

LOWE ON A POSTERIORI ESSENTIALISM

1

Following Kripke, many philosophers have accepted the existence of propositions concerning essences, and, more generally, propositions asserting necessities, that are knowable only a posteriori. Such an acceptance is consistent with the claim that ultimately all knowledge of necessity is a priori. A posteriori knowledge of necessity may be held to be a consequence of the combination of a priori knowledge of a proposition asserting essence or necessity with a posteriori knowledge of a non-modal proposition. E. J. Lowe (2007: 287–8) denies even this kind of derived a posteriori knowledge of essence or necessity. He reconstructs the form of an argument that is intended to lead to a proposition concerning essence but which is known a posteriori:

(I)

(1) It is part of the essence of x that x is R to the actual F .

(2) The actual F is a .

Therefore, (3) it is part of the essence of x that x is R to a .

This schema may be exemplified thus:

(Ia)

(1a) It is part of John's essence that he is the son of his actual father.

(2a) John's actual father is Fred.

Therefore, (3a) it is part of John's essence that he is the son of Fred.

As this example illustrates, instances of (1) are a priori propositions concerning essence, while instances of (2) are a posteriori propositions; instances of the conclusion

are propositions asserting particular essences, and are, it is claimed, knowable only a posteriori.¹

Lowe doubts whether the schema and this exemplification of it are valid, and in his (2007) provides reasons for his doubts that would provide, if well-founded, a powerful check on claims on behalf of a posteriori knowledge of essence and necessity. I argue below, however, that Lowe's objections can be resisted.

2

Lowe first objection targets the truth of conclusion. According to Lowe, (3a) makes the identity of one man, John, depend for his identity on another man, Fred. This leads to an infinite regress of identity dependence. Or, says Lowe, "If some man did *not* have a father—Adam, perhaps—the strange implication would be that he, unlike other men, was exempted from such identity-dependence. It is more intelligible, surely, to suppose that if one man can be thus exempted, all men are."

I am unconvinced by this for several reasons.

(a) An infinite regress (or even a circularity) in identity-dependence is not in itself objectionable. The worry is that the regress or circularity leads to indeterminacy of identity. But this worry can, in certain cases, be assuaged. This is the problem of impredicative identity criteria. Whether or not particular case leads to indeterminacy or determinacy of identity for the entities in question can be answered by representing the structure of identity-dependence as a graph (in the graph-theoretic sense). An infinite or finite-but-circular graph may have sufficient asymmetry (the graph has no non-trivial automorphisms) that each vertex (node) in the graph has its location in the graph deter-

¹There is some small degree of equivocation in Lowe's discussion as to whether we are concerned, on the one hand, with propositions that (supposedly) are a posteriori and which are necessary (or state truths that are essential) or, on the other hand, with propositions *concerning* necessity or essence that are a posteriori. The quotation from Soames (2007) with which Lowe introduces his discussion addresses the former. But the inference schema under consideration has as its conclusions propositions of the second kind. I have accordingly framed my discussion in terms of the latter. However, one might consider the purpose of the schema to be that it gives us reason to believe that propositions of the form of the second premise are necessary (or state essences)—it is these propositions that are the a posteriori propositions that are also necessary. However, the equivocation does not matter much. Instances of (2) will be necessary a posteriori if and only if instances of (3) are true a posteriori assertions concerning necessity.

mined uniquely. Likewise, a structure of identity-dependencies among a set of entities, even if infinite or circular, *can* fix the identities of the entities uniquely.²

(b) The graph-theoretic answer given in (a) notwithstanding, the problem of identity-dependence arises only if the relation in question is the *only* factor determining identity. But clearly the essence of a man is not exhausted by the identity of his father. As Lowe says, that is *part* of the essence of a man; one might suppose that his mother's identity plays a role also. More importantly other rather more discriminating details, are relevant, such as the identity of the gametes (the sperm and egg) from which the man developed (McGinn 1976: 131-3).³

(c) Let us turn to the other possibility considered by Lowe, that some man has no father. There would be no infinite regress but what Lowe calls the general essence of a man, that he is the son of his actual father, would mean, via the analogue of the inference from (1a) and (2a) to (3a), that it is part of the essence of this man, that he has no father. He would thus be exempt from the identity-dependence that afflicts other men. Lowe regards this as less intelligible than supposing that all men are exempt from this identity-dependence. But what is unintelligible in holding that most men have their identity dependent on some other man, but one man does not have his identity so dependent? Such a structure exists elsewhere. The general essence of set is such that the identity of a set is given by its members. In the theory of pure sets, only a set can be a member of a set. So sets have their identity given by the identity of other sets, and so we have a structure of identity-dependence.⁴ One set, however, is exempt from that identity-dependence, the empty set. The empty set is formally analogous to

²See Horsten (2006) for an insightful discussion of this issue. Lowe (2006: 138) makes a similar complaint against the proposal that not all properties could be essentially dispositional, 'The problem . . . is that no property can get its identity fixed, because each property owes its identity to another, which, in turn owes its identity to another and so on, in a way that, very plausibly, generates either a vicious infinite regress or a vicious circle'. In my (Author Author) show how graph theory can dismiss this concern. In his (2002: 228) Lowe discusses Davidson's criterion of event identity, that events are identified by their causes and effects, and mentioning the circularity/regress objection there also. Lowe does however concede that "in certain . . . very simple universes of an asymmetrical character [this] criterion . . . may indeed serve its intended purpose of unambiguously identifying every event non-circularly" but denies that our is such a universe. Note that the universe does not need to be simple to have the required asymmetry. Indeed, the larger it is, the more probable it is that it is asymmetric. Lowe might perhaps make a distinction between a criterion of identity and what grounds identity. I am not sure we need such a distinction. And if we do, it needs further to be argued that entities of a kind cannot be grounded holistically in appropriately organized relations among entities of that kind.

³Though even this is not sufficient, since that would not succeed in discriminating between monozygotic twins.

⁴Cf. Lowe 2002: 226-7.

Adam. All sets have the same general essence, which means that the identity of all but one is dependent on the identity of other sets (its members), while the exception has an individual essence that it has no members. If this structure is intelligible for sets, with a privileged exception to the general rule about identity-dependence, then it is intelligible for other entities as well, including men.⁵

3

Lowe has a second complaint against the inference from (1) and (2) to (3). He points out that we do not have a worked-out logic of essence, and until we do we cannot be confident with such inferences. After all, we do accept that not every entailment of an essence is itself an essence, as Fine (1994) reminds us—while necessarily everything is such that Fermat’s last theorem is true, that Fermat’s last theorem holds is not part of the essence of every object. I have some sympathy with the complaint that we must be careful when making inferences about essences. That said, there are no obvious grounds for rejecting instances of (3) as correctly stating truths about essences. Essences concern the identity and nature of things.⁶ The holding of Fermat’s last theorem provides no information about John’s identity or nature, and so may easily be excluded. But the assertion that John is the son of Fred does provide such information, and so certainly seems a *prima facie* candidate for an acceptable statement of (partial) essence.

4

One might think that whatever the merits of (I) and (Ia) as arguments leading to an a posteriori proposition concerning *essence*, there are corresponding arguments leading to conclusions concerning *necessity* and which are also a posteriori. Even if it is debatable whether (3a) follows from (1a) and (2a), it is much less contentious that (3a*) \square (John is the son of Fred) follows from (1a) and (2a). More generally, in place of the former argument we can endorse:

⁵The formal analogy to a regress of identity dependence is given by the structure of non-well-founded sets. The analogy breaks down, of course, in several respects: that sameness of membership suffices for identity of sets, but sameness of father does not suffice for identity of men; and sets can have more than one member, but a man cannot have more than one father.

⁶Aristotle (*Met.* H 7) and Locke (1964: 270), for example, both tell us that the essence of a thing is that whereby that thing is what it is.

(II)

(1*) It is necessary that, if x exists, then x is R to the actual F .

(2*) The actual F is a .

Therefore, (3*) it is necessary that, if x exists, then x is R to a .

Lowe considers the claim that (2*) expresses a necessary truth, allowing the inference to go through *salva veritate*. If so, we are then in ef

(III)

(1*) It is necessary that, if x exists, then x is R to the actual F .

(2**) It is necessary that the actual F is a .

Therefore, (3*) it is necessary that, if x exists, then x is R to a .

One might wonder whether depending on (2**) would be dialectically suitable in an argument whose aim is to show how there can be a posteriori truths concerning necessity since this argument leads to that conclusion concerning (3*) only if (2**) is just such a truth. This is a point to which I shall return.

Lowe has two related objections to the schemata concerning necessity. First, he holds that (2007: 290) “the notion of metaphysical necessity is *not* prior to that of essence ... on the contrary, ... the notion of essence *is* prior to that of metaphysical necessity ... ultimately, we ought to be guided in our views about the logic of necessity by a properly worked-out logic of essence: something that, unfortunately, we don’t yet have.” Thus we should not be too quick to endorse above schema just because current orthodoxy in modal logic does so. This leads to Lowe’s second objection. That orthodoxy is sustained by the possible-worlds model of modality, which is antithetical to the view that “represents necessary truths as being grounded in truths about essence”.

I believe that this misrepresents the relationship between essence and necessity. Note first that Lowe asserts *two* relationships: he says that the *notion* of essence is prior to that of necessity; and he says that necessary truth is grounded in truths about essence. The latter is a metaphysical relationship whereas the former is conceptual. The metaphysical relationship can hold without that implying the conceptual one, and arguably the reverse is true also. One might concede that the source of necessity is facts about essence without thereby committing oneself to any relationship between the *concepts* of necessity and essence. The concept of essence concerns the identity and nature of things whereas the concept of necessity concerns what must be the case. Insofar as modal logic is the formal articulation of the concepts of necessity and possibility (the

ideas of what must be and what could be) that logic need not be guided by the formal articulation of the concept of essence, even if it is true that necessity is grounded in essence.⁷ It is clearly plausible that if all of some set of propositions must be the case, then whatever is logically deducible from them must also be the case. That inference rule is all that is required in order to validate (III).

As the intuitive plausibility of the inference rule just enunciated shows, it is not that case that the relevant principles of modal logic are sustained *only* by a possible worlds semantics. After all, why should anyone have endorsed such a semantics unless that semantics validates certain basic principles of modal logic that we were *antecedently* inclined to accept? So *some* principles of modern modal logic must have a plausibility that is independent of the possible worlds semantics, and the inference rule articulated above is one of them. That is shown by the history of modal logic. Possible worlds semantics was introduced after C. I. Lewis's formalization of propositional modal logic in order to assist with quantified modal logic, and more specifically, with the application of '□' to predicates (i.e. open sentences) which may then be quantified over outside the scope of the operator (e.g. $\exists x \square Fx$). But the inference schema (III) does not depend on any principle of quantified modal logic and so does not depend for its acceptability on possible worlds semantics. It is true that possible worlds semantics does assist in articulating the differences between Lewis's various systems of propositional modal logic, in virtue of different features of the accessibility relation among possible worlds. But that does not show that the acceptability of (III) requires possible worlds semantics. Insofar as the latter is useful in this context, that is consistent with the '□' operator being primitive and possible worlds being defined in its terms.

Lowé further complains that our inclination to accept (2**) and to agree that (2a) expresses a necessary truth is also an artefact of possible worlds semantics. Again I disagree. While it is common to explain the necessity of 'John's actual father is Fred' by saying that both 'John's actual father' and 'Fred' are rigid designators, that is not the only way of so doing. Equally relevant is the fact that the presence of 'actual' signifies that the designation 'John's father' is *de re*. As such 'John's actual father is Fred'

⁷Someone might reasonably claim that the logic of X is not a formal articulation of (aspects of) the concept of X but rather concerns general features of X itself. In that case the truths of modal logic might well be grounded in the truths captured by the logic of essence. But that still does not mean that we cannot make claims about modal logic in the absence of a logic of essence. One might well claim (rightly or wrongly) that the truths of chemistry are grounded in the truths of physics without being thereby committed to the claim that one cannot know the truths of chemistry without having first obtained a well worked-out physics.

states of a certain man, John's father Fred, that he is identical with himself. And that is clearly necessary. The same effect may be achieved by other means, demonstratives, for example:

that man is Fred.

The latter is necessary, if true at all, for the same reason. If that man *is* indeed Fred how could that man *not* be Fred?

The same can be said of some uses of definite descriptions, according to Keith Donnellan (1966), when they are used referentially rather than attributively. In a referential use of a definite description the speaker refers to a particular object, intending to pick out precisely that thing, and so does not function, for example, as a Russellian definite description. Thus the expressions 'the murderer' and 'the babysitter' may be used referentially in the sentence:

the murderer and the babysitter are identical

to say of a person that he is identical with himself.⁸ Likewise:

John's father is Fred

can be used to say of that man, John's father, that he is Fred. If indeed John's father is Fred, the sentence is again being used to say of a certain man that he is identical with himself. In both cases the sentences are being used to express necessary truths.

Famously, Kaplan (1978) employed his 'dthat' to achieve much the same end as Donnellan thinks is achieved by referential uses of an expression.⁹ (It is true that 'dthat' is often explicated by saying that it rigidifies a definite description, but that is not how Kaplan himself introduced the term.) Hence, in:

⁸Famously Donnellan thinks that if nothing satisfies the definite description, it may, in its referential use, still be used to refer to an object, while Kripke (1980: 25) thinks that such cases may be handled by a speaker's reference versus semantic reference distinction. That does not affect the claim that in cases without error, a definite description being used referentially does refer rigidly. Nathan Salmon (1982, 1991) takes Kripke's point further while Howard Wettstein (1981, 1983) defends the semantic significance of Donnellan's referential/attribution distinction. Salmon (1982: 43) takes the claim that 'the murderer and the babysitter are identical' expresses a necessary truth to be implausible and thus to refute the semantic significance claim. But note that it is agreed on all sides that *if* the expressions are used in a referential way, *then* that proposition is necessary—and that fact is explained without appealing to rigid designation, but is explained instead by pointing out that understood thus the sentence expresses the necessary truth that Jones (the referent) is self-identical (Reimer 1998: 136). Furthermore, on Wettstein's behalf, it may be remarked that it only appears that the proposition expressed is contingent, since we tend to read the sentence attributively. See Reimer (1998) for an extended discussion.

⁹But without running to the speaker's reference versus semantic reference issue mentioned in Footnote 8.

Dthat(John's father) is Fred

'Dthat(John's father)' can be understood as a means of denoting *de re* the entity satisfying the description.

In all these cases, the principal idea is that the expression in question functions to refer precisely to that object. Hence the conjunction by the identity sign of any two such expressions that in fact refer to the same object, or such an expression and a name of the object it refers to, forms a sentence that says of some object that it is identical to itself and so expresses a necessary truth. That is how

John's actual father is Fred

should be understood, and without any invocation of possible worlds. Conversely, the argument (Ia) can be recast as:

(I[†])

(1[†]) It is part of John's essence that he is the son of dthat(his father).

(2[†]) Dthat(John's father) is Fred.

Therefore, (3[†]) it is part of John's essence that he is the son of Fred.

At this point we may return to a worry I raised earlier. We cannot appeal to (III) if we wish to show that there are truths concerning necessity that are known (only) a posteriori. For (III) can help us show this only if instances of (2**) are just such truths. For the same reason we cannot be implicitly relying on the necessity of 'the actual *F* is *a*' in allowing (II) to be valid. And we need not. What (Ia) and (Ib) require, and likewise their analogues in terms of necessity, is that their first premises are *de re* modalities and that their second premises are statements of genuine identity in the sense just discussed. Since the first premise in any such argument is *de re* we can substitute expressions that refer to precisely the same object. And such expressions are just what the second premise supplies. Although the second premise is in fact necessary, that is not what makes the inference valid.

5

Lowé starts by considering an argument from Soames which aims to show that the identity 'water = H₂O' is necessary and a posteriori. There are some problems with this, since it is not entirely clear that a posteriori investigations deliver even that is is

true that water is identical to H₂O. That said one may agree that if the proposition is true, it is necessarily true. More straightforward is the version of the argument that Lowe gives:

(1b)

(1b) It is part of water's essence that it has its actual molecular composition.

(2b) The actual molecular composition of water is the H₂O one.

Therefore, (3b) it is part of water's essence that it has the H₂O molecular composition.¹⁰

We have examined Lowe's reasons for rejecting inferences that have this form. But as it stands we may resist those reasons: such inferences, and their analogues involving necessity, do indeed show how it is that there can be a posteriori knowledge of essence and necessity.

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¹⁰Like Putnam's Twin Earth thought experiment, this argument does not yield that it is necessary that water = H₂O, since it has not been shown that having the H₂O molecular structure is sufficient for being water.

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