

Review of *Necessary Beings, An Essay on Ontology, Modality, & the Relations Between Them*, by Bob Hale, Oxford University Press (2013). ISBN 978-0-19-966957-8

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Bob Hale's *Necessary Beings* synthesises and extends his many years of work in this area, responding to his critics, and presenting a complex, rewarding, thought-provoking whole. Modality is shown as grounded in the natures of actually-existing entities. But this is not a reductive account of modality. Rather, it pictures actually-existing entities as inherently modal. Thus Hale's apt subtitle: 'An Essay on Ontology, Modality, and the Relations Between Them'.

Early chapters establish the need for some such account of modality, arguing first (by way of McFetridge) that modal claims are indispensable and second (by way of attacks on Lewis and Armstrong, and on Blackburn) that neither a reductionist nor an anti-realist account of modality will do. The positive proposal is to ground logical necessities in the nature of logical entities, extending this to account for metaphysical necessities more generally.

What is a logical entity? Hale is clear that these are neither meanings nor concepts; he does not identify necessity with either analyticity or conceptual truth. Rather, logical entities are objects, properties, or relations, including functions like conjunction. Suppose we ask *why* it is necessarily true that a conjunction of two propositions is true iff both of the conjuncts are true. Hale's response is that this is because conjunction just *is* that binary function of propositions the value of which is a true proposition iff both its arguments are true propositions; this is the nature of conjunction.

Crucial explanatory weight is carried by a claim about the nature of a function. 'Nature' here means something stronger, and narrower, than 'what it is like'. Conjunction is the binary function most commonly used to introduce students to truth tables, but this is not part of the nature of conjunction. Supposing a necessarily-existent God, conjunction necessarily co-exists with God, but again this is not part of the nature of conjunction. Conjunction is necessarily a member of the singleton set {conjunction} but even that is not part of the nature of conjunction. Instead, something's nature is its identity, what it is to be that thing, what makes it that thing and what distinguishes it from every other thing.

Such talk of natures is more familiar from discussions of material beings, and scientific properties, rather than logical entities. For example, in his *Nature's Metaphysics* (OUP, 2007), Alexander Bird argues that fundamental physical properties are essentially dispositional, building an account of nomic necessity on this basis. Moreover Hale's nature-based account is reminiscent of 'hyperintensional' accounts of essence more generally, as associated in the contemporary literature with Kit Fine's work. Indeed, Fine uses essence as a foundation for logical necessity. However Hale distinguishes himself from Fine in his reliance upon non-conceptual entities rather than logical concepts, and in his approach to explanation.

In any domain, purported explanations must steer between Scylla and Charybdis. On the one hand, if the explainer is too close to the explained, triviality threatens ( $p$  because  $p$ ). On the other hand, if the explainer is too distant from the explained, the connection between them threatens to be too weak for genuine explanation. The dimension along which closeness and distance are measured will differ according to the type of explanation we are considering and, more controversially, according as to whether we emphasise epistemic, pragmatic or metaphysical aspects of explanation.

This Odyssean challenge plays out for Hale as follows. To an unkind ear, it can sound trivial to say that (necessarily, a conjunction of two propositions is true iff both of the conjuncts are true) because (necessarily, conjunction is such that any conjunction is true iff both of its conjuncts are true). Suppose instead that we drop the second 'necessarily', and say that (necessarily, a conjunction of two propositions is true iff both of the conjuncts are true) because (conjunction is such that any conjunction is true iff both of its conjuncts are true). Then the worry is that this merely actual fact about how conjunction works is not strong enough to explain any necessary fact.

Hale navigates these straits subtly and thoughtfully. For him, a proposition about the nature of conjunction explains why, necessarily, a conjunction of two propositions is true iff both of the conjuncts are true. This proposition about the nature of conjunction is itself necessarily true, because it specifies the nature of something. But it is the truth of the proposition about the nature of conjunction which does the explaining, not the necessity of this truth. (In Hale's terms, this is a 'non-transmissive' explanation of necessity; a transmissive explanation would explain a necessary truth by appeal to the necessity of some other truth.) So the explanation

is not trivial – it is the truth of the claim about the nature which explains the necessity of the claim about the truth conditions.

Moreover the explanation is strong enough to be genuinely explanatory. The necessity of the truth about the nature of conjunction does not play a role in the explanation. Nevertheless, the truth about the nature of conjunction is indeed a necessary truth. So it is robust enough to underpin the necessary necessity of the truth that a conjunction of two propositions is true iff both of the conjuncts are true.

Following this model, Hale argues that other – non-logical – metaphysical necessities can also be explained by reference to the natures of actually existing entities. For example, necessarily anything which is red is coloured, because it is of the nature of *being red* and *being coloured* that anything which is red is coloured. And necessarily,  $1 < 2$ , because it is of the nature of 1, 2, and the relation of *being less than* that  $1 < 2$ .

Reading and thinking about this, I find myself wavering between judging it to be deep and ingenious, and judging it to be trivial. The temptation to think ‘trivial’ is driven by the talk of natures, which are inherently modal, but Hale would remind me that he is not attempting to reduce modality to a non-modal basis. And yes, if one is sceptical about the existence of natures, then one will be sceptical of the efficacy of such ‘explanations’. But the way in which Hale puts natures to work, in providing a foundation for modality more generally, can give us good reason not to be sceptics (and he has already offered us good reasons to reject both reductionist and anti-realist accounts of modality).

In any case, these questions about existence must be viewed through the lens of Hale’s preferred neoFregean approach to ontology more generally, an approach he articulates and defends in the first chapter of his book, then draws upon in chapter seven especially. Broadly speaking, the idea is to understand ontological categories as subsidiary to the logical categories to which they correspond. For example, ‘to be an object is to be something to which we could make basic reference by means of a singular term, actual or possible’ (36). Such a view involves modality from the outset, otherwise our ontology becomes hostage to which singular terms have, as a matter of contingent fact, been coined. Likewise, properties are understood as the referents of actual or possible significant predicates, read in such a way

as to allow for the existence of uninstantiated properties. Thus, if a property possibly exists, then it necessarily exists.

In consequence of all this, ‘while the bare existence of meaningful singular terms is insufficient for the existence of objects, the bare existence of meaningful predicates is sufficient for the existence of properties’ (38). Both meaningful names and meaningful predicates are associated with conditions, but a name does not refer unless that condition is satisfied, whereas a predicate is associated with a property even if that condition is unsatisfied: for Hale, all it takes for there to be a certain property is for there to be a condition that things have to meet if they are to have the property.

Natures are properties, so if there is a condition which something must satisfy in order to have a certain nature, then that nature exists, and can ground necessities. Thus modalities are grounded in natures, whose existence is themselves a modal affair, vindicating Hale’s subtitle. (I take it that it’s a mistake to ask further about what sort of entity a condition is, although pleasingly I can see what condition my condition was in, by grasping the second-order property which is the nature of the first-order property which is my nature.)

The neoFregeanism is crucial to the success of the project, needed to ensure a sufficient supply of logical entities whose natures can explain logical necessities, plus all the other entities required for all the non-logical necessities. Hale reassures us that this is a ‘deflationary, or metaphysically lightweight’ (39) conception of properties, and likewise for his conception of objects. But at this point I begin to feel slightly dizzy: does this mean we have secured only a deflationary or metaphysically lightweight conception of modality, and if so have we secured sufficient advantage over the reductionist or anti-realist pictures of modality Hale rejects? The etiology of this dizziness is traceable to my own philosophical upbringing, and the difficulty of reconciling Lewis-Armstrong-Mellor approaches to metaphysics with this very different approach. But it is notable that it is the *conception* of properties which is described as deflationary or lightweight, rather than the properties themselves, and this is glossed in terms of how easy it is for properties to exist, according to the conception. Perhaps this means that the properties themselves are heavy enough to do the substantial metaphysical work required of them. Or perhaps a lightweight, deflationary conception of modality is all we need.

*Necessary Beings* contains much more than I have been able to discuss in this review. Hale explores the consequences of his view for the semantics of second- and higher-order logics, develops a 'possibility semantics' based on indeterminate or incomplete ways things could have been, and, finally, discusses the prospects for modal epistemology given this view of modal metaphysics. There is much here to reward the careful reader, and much that should have lasting influence on debates about the nature and sources of necessity.