fitting that I should in this context include some discussion of the matter.

§4.4.1 A Modal Account Of Essence

Prior to the work of Kit Fine in this area³¹¹, it had (at least for a century or so) been common to define an essential property as one the particular has necessarily.³¹² Essence was simply equated with necessity.³¹³ Call this the “Narrowly Modal Account” (NMA) of essence: F is essential to *a* iff *a* is necessarily F. In his (1994),

³¹¹ In particular, “Essence and Modality”, *Philosophical Perspectives 8: Logic and Language*, (1994), pp.1-16.

³¹² Thus, Quine (1980), p.155: ‘Aristotelian essentialism...is required if quantification into modal contexts is to be insisted upon. An object...must be seen as having some of its traits necessarily and others contingently’. Clearly, Quine is equating here essential properties with necessarily held properties. Richard Cartwright, “Some Remarks on Essentialism”, *Journal of Philosophy*, 65:20, (Oct.,1968), p.615, says that something’s ‘essential attributes are those it has necessarily, those it could not have lacked’, and James Tomberlin, “Essentialism and Possible Worlds”, *Philosophy and Phenomenological Research*, 35:3, (1975), p.324, says almost exactly the same thing.

³¹³ A notable exception here is Terence Parsons. In his “Essentialism and Quantified Modal Logic”, *Philosophical Review*, 78:1 (Jan., 1969), pp.35-6, Parsons distinguishes what he calls the doctrine of ‘individual essences’ from that of ‘general essences’. The first has it that

some or all objects have characteristics...which are so intimately associated with the object that nothing else could...have precisely those characteristics without being that object.....The doctrine of general essences, on the other hand, simply singles out certain characteristics as being necessarily true of certain objects.

Parsons saw that the narrowly modal conception of essence was not the only possible approach. He did not, however, consider the notion of individual essences in his paper, only that of general essences. Another name we might mention in this regard is that of Ruth Barcan-Marcus. Although in her “Essentialism in Modal Logic”, *Nous*, 1:1, (Mar., 1967), p.91, she declares that ‘an essentialist theory is one in which it is possible to distinguish necessary attributes’, by her “Essential Attribution”, *Journal of Philosophy*, 68:7 (Apr., 1971) she is promoting the idea that a simple equation of necessity and essence would not do. There she distinguishes between what she calls ‘Aristotelian’ and ‘Individuating’ essentialism. According to ‘Aristotelian’ essentialism, the essential properties of a thing are those which it has necessarily in virtue of its being a member of some kind (p.191). ‘Individuating’ essentialism, on the other hand, says that an essential property is one a thing necessarily which ‘partially individuate[s] it from objects of the same kind’ (p.193).

one of Fine's central claims was that NMA is false, that a thing may necessarily possess a property without that property being essential to it. In his well-known example, we are told that Socrates may be necessarily distinct from the Eiffel Tower without it being essential to Socrates that he be distinct from it. After all, what has the Eiffel Tower really got to do with *Socrates* and his being the very thing that he is? Not much it seems, so the left-to-right direction of NMA looks to be threatened: it looks, that is, as if Socrates being necessarily F is insufficient for F being essential to Socrates. Having given various other similar examples of apparently necessary but inessential properties, he rejects NMA.³¹⁴ Most have found his argument against NMA compelling³¹⁵, and this is my feeling too. Fine's examples show that more would need to be said in a modal account of essence if it is to be plausible. Having considered and rejected some other types of modal account of essence, Fine goes on to argue for a non-modal, *definitional* account of essence, the basic idea being that in giving the essence of a thing we are defining it (very much as we would a word).³¹⁶ Although I agree with much of what he has to say on the subject, I would like to retain a modal component in the definition of essential property. I shall not consider the merits of his definitional account here; rather, I propose we take the following kind of approach.

Essence *is* about definition. In defining something we are *individuating* it, and the way to individuate a particular is, I believe, to give its essence. So far, so Finean. The essence of an individual, the collection of its essential properties, is what makes it the *very* individual it is. Discriminating amongst the properties of things those held essentially from those not held essentially is all about discovering which properties make a thing what it and it alone is. Such discovery allows us to

³¹⁴ I don't think it is necessary here for me to go into all the details of Fine's arguments against NMA. As I say, I find it compelling and know of no direct challenges to it. Given that, I shall take it in what follows that Fine has shown the narrowly modal account of essence to be inadequate.

³¹⁵ For example, Bob Hale, "The Source of Necessity", in *Philosophical Perspectives 16: Language and Mind*, (2002); Boris Kment, "Counterfactuals and the Analysis of Necessity", *Philosophical Perspectives 20: Metaphysics*, (2006); Cameron (2008), p.9. See also Kevin Mulligan, "Essence and Modality: The Quintessence of Husserl's Theory", in M. Siebel & M. Textor (eds.), *Semantik und Ontologie*, (Ontos Verlag, 2004), pp.393-396. However, Ed Zalta, "Essence and Modality", *Mind*, 115:459, (2006) disagrees with Fine that an essential property must be necessarily held.

³¹⁶ See pp.8-9. As with Armstrong, Fine has a habit of shifting between talk of *de re* and *de dicto* modality without signalling the shift, which tends to obscure his views somewhat.

answer, for each given thing, the deepest version of the question, “What is it?”. As Della Rocca puts it:

Essentialists attempt to discover what properties are required to be a particular thing *a*...., the aim in so doing is to offer an account of what is required to be *a* that goes beyond the kind of facts we can learn about *a* simply from the general fact that *a* is a thing.³¹⁷

I shall take it that the essence of a thing is just the set of its essential properties. In Van Cleve’s words, the ‘essential properties of a thing...[are]... collectively called its essence’.³¹⁸ Forbes gives a precise statement of things:

An individual essence of an object *x* is a set of properties *I* which satisfies the following two conditions: *I*(i) every property *P* in *I* is an essential property of *x*; *I*(ii) it is not possible that some object *y* distinct from *x* has every member of *I*.³¹⁹

Now, Fine and I agree that the set of a thing’s essential properties will be a proper subset of its necessarily held properties.³²⁰

³¹⁷ Michael Della Rocca, “Recent Work in Essentialism: Part 1”, p.3, *Philosophical Books* 37:1, (Jan., 1996), pp.1-13. Della Rocca is here largely following Graeme Forbes, “In Defense of Absolute Essentialism”, *Midwest Studies in Philosophy XI*, French, Uehling & Wettstein (eds), (1986), pp.3-31.

³¹⁸ James Van Cleve, “Essence/Accident” entry in *A Companion to Metaphysics*, E. Sosa & J. Kim (eds), (Blackwell, 1995), p.136.

³¹⁹ Graeme Forbes, *The Metaphysics of Modality*, (OUP, 1985), p.99. *I*(i) and *I*(ii) are not, of course, intended to jointly constitute a *definition* of essential property.

³²⁰ Daniel Bennett (1969, 488) disagrees, on the basis of his Quinean dissatisfaction with the clarity of *de re* modalising. But we need not, I think, give much consideration to this type of disagreement, for it is not as interesting in the present context as the kind of disagreement we might have with one who accepted *de re* modality but denied that essential properties are one-and-all exemplified necessarily. Bennett puts forward an essentialism in which essential properties will be held *omnitemporally*, but it would be to stray much too far from the present point to seriously examine this kind of opposition to my view. To say the least, Bennett’s is an unorthodox position for a 20th Century philosopher, although it is in the same Aristotelian mould as many of the other views he defends. Baruch Brody (1973) also rejects the idea that essential properties must be held necessarily. To be precise, he rejects the idea that if *a* is essentially *F*, then *F* is had by *a* ‘in the actual world and by the object identical to it in any given possible world’ (p.357). He argues that neither Chisholm’s (“Identity Through Possible Worlds”, *Nous*, 1:1, (Mar., 1967)) account of identity across possible worlds, nor Lewis’s counterpart theory can explain the notion without rendering it an unhelpful component in analyses of essentialist claims. He proposes that we adopt the following instead:

it is not necessary that an object have a property in all possible worlds in order that it have it essentially. All that is required is that it have it in the actual world now and in all possible futures in which it exists. (p.359)

To address the last point first, Brody’s concept of ‘possible futures’ (or ‘possible future worlds’) seems inadequate. We say that if *F* is essential to *a*, then *a* could not be what it is without *F*. But

I accept that if an object essentially has a certain property then it is necessary that it has the property (or has the property if it exist); but I reject the converse.³²¹

So, *a*'s necessarily being F is a necessary but insufficient condition for F's being essential to *a*.³²² And I agree; there will be properties which *a* holds necessarily but which are, nevertheless, not essential to *a*.

We have, Fine thinks,

an informal way of saying that an object essentially has a certain property. We say 'the object must have that property if it is to be the object that it is'. Somehow this form of words manages to convey what it is we wish to convey. But how? And how, in particular, are we to understand the role of the qualifying phrase 'if it is to be the object that it is'?...We can think of the various modal accounts as providing us with an answer to this question. (*Ibid*)

And the various modal accounts he considers are captured in the following:

NMA: *a* is essentially F iff it is necessary for *a* to be F

$$ESS\langle a, F \rangle \leftrightarrow \Box Fa$$

this is usually understood to mean also that *a* could *have been* what it is without F. Wouldn't Brody, therefore, need a notion of "possible pasts" to account for this? But the past cannot be otherwise than it was, so what content could he give to such a notion? The concept of possible worlds doesn't have the same problem, for a possible world is just a way the world could *have been*. Secondly, Brody seems to be assuming a realism about possible worlds (in his discussion of the modal account of essence) much like Lewis's. But a modal account of essence need not make such an assumption. A modal-essentialist need not even go in for a possible worlds based account of modality (just as I do not), let alone one in which possible worlds are taken as Lewis takes them. Even if one *did* want to use possible worlds in one's account of modality, one might still think (with Kripke) that the problem of identity across possible worlds is a pseudo-problem. One may, nevertheless, proceed with the development of a *modal* account of essence which employs the notion of possible worlds.

³²¹ Fine (1994), p.4. Cf. Stephen McLeod, "Why Essentialism Requires Two Senses of Necessity", *Ra* 19:1, (2006), p.77: 'It is a necessary condition on a property's being essential to an object that it has it *necessity*' [emphases in original]; Ori Simchen, "Actualist Essentialism and General Possibilities," *Jou Philosophy* 103 (2006), p.9: 'an essential property...is not contingently instantiable. So it is necessary anything at all *can* have such a property, then it *must* have it' [emphases in original].

³²² In the quotation, Fine employs the modal term (necessarily) in a de dicto rather than in a de re manner. But he has confirmed (in correspondence) that no significance ought to be attached to this fact. He would, that is, be happy with formulation "If F is essential to *a*, then it is necessary for *a* to be F".

MEA: a is essentially F iff it is necessary that a is F if it exists

$$ESS\langle a, F \rangle \leftrightarrow \Box(E!a \rightarrow Fa)$$

MIA: a is essentially F iff it is necessary that a is F if it is self-identical

$$ESS\langle a, F \rangle \leftrightarrow \Box((a=a) \rightarrow Fa)$$

Fine thinks that NMA (what he calls the “Categorical Account”) makes the qualifying phrase – ‘...if it is to be the object that it is’ – redundant, and so is unsatisfactory insofar as it fails to account for our desire to see that included in the informal analysis of essence talk. And I think this is a fair criticism of NMA; if all the analysis we need of ‘It is essential to a that it is F ’ is to be had with ‘ a must have F ’, then why does the intuitive account, the one that strikes us (or at least Fine) as so plainly correct, include that condition?³²³ In MEA (the “Modal Existential Account”), he says,

the [qualifying] phrase is taken to convey existence. But then why is the existence of the object expressed [in the informal analysis] so perversely in terms of identity? (*Ibid*)

So, a proponent of MEA is one who holds that what *looks* like an identity-centred condition (in the qualifying condition in the intuitive analysis) is *in fact* an existence-centred one. Fine’s objection is that if we had wanted the restriction to be in terms of existence, why wouldn’t we have just talked directly about existence, and not identity? Finally, under MIA

the phrase conveys a vacuous condition. But then, again [i.e. as with NMA], why is the qualification made and whence our feeling that it points to something significant? (*ibid*)

The criticism is that, on MIA, the qualifying condition (‘...if it is to be the object that it is’) is understood as imposing a condition (self-identity) that is met by everything x simply in virtue of x ’s being a thing. But we don’t, Fine urges, think that the qualifying phrase in the intuitive analysis imposes a vacuous condition.

³²³ He makes this criticism of NMA prior to his detailed argument against it, where he gives examples of apparently necessary but inessential properties – such as the one mentioned earlier, involving Socrates and his being distinct from the Eiffel Tower.

We think (or at least Fine does) that the qualification is important, that in it we say something worth saying. According to MIA, however, it is not important. Hence Fine's feeling that MIA won't offer a satisfying account of the intuitive analysis of essentialist statements.

He goes on to consider various (putative) problems with each account. Now, although I am not convinced by all aspects of his discussion of those, I shall assume here that his arguments against them are successful, that he has shown each of NMA, MEA and MIA to be unsatisfactory as theories of essence.³²⁴ What I wish to do is to suggest another kind of modal account, which is, it seems, immune to the kind of criticisms he makes against those. So, my dispute with Fine is over his assessment of the *import* of his rejection of the three modal accounts he considers. He regards himself as having shown that a blanket rejection of modal analyses of essence is reasonable.³²⁵ I disagree; I think there is a modal analysis which is not vulnerable to Fine's criticisms of NMA, MEA and MIA. (And I see no reason why there might not be other kinds of modal account than the one I wish to recommend which also fall beyond the scope of Fine's criticisms.³²⁶)

I agree with him that a good informal way of paraphrasing an essentialist claim about x is to say that x must have the property if it is to be the object that it is. But Fine seems to think that a modal account³²⁷ needs to be one in which we interpret this as a claim of the form " $\Box(\phi x \rightarrow Fx)$ ", where the antecedent would say

³²⁴ As I have already said, I am convinced by Fine's arguments against NMA. And although I am not entirely convinced by his criticisms of MEA and MIA, I think a better modal account than those is available, so I shall leave it to those who wish to defend MEA and MIA to do so. The position adopted here is that they are discredited in the absence of convincing defences – and, to my knowledge, no defence of those against Fine's criticisms has been offered.

³²⁵ *Ibid.*, p.8. His final position on essence is: 'the proper expression of the claim that x essentially ϕ 's would not be that it is necessary that $x \phi$'s if it exists, for some amorphous notion of necessity, but that it is true in virtue of the identity of x that it ϕ 's, or that it ϕ 's if x exists.' (1995, 273).

³²⁶ For example, Fabrice Correia, "(Finean) Essence and (Priorean) Modality", *Dialectica*, (2006), presents a modal account of essence which he thinks is immune from Fine's objections. His account involves what he calls a 'Priorean' conception of modality. But its content bears little relation to that of the account I will recommend, and, strategically, Correia's is a very different kind of reaction against Fine's claim that satisfactory modal analyses of essence cannot be found. Cameron (2008), p.15, also thinks that we can construct a modal account of essence which is not vulnerable to Fine's criticisms. His proposal centres upon a counterpart-theoretic approach to modality.

³²⁷ Ignoring here the supposedly hopeless NMA type of account.

something about existence (as in MEA) or identity (as in MIA) or some other putatively appropriate notion. My suggestion is that there is another way for modal accounts to go.

First, I propose that a modal account of essence ought to employ *de re*, and not *de dicto*, modality. In this respect, MEA and MIA are, I think, misrepresentations of the informal paraphrase of essentialist claims. The “must” there should be read *de re*, and in both MEA and MIA it is read *de dicto*. The old association of essence with modality is one with *de re* modality. Indeed the two were (in the likes of NMA) often assimilated. Essentialism studies what it is for things to be what they uniquely are, and *de re* modality is modality as that pertains to *things*, not *dicta*. So there is very good reason to think that the modal term found in our intuitively satisfying informal paraphrase ought to be taken as occurring in the *de re* rather than the *de dicto* manner.

But if we try to reconcile this desideratum with the MEA or MIA theorists’ intuitions, we seem to run into trouble. If we think (*pace* Fine) that there should be something about existence in the modal definition of essence, and we think the modality should be *de re*, we get something like:

$$\mathbf{MEA^*}: \text{ESS}\langle a, F \rangle \leftrightarrow (E!a \rightarrow \Box Fa)$$

This reads “*a* is essentially *F* iff *a* is necessarily *F* if it exists”. In a non-technical sense, however, the right-side here looks incorrect. Intuitively, *a*’s existence and its exemplifying the properties it must exemplify are not connected as antecedent and consequent are in a (true) conditional. It could *not* exist if it did not exemplify a property *F* which it must exemplify, which is different from saying (as MEA* does) that its existence is a necessary condition for its necessarily exemplifying *F*. What *precisely* the connection is between *a*’s existence and its exemplification of *F* remains to be seen. Nevertheless, we can say that there is reason to question MEA* on an intuitive level. More obvious difficulties are, however, to be found at the technical level. First, MEA* would be true even if *a* did not exist: the right-

side would be true even if “ $E!a$ ” were false. And this can hardly be right – how could some non-existent thing exemplify (necessarily or otherwise) a property? Second, just as Fine points out in his discussion of MEA,³²⁸ MEA* would be true were we to substitute any necessary truth for the consequent in the right-side, “ $\Box Fa$ ”. So, our analysis might end up that F is essential to a iff $2+2=4$ if a exists. But what has that mathematical truth got to do with a and its being essentially F? A similar problem afflicts MIA*:

$$\mathbf{MIA*}: \text{ESS}\langle a, F \rangle \leftrightarrow ((a = a) \rightarrow \Box Fa)$$

The analysis will fail if we substitute as above some random necessary truth for “ $\Box Fa$ ”. And MIA* will also suffer from the problem Fine brings up for MIA, that it renders the qualifying phrase in the informal paraphrase vacuous when intuitively we think it is not. So, there are outstanding problems for MIA* as an analysis of essentialist claims.

And yet there is, I think, an ounce of truth in both accounts. The essential properties of a thing *do* seem to have something to do with its existence, and *do* seem to have something to do with its identity. Its identity is what the thing is, and something cannot exist without being what it is – in a sense, its existence *just is* the thing having its own identity. Identity and existence are intimately linked. But how are those connected in turn with essence? Well, a thing could not be what it is (i.e., have the identity it does) if it lacked properties essential to it.³²⁹ Those properties are, after all, properties it must have if it is to be the object that it is. And it is the identity of an object that makes it “the object that it is”. So, essence and identity are closely linked. But it seems that we also have here the sense in which existence is connected to essence: if the thing could not be what it is without its essential properties, then it could not *be* without them – it could not exist. There are, therefore, good grounds it seems for wanting identity and existence to play *some* role within our definition of essence.

³²⁸ *Ibid.*, p.6.

³²⁹ Our English word “essence” is a translation of Aristotle’s phrase “*to ti ên einai*”, meaning “the what it is to be”.

The big problem with MEA* and MIA* is, I think, their logical form. Fine simply reads the conditional form of the right-side off the informal paraphrase of essentialist claims. But although I think the informal paraphrase suits its purpose, we must remember that what it affords us is only what we might call a “pre-theoretical” analysis of the concept of an essential property. It is simply not detailed enough to be adopted as the centrepiece of a developed philosophical theory of essence. What we are trying to do with the informal paraphrase is to capture something that is in fact quite complicated, without actually stating the complications. While it might not (normally) be appropriate to say something like “*a* is essentially F means that it must be F if it is to be the object that it is” in everyday conversation, it *would* be appropriate in a context in which we wish to merely roughly circumscribe the concept of essence. In the philosophy of modality, however, we want to do more than that. The problems we saw above with MEA* and MIA* derive from the logical form of the right-side. But I have also said that we have good reason to let the concepts of existence and identity play some role in our theory of essence. So, the task is, in my view, that of finding a new way to formulate a modal account of essence which (somehow) involves those concepts. But think now of the kind of thing that the right-side in an analysis of essence *should* be saying. It seems it must tell us all the things about the essentially-held property that *make it* essential. It must inform us as to the necessary and sufficient conditions for being an essential property. I believe that one of those things is that the property be *necessarily*-held by the particular. Like Fine, I believe that this is a necessary but insufficient condition for being an essential property. But let’s just concentrate for a moment on the *form* of the right-side. If it should do what I claim it should, if it should inform us of the respects in which the property is essential, then would it not make sense that in the right-side we should *list* the necessary and sufficient conditions for being an essential property? And the most natural way of formally rendering a list is to represent it as a *conjunction*. What I propose, therefore, is that we should drop the conditional structure we find on the right-side of MEA* and MIA* and replace it instead with something of the form “ $(\phi F \wedge \psi F \wedge \dots)$ ”. Each of the variables represents some condition the property F must satisfy if it is to be an essential property. But

satisfaction of any one of the conjuncts will not in itself be enough to qualify F as an essential property – for that it must satisfy the conjunction as a whole. Of course, deciding what to put in there is the real work. However, we are some way there already. For one thing, I am committed to the idea that an essentially held property must be a necessarily held property. Hence, in my analysis the first conjunct will be “ $\Box Fa$ ”. And I have argued that existence and identity ought to have a role in our definition. But how are we to do that? How do we incorporate the best of MEA* and MIA* into the new analysis?

Well, firstly, we won't – I presume – want to incorporate an existence clause such as that found in MEA* into the analysis. What purpose would such a conjunct serve? In saying that *a* exists, how do we contribute in “*a* is essential to F iff ($\Box Fa \wedge E!a \wedge \dots$)” to our understanding of the left-side?³³⁰ If we *had* any reason to want to require that *a* exists, which I don't believe we have, would the first conjunct not imply that anyway? For a non-existent thing cannot exemplify a property. Nor would we have any reason to say that the *property* in question exists (if it would even be meaningful to apply “E!” to a predicate term). Again, the first conjunct implies that the property exists, so we would have no reason to explicitly state as much even if we wanted that as a requirement. And yet, as I said above, it seems that existence should have some role in our theory of essence. The answer is, I think, that it should feature in some other aspect of our theory than the formal statement of our definition of an essential property. More on that below.

What about the self-identity clause we find in MIA*? Again, it seems misplaced in the new formulation of our definition. All we say in “*a* = *a*” is that *a* bears a relation (if identity is indeed a genuine relation) to itself which *everything* bears to itself. We seem to say little more than that *a* is a “genuine” thing, an existent. Thus, the same problems would arise as did in connection with the inclusion of “E!*a*” as a conjunct. It would not contribute to the informativeness of the right-side

³³⁰ It certainly could not be the *only* other conjunct along with “ $\Box Fa$ ”, for then the analysis would seem to collapse into NMA. Saying that F is essential to *a* iff *a* must be F and *a* exists comes to little – if anything – more than saying that an essential property is a necessarily held property.

and it would seem to be implied in any case by the first conjunct. So, where should identity feature in our theory of essence?

Let's return for a moment to what Della Rocca says:

Essentialists attempt to discover what properties are required to be a particular thing *a*...., the aim in so doing is to offer an account of what is required to be *a* that goes beyond the kind of facts we can learn about *a* simply from the general fact that *a* is a thing.³³¹

I think this gets to the heart of things. As essentialists, we want to understand what makes a thing the very thing it is. To state the essence of something is to answer the "What is it?" question. It is to identify it. But we only *need* to identify something in order to tell it from other things. This is why we identify by giving the *individuation conditions* for the thing. We identify by specifying what conditions anything *x* must satisfy for *x* to *be a*. If *x = a*, then *x* satisfies *a*'s individuation conditions. So, the reason we *ask* the "What is it?" question is that we want to individuate the thing. And that is just what a thing's essential properties do: they contribute to its individuation, its being an individual distinct from others.³³² This is, then, the sense in which identity is to feature in our account of essence: if *x* is identical to *a*, then *x* is individuated in precisely the same terms

³³¹ Della Rocca, *op. cit.*, p.3.

³³² Bennett (1969) looks as if he wants to say something similar in declaring that '[e]ssential properties sort the entities of which they are true in some fashion', but goes on to say that 'not all sorting is individuating, and essential properties don't have to individuate' (p.487). He thinks, for example, that *being a man* is an essential property which sorts without individuating. That property sorts Socrates from his parts (e.g., his nose) and from wholes of which he is a part (e.g., the society of which he was a member (p.494), but it does not, Bennett appears to think, individuate him. Bennett doesn't actually say what individuation *is*, but he seems to think that an individuating property of *x* is one which sorts *x* 'from everything in the universe' (p.487). But I'm not sure anyone would wish to say that any *one* of Socrates' properties is by itself capable of individuating him in this sense, unless of course we have in mind the very large complex (conjunctive) property which results from conjoining all of his essential properties. This is why I say that essential properties are *partially* individuating of their exemplifier. However, even if one did have sympathy for the idea of single essential properties being so powerful in their individuating capacity, there is still a worry, I think, about how well Bennett's theory fits our intuitions about essence. When we ask for the essence of *x*, I don't think the intention is to sort *x* from its parts or from the wholes of which it is part. Aren't we looking for what it is about *x* that makes it what it is and does *not* make something else *y* what *it* is? And isn't this closer to the kind of work done by Bennett's individuating properties? Admittedly, not every essential property will distinguish the thing from every other thing, but it certainly makes sense to think that *collectively* they will achieve that. I don't see that Bennett has offered us much reason to think that essential properties should not have (at least) this kind of individuating role.

in which a is individuated. An essential property of a will be one that a must have if a is to be identified as it is identified. I shall say that such a property is *partially individuating* of a .³³³ Formally, the analysis will read:

$$\mathbf{MinA}: \text{ESS}\langle a, F \rangle \leftrightarrow (\Box Fa \wedge \mathcal{P}\mathcal{I}\langle F, a \rangle)$$

“ $\mathcal{P}\mathcal{I}$ ” denotes the cross-categorical relation “ $_$ is partially individuating of $_$ ”.

The referent of the first term of the relation (the property) will contribute to the individuation of the referent of the second term (the particular). So, an essential property of a is one which a has necessarily and which is partially individuating of a . What else does an essential property do but aid in the individuation of its exemplifier? If it is part of Socrates’ essence to be a man, then the property *being a man*, helps individuate Socrates relative to the other, non-human male, things.³³⁴ A statement of Socrates’ (complete) essence – if it is possible for us to make such a statement – would list all of his essential properties³³⁵, all of his necessarily-held partially-individuating properties. And it seems as if amongst those will be a property or properties which Socrates *uniquely* exemplifies. For example, if we accept the Kripkean thesis of the necessity of origin, then Socrates must stand in a relation of the form “ $_$ is the n^{th} child of $_$ and $_$ ” to his parents. And what other particular will stand in that relation with Socrates’ parents? None, it seems. And no number other than 4 will stand in the relation “ $_$ is the immediate successor of $_$ ” to the number 3; so, doesn’t the number 4 do that uniquely? Nor do I see any reason why we ought not to think that even something like a carbon atom will have unique essential properties (relations), of the form “*having electrons* $e_1 \wedge \dots \wedge e_6$ ”. Each atom will have its set of six electrons, and it seems each atom must necessarily have the ones it does. If atom a^c has an electron e^c_1 , then how could it be the thing it is and lack that particular electron? And isn’t it individuated from

³³³ The theory is very close to one discussed by Barcan-Marcus: ‘Individuating’ essentialism. According to that theory, an essential property is one a thing has necessarily which ‘partially individuate[s] it from objects of the same kind’ (1971, 193).

³³⁴ As it happens, Linda Wetzel, “Is Socrates Essentially a Man?”, *Philosophical Studies*, 98, (2000), argues that it is dubious whether Socrates is essentially a man.

³³⁵ Brody (1973), p.363: ‘the kind of thing that one is is determined by the set of one’s essential properties’.

atom a^{c^*} insofar as a^{c^*} has *other* electrons? We may not be capable of telling electron e_4 from electron e_5 , or perhaps even atom a^c from atom a^{c^*} , but if electrons and atoms *are* distinct from one another, then each has its individuation conditions. In saying that we cannot discern (say) one electron from another, we merely point out a certain (putative) limitation in our epistemic capacities. It is *not*, however, to cast doubt upon the claim that each electron *is* individuated. And this is an important point. Individuation is a *metaphysical*, not an epistemological, concept. It pertains to the distinctness of each particular. A particular is individuated iff it is distinct from all other particulars. But, in a sense, this is really only to say that the particular *is* a particular. A particular is an individual, an individuated portion of reality. In its individuating role for a , the set of a 's essential properties is the foundation of its particularity.³³⁶ With this, we return to our original concern: the connection between the concept of essence and that of the bare particular.

§4.4.2 *Essence And The Bare Particular*

If the particular a is only established *as* a particular in its exemplification of its essential properties, then how can substratum theory be right? For what would we say of the exemplifier a in the state of affairs a 's *necessarily being F*, where F is partially individuating of a (i.e., is an essential property of a 's)? How could it be the bare particular a , for a bare particular is *a particular*, and I have just said that particularity is only established on the basis of exemplification of essential

³³⁶ We might distinguish, then, a second sense of individuation – *practical* individuation. This is, in contrast to the type of individuation I am discussing in the text, an epistemic activity which *we* perform. This is simply the activity of telling one thing from another. But that has, I think, little to do with essential properties. The question the essentialist answers – the “What is it?” question – is not the same as the type of question we ask in everyday life in which we enquire about something with the intention of distinguishing that thing from others. When someone asks “What is (was) Socrates?”, we would hardly respond by listing his essential properties, even those he might uniquely have. We would, I think, usually cite certain of his contingently held properties: he is a philosopher, a Greek, the husband of Xanthippe, and so on. This kind of practical individuation is something *we* do. The type of individuation achieved on the basis of the exemplification of essential properties is not something that is *practiced*. It is the formation or constitution of the discreteness, the heterogeneity, of reality.

properties. Obviously, the bare particular doesn't *have* any properties, essential or otherwise. So, what accounts for the particularity of the bare particular?

My answer is that we *cannot* regard the exemplifier in *a's necessarily being F* as a fully-fledged particular. We cannot really regard it as a particular at all. An Armstrongian theory of abstraction might be useful here, but I have already rejected that. What I shall say is that the exemplifier in such a state of affairs *is* the bare particular, but that bare particulars are only *proto-particulars*. It is the particular at an "early" stage in its development towards particularity. It is the particular *establishing* its particularity. What we can say about it is very limited. Bare particulars are, for me, primitive; they are not composed of anything more metaphysically fundamental. Yet, particulars (not *bare* particulars) are one-and-all *created*. They come into being. Even necessary existents must be said to come into being, although they come into being *with* reality, so to speak. They are portions of reality, but are special insofar as those divisions are written into reality. Contingent individuals are less fundamental portionings of reality. They have a duration, a temporal location in reality. But the particularity of both necessary and contingent existents must – in *some* sense – be said to be *established*. Exemplification is a kind of activity, it is something the particular *does*. But exemplification of essential properties must be seen as the activity of something less than the particular which exemplifies contingent properties, for the particular in the latter sense only *gains* its particularity at the stage of essential property exemplification. Hence, the idea of the bare particular as proto-particular. What exemplifies contingent properties is the fully-fledged particular – for convenience, call it "particular_C". Particular_C may be regarded as the particular which "emerges" from (or "results from", or "is the product of") proto-particular_C's exemplification of the properties particular_C must have.³³⁷ Particular_C and proto-particular_C are *stages* of

³³⁷ And I deliberately say "*must have*", as in "*had necessarily*", rather than "*essentially have*". While the essential properties of *a* may form the basis of *a*'s individuation, *a* will also have necessarily held and yet non-essential properties (such as Socrates' being distinct from the Eiffel Tower). My view is that these must be said to *come with*, in some sense, the thing's particularity. The establishment of a particular's particularity *entails* the particular's necessarily exemplifying certain properties, although those properties will not be essential to the particular. Socrates is individuated by his essential properties, which is to say that his particularity is established in his exemplification of those. But the establishment of his particularity brings with it his necessarily standing in the relation "*__ is distinct from __*" to (*inter alia*) the Eiffel Tower, and in the relation

the one particular. The bare particular, I am saying, is the early stage. The particular which exemplifies contingently is the later stage, the *formed* particular. This is not, however, to say that the latter is like Armstrong's 'thick particular', a state of affairs in which the bare particular (paradoxically) exemplifies all of the properties it must exemplify. The particular which exemplifies contingently is, for me, just a particular, it is not a state of affairs. It is, in a sense, "thicker" than the proto-particular, but only in the sense that the latter is something less than a fully-formed particular. As such, the proto-particular should not really be thought of as a particular *having* properties. Bare particulars are, after all, just that – *bare*. What exemplifies the properties is the particular in its fully-formed particularity. The establishment of that particularity, as that involves the exemplification of essential properties, is, to be sure, a murky business. But we are at the level of primitives here, and at that level our descriptive powers are stretched to their limit.

It is indeed very regrettable that the language I use here must have the temporal air that it does. All this talk of "proto", "stages", *establishing/ed*", and "*gaining/ed*" suggests that the proto-particular might literally come before the fully-formed particular in time. But this is not what I *want* to suggest. Proto-particular_C is just particular_C "forming itself" *as* a particular. Even that, of course, has temporal connotations. But it seems we cannot get away from those. At this level of metaphysics we are forced against our will towards metaphor and analogy. If the theory presented is obscure – and, of course, I recognise that it *is* – then the question is what weight that obscurity carries. Is it *so* obscure as to be unacceptable? Perhaps some would say so, but I would respond by asking what substratum theory goes into as much detail as mine without suffering the same degree of obscurity? If there are some such theories, then have at least *that* advantage over mine, although it would remain to be seen how well they do at answering the question we have about essence (if they are essentialist) and particularity. If there are none less obscure than mine, then the obscurity of mine is *no specific* disadvantage to it. Obscurity is, then, an affliction of *all* substratum

__ is a member of __ to the singleton {Socrates}, and his necessarily exemplifying whatever other properties he necessarily but non-essentially exemplifies. These are properties he exemplifies in virtue of his being a particular, in virtue of his individuation having been achieved.

theories – we cannot do better than the Lockean “we-know-not-what”.³³⁸ But in that case, it is back to the metaphysical drawing board. What will be needed will be a theory of particulars which does not employ the concept of a substratum (bare particular). As it is, the only developed alternative is the bundle theory, and we have already seen that there are serious questions hanging over that, especially if you wish to construe properties as universals. What I have presented here (at least in outline) is a substratum theory of particulars which connects up with what I regard as an intuitively satisfying (and otherwise plausible) theory of essence. The latter manages to speak to the widely-held intuitions that essential properties are necessarily held and have an intimate link with the identity and existence of their exemplifier. And with the former, the theory of particulars, we have one way in which to supply the details regarding the individuating role of essential properties.

§4.5 Truthmakers For Negative Truths

Within the account of contingency and possibility presented in §3.6 above, I introduced the notion of inter-property rivalry. The idea was that two properties, F and G, are rivals iff they play the same role within particulars such that any particular exemplifying the one could have exemplified the other instead. Where a particular *a* contingently exemplifies F, *being F* plays a certain role within *a*. And F’s rivals are those properties which *a* could exemplify to play that role instead of F. But this is mere possibility – *a* still lacks those properties which rival F in the role it plays within *a*. If it contingently exemplifies F and F has as rivals properties G and H, then *a* lacks G and H. So, we have two negative truths: “*a* is not G” and “*a* is not H”. Earlier I said that particulars cannot simultaneously exemplify more than one property from a range of property rivals. If this is correct, then if {F, G, H} is a set of rivals, and *a* exemplifies one of those properties at time *t*, then it follows that “not-G” and “not-H” will be true of *a* at *t*. The truth of our two negative claims seems to be entailed by *a*’s exemplification of F and F’s being a

³³⁸ Locke *Essay* (I.iv.18).

rival to both G and H. And the rivalry which holds between those properties is grounded in certain possibility-aspects of *a*'s contingent exemplification of F, namely, its being possible for *a* to be G and possible for *a* to be H. These are, as I say, both aspects of *a*'s being contingently F. So, why not have that state of affairs, *a*'s being contingently F, as the truthmaker for the two negative claims, "*a* is not G" and "*a* is not H"? All we need is a principle of rival-exclusion such as that recommended above³³⁹, according to which a particular may not simultaneously exemplify more than one from a range of property rivals. *a*'s contingent exemplification of F would, then, be enough to ground the truth of "*a* is not G" and "*a* is not H". The state of affairs *a*'s being contingently F would necessitate the truth of all claims of the form "*a* is not ϕ ", where " ϕ " is a variable taking rivals of F as values.

This approach would allow us to avoid negative states of affairs of the form *x*'s lacking ϕ , or positive states of affairs of the form *x*'s being not- ϕ , where *being not- ϕ* is a negative property. And it is certainly desirable to avoid negative states of affairs and properties if at all possible. What makes negative states of affairs so unattractive is that their existence seems to be inconsistent with the Wittgensteinian thought that the world is composed of states of affairs. If the world is, as he says, all that is the case, all that is real, then reality is composed of states of affairs. And how can *absences*, *lackings*, be real? *a*'s lacking G does not contribute to what the world *is*, as the state of affairs *a*'s being F seems to do. The guiding thought here is that what composes reality is *positive*, and insofar as they are not positive (at least not on certain interpretations of "positive"), it is difficult to see where negative states of affairs might fit into reality.³⁴⁰ Negative properties, such as *being a non-plumber* or *being non-human* (or *being not-human*, if that is preferred) are also, as I have said earlier (§3.6), fairly obviously undesirable entities. Do I have the property *being a non-centipede*? Is that amongst the properties I exemplify? If I do, then I have a great many other negative properties

³³⁹ Or perhaps something along the lines of W.E. Johnson's theory of determinates and determinables, which appears to me to be fairly similar in a number of ways to my theory of roles. See Johnson's *Logic: Part I*, (CUP, 1921), especially Ch.XI.

³⁴⁰ In this I echo George Molnar's thought that 'everything that exists is positive', p.72, "Truthmakers for Negative Truths", *Australasian Journal of Philosophy*, 78, (2000), pp.72-86.

also; in fact, I have an infinite stock of them. And is it at all plausible that our property-sets should be so large? Apart from that problem, there is also the question as to the nature of these negative properties. Just what *is* it to be a non-centipede? Is that something over-and-above one's being, say, a human? Clearly, negative properties stand in need of much explanation, although most people are, I would say, pessimistic about the chances of any satisfactory story being put together in support of their postulation. "Best to avoid them, if possible" looks like the best policy here. And the account of the truthmakers for negative truths given above seems to allow us to do that.

It is, however, an as-yet incomplete account. I have said nothing about negative existentials – claims such as "There are no unicorns". Perhaps something along the following lines would work. Were it exemplified, the property *being a unicorn* would play the same kind of role in anything exemplifying it as (e.g.) *being human* plays in the things exemplifying that. And anything exemplifying that latter property does so necessarily (or so I am assuming). Generally, if x is of sort S , it must be a thing of that sort. So, maybe the truthmaker for "There are no unicorns" is the complex conjunctive state of affairs *a's being necessarily $F \wedge b's$ being necessarily $G \wedge c's$ being necessarily $H \wedge \dots\dots\dots$* , where each of the properties is a sortal property. Each conjunct would be a state of affairs in which a particular necessarily exemplifies their sortal property, and every particular in the world would feature. *Being a unicorn* is (or would be) a sortal property, but there are no particulars *lacking* a sortal property; every particular has some sortal property and whichever they have they have necessarily. For "There are unicorns" to be true, some particular would need to be of another sort than it is. But that is not an option as sortal properties are exemplified necessarily – nothing rivals a property a must have for the role it plays within a . It might help to clarify things here if we paraphrase the original negative claim. "There are no unicorns" is equivalent to "No existing thing is a unicorn". And the latter is made true, I am suggesting, by the large conjunctive state of affairs in which every existing thing (particular) appears and is seen to necessarily exemplify the sortal property they in fact do.

Because every thing is the kind of thing it is necessarily, there is, in a sense, no room left for anything to be a unicorn.

What I have said is merely suggestive of one route which we might take in trying to solve the problem of negative truths. Obviously, much more would need be done in order to develop the account. I cannot, however, undertake such a large task here. I might point out though that my approach appears to be similar to that recommended by Cheyne & Pigden in their (2006)³⁴¹. They claim that ‘positive facts constituting what Theaetetus *is* doing necessitate negative truths about what he is *not* doing’ (p.259). Basically, it is true that he is not flying because he is doing something else instead, for example, sitting on a bench. His sitting on the bench necessitates, or so they claim, the truth of the negative claim “Theaetetus is not flying”. Whatever about the detail, both theories certainly seem to be related in spirit.

³⁴¹ Colin Cheyne & Charles Pigden, “Negative Truths From Positive Facts”, *Australasian Journal of Philosophy*, 84:2, (Jun., 2006), pp.249-265.

Concluding Remarks

I began in Chapter One by clarifying how the metaphysical problem of de re modality fits into the wider context of modal philosophy. It is one of the fundamental questions to be addressed, along with those of the clarity, function and epistemology of modality. But the real work of the dissertation began with my assumption, in §1.4, of realism about universals. Having adopted a truthmaker-theoretic approach to metaphysics, it was necessary to select a basic ontology. One must specify which *entities* are to serve as truthmakers, and this means having ontological categories in place between which to choose. Much of Chapter One was then taken up with argument about the consequences of that assumption of realism about universals. I claimed that one consequence is realism about particulars, construed as more than mere bundles of properties. We saw problems with the bundle-of-universals view, and also with Armstrong's position on particulars. The conclusion was that if we accept universals, we should accept some form of substratum theory of particulars. But then the particulars need to be "united" with the properties (they have), and I argued that we need states of affairs to ground such unity. But we cannot simply postulate states of affairs as unity-providers without saying something about *how* it is that they supply that. This is, of course, the problem of exemplification. Developed accounts of that are scarce and, having rejected Armstrong's insubstantial (pre-1999) account and Baxter's partial-identity account, I concluded that we must adopt a relational view of exemplification. The Bradleyan regress-objection to that was considered, and a response was offered which sought to call into question the coherence of the objection. I offered some further discussion of the relational theory towards the end of the chapter and, with that, my three-category ontology of universals, particulars and states of affairs, construed as involving the relation of exemplification, was in place.

In the first section of Chapter Two, I moved a little closer to the main business of the dissertation. I offered Armstrong's "Truthmaker Argument" in support of my construal of truthmakers as states of affairs. It was argued, however, that

Armstrong misconceived the argument, believing that it establishes the *necessity* of states of affairs in a metaphysics of properties and particulars. What it establishes is that states of affairs are the best candidates for the role of truthmakers, and I invoked it in §2.1 in order to establish precisely that. The next section, §2.2, was pivotal. Having decided *what* our truthmakers are, I could now state the two questions which lie behind the entire investigation. The first of those asks *whether* the truthmakers for de re modal truths feature at the fundamental level – whether, that is, modal states of affairs are reducible. The second is the question, if they are not reducible, *how* do they feature at the fundamental level? The rest of the second chapter may be regarded as an extended argument against the *usual* way of approaching that first question. That approach presupposes the reality of non-modal states of affairs. But when we examine what are apparently paradigmatically non-modal states of affairs, we find that, one and all, they involve contingent exemplification. By a standard definition of that, the non-modal states of affairs would seem to have two sorts of aspects: a property-possession aspect and a possibility aspect(s). What, then, we wonder, is the connection between these aspects? What is the metaphysical profile of contingency – are the two aspects both involved in states of affairs in which universals are contingently exemplified? Separatism says not. Our apparently deep attachment to the idea that particulars may simply *have* properties, without that being complicated by modal bells-and-whistles, produces within us a desire to *secure* that modal-free property-possession. And this comes to a desire to *separate out* the possibility aspects of contingencies from the property-possession aspects. This is the Separatist Impulse. My argument was, however, that we seem to have no good reason to pursue the separatist strategy. Its lack of motivation is not helped, of course, by the fact that it has received almost no attention in metaphysics, indeed I cannot find a single philosopher explicitly defending it. Armstrong's account of the link between contingency and possibility certainly gives us no reason to be optimistic for the prospects of separatism. In fact, he appears to give us (albeit, it seems, inadvertently) reason to think that we should pursue an *anti-separatist* approach. Examination of the origins of separatism does nothing to alleviate our discomfort with that strategy. The separatist impulse arises within a complicated web of metaphysical, semantic and pragmatic commitments, aspirations and prejudices.

The concept of truth plays an important role in its development, and my finding was (§2.2.2) that once unquestioning deference to that status is taken out of the equation, the separatist impulse looks quite empty. If we closely attend to the fact that the truth of a proposition does not entail that the proposition *comprehensively* represents its truthmaker, then the reasonableness of the anti-separatist approach becomes more and more evident. The myth of the non-modal state of affairs begins to show itself. In those circumstances, the separatist impulse remains ungenerated. The usual approach to the metaphysics of modality (which is to begin by examining whether modal states of affairs may be reduced to non-modal ones) is now obsolete. If states of affairs involving contingent exemplification are suffused with possibility, they cannot be regarded as *non-modal* any more.

And so we arrived (in §2.3) at the Principle of Modal Ubiquity. And, with that, modal primitivism – a *strong* form of modal primitivism. It would not be to oversimplify things *too* much to say that the rest of the dissertation may be seen as an extended reflection on PMU. The remainder of Chapter Two was occupied with consideration of how we may employ the concept of possible worlds once PMU is granted. In Chapter Four I was also largely preoccupied with consequences of PMU. And that is, I think, as it should be. PMU is an ambitious claim with wide-ranging, important consequences. It would certainly require deep and extensive consideration before we would be willing to regard it as conclusively established, although I tend to agree with Armstrong and Lewis that it is a sort of confusion to seek conclusivity in metaphysics. I hope I have at least given some reason to question the widespread commitment to non-modal states of affairs, and shown how the landscape differs in the absence of that commitment.

The theory of the locus of modal status which I defend in Chapter Three is, I think, a plausible one, particularly given the metaphysical commitments I had made earlier in Chapters One and Two. And there may be reason to think that the basic idea there could be adjusted to fit with, for example trope or resemblance theories of properties or bundle theories of particulars. Given my commitment to a relation of exemplification, the proposal was that particulars *participate in* that relation in the various modes. But I can see no reason why this core idea might not be

appropriated by theorists defending the kinds of theories mentioned. For trope theorists, the idea might be that the properties *belong* to the particular things they do in the various modes. The resemblance nominalist might say that particulars resemble each other in the differing modes, and the bundle theorist might say that properties are compresent (or whatever they prefer) in modes. This suggestion would, obviously, need to be developed in much greater detail. In any case, I am deeply committed to the basic idea in the Refined Copula Modifier (RCM) account. If it *was* shown to require a rather generous background metaphysics, it just might be that it is *worth* such commitment. We must at all times bear in mind the scarcity of intuitively-satisfying and smooth-running metaphysical account of de re modality. With RCM we have, I think, at least the makings of such an account.

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