# Aristotelian essentialism in David Lewis's theory

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*Abstract*: David Lewis is usually thought to reject what Quine called 'Aristotelian essentialism'. In this paper, I will define Aristotelian essentialism and locate it in the context of the criticism that Quine made of quantified modal logic. Indeed, according to Quine, Aristotelian essentialism would be one of the consequences of accepting quantified modal logic. Then, I will explain Lewis's stance in the Quinean debate against quantified modal logic. Finally, I will deal with the question as to whether Lewis accepts or rejects Aristotelian essentialism. I think there are different plausible interpretations of the essentialist thesis, and I will distinguish between three such interpretations. This distinction between different interpretations of essentialism is both interesting *per se* and helpful in understanding the senses in which Lewis is or is not an antiessentialist. I will say, in fact, that while it is true that Lewis rejects Aristotelian essentialism under the first two understandings of the essentialist thesis, he endorses such a thesis according to a third understanding. I will then take this to show that there is a sense in which Aristotelian essentialism survives in Lewis's metaphysical theory.

# 1. Introduction

Let us take essentialism to be the doctrine that at least some non-trivial property is determined to be essential to some individuals, where trivial properties are properties such as being either P or non-P, for any property P.<sup>1</sup> According to this characterization, anyone who believes that no non-trivial property is determined to be essential to any individual is regarded as an antiessentialist.

Given such a definition, commitment to essentialism simply consists in claiming, without further explanation or characterization, that some non-trivial properties are determined to be essential to some individuals. Nothing has been said about what is required for a property to be determined as essential.

<sup>&</sup>lt;sup>1</sup> In the example, the triviality of the property of being P or non-P is given by the fact that this property belongs to all things. (For attempts to establish which other properties count as trivially essential, see for instance Marcus 1967, and Della Rocca 1996).

Let us call this conception of essentialism "metaphysically neutral essentialism".<sup>2</sup>

There is a further requirement for a stronger, metaphysically more robust conception of essentialism. This further condition is generally attributed to W. V. O. Quine (1953a; 1953b). Given an individual a and an attribute P, it is a matter independent of how a is represented (namely, conceived or described) whether or not P is determined to be essential to a. Let us call this stronger conception of essentialism 'Aristotelian essentialism' (hereafter AE), as Quine calls it.<sup>3</sup> There is thus another way to be antiessentialist, namely, to deny that it is independent of how individuals are represented which (non-trivial) properties are determined to be essential to those individuals.

David Lewis is said to accept metaphysically neutral essentialism. However, he is regarded as an antiessentialist when people have AE in mind. The reason for this is that Lewis's account of what it is for a property to be determined as essential is said to rely on how individuals are represented.

In this paper, I will firstly explain AE and contextualize it within Quine's criticism of quantified modal logic (QML) (Sections 3 and 4). Indeed, according to Quine, AE would be one of the consequences of accepting QML (Section 4.1). Afterwards, I will set out Lewis's position in the Quinean debate against QML (Section 5). Then, I will deal with the question as to whether Lewis accepts or rejects AE (Section 6). I shall argue that we should distinguish between three different understandings of AE. While Lewis does reject AE, under the first two readings of AE (Sections 6.1, 6.2), I will claim that he ought to be regarded as accepting AE, according to the third understanding of AE (Section 6.3). I will then take this to show that there is a sense in which AE survives in Lewis's metaphysical theory.

# 2. A preliminary clarification

If one believes in the semantic inconstancy of essentialist claims, as we will see Lewis does, then it would be misleading to talk about "essential properties". Instead, it seems safe to talk about properties whose instantiation by an indi-

<sup>&</sup>lt;sup>2</sup> Throughout this work I will use 'lazy' talk about properties and attributes. That is, my metaphysically neutral essentialism does not intend to rule out the nominalist. Indeed, in the following, I will say that David Lewis accepts such a thesis, even though he is a class nominalist: he identifies properties with classes of particulars. Therefore, I do not think that the metaphysically neutral position on essentialism requires the commitment to properties.

<sup>&</sup>lt;sup>3</sup> In Section 6.3, I will claim that Lewis ought to be seen as accepting AE, under one of the readings of AE I will discuss. However, one must bear in mind from the outset that there is a crucial difference between Lewis and the Aristotelians: as we will see, Lewis does not accept any essentialist primitives in his metaphysics. So, if one believes that AE presupposes fundamental modalities in the metaphysics, then clearly Lewis rejects AE.

vidual might be required to account for the truth in a context of an essentialist claim about that individual.<sup>4</sup> However, if one rejects inconstancy, one might want to call those properties "essential properties". In order to align Lewis's view about essentialism with other views, I will use expressions like "properties that are determined to be essential", or "properties that count as essential", instead of "essential properties". When done differently, it will be only for the sake of brevity.

# 3. Quinean skepticism about quantified modal logic

If we are interested in essentialism, we are concerned with *de re* modality.<sup>5</sup> If we are concerned with *de re* modality, we are interested in quantified modal logic (QML). QML is the combination of quantifiers with modal operators. Not all such combinations make for *de re* modality. *De re* modality comes when a modal operator is allowed to apply to an open sentence in which variables occur bound by a quantifier whose scope includes the modal operator, as in (1):

### (1) $\exists x \Box Hx$

When the modal operator applies to a closed sentence, as in (2),

### (2) $\Box \exists x Hx$

the interaction of modal operators with quantifiers gives rise only to *de dicto* modality.

According to Quine (1953b, 156-157), there are three different grades of modal involvement. The first or least degree occurs when modality is expressed by a semantical predicate, which attaches to names of sentences. In the second and third grades, modality belongs to the object-language: the second grade arises with *de dicto* modality and the third grade, which is the gravest one, occurs with *de re* modality. Famously, Quine was a consistent critic of QML, es-

<sup>4</sup> I believe that this point can be clarified by referring to a case that is safely distant from all modal matters. I would imagine that everyone believes in the semantic inconstancy of claims of the form "*a* is close to *b*". While, we can happily talk of the distance properties (relations) that make closeness claims true in some context, and be as realistic as we like about those, we should resist talking of 'closeness properties'. Indeed, talk of 'closeness properties' invites confusion between something that merits semantic characterization (closeness claims can be said to be context-dependent: that is a semantic characterization) and something that does not (any non-semantic distance property that might be picked out by a truth-condition).

<sup>5</sup> For Quine, questions of essentialism are at one with questions of necessity *de re.* This is in common with many philosophers (like Kripke and Lewis), but not with most philosophers after Kit Fine (1994) who would distinguish the two. In the present work, I will not distinguish between the two.

pecially of QML when it gives rise to *de re* modality. In other words, he found the third grade of modal involvement objectionable (see especially Quine 1953a; 1953b).<sup>6</sup>

Before trying to understand the reasons why Quine was skeptical about QML, an important point has to be made: Quine has no problem at all with the fact that in our ordinary language we use *de re* modal sentences. He only thinks that whatever is non-canonical (and, as we will see, *de re* modal discourse is non-canonical) is free of ontological commitments. Quine's aim is indeed to build a system of canonical representations with the property that *"all traits of reality worthy of the name can be set down in an idiom of this austere form if in any idiom"* (Quine 1960, 209). What philosophers have to do, for Quine, is adapt our best available theory of the world in a canonical language, and this canonical language has to be taken as making a genuine claim about what there is in the world, that is, it implies ontological commitments to what exists. Therefore, if QML is not required for describing the most general traits of reality, then it has no place in Quinean canonical notation.

We might thus paraphrase Quine's general concern about QML in the following way: should QML and, so, *de re* modal predications have a place in our canonical notation just as they have a place in ordinary language? Since Quinean canonical notation is supposed to be given in a first-order logic, and hence it is extensional, Quine's concern about QML amounts to the question: is our canonical language a first-order extensional logic, or should it be extended in order to also accept QML?

The first thing to be said, indeed, is that modal contexts are non-extensional contexts. A context is extensional if and only if (hereafter iff) given two formulas or terms  $\phi$  and  $\psi$ , such that  $\phi$  contains  $\psi$ , and given  $\psi^*$  that has the same extension of  $\psi$ , if all the occurrences of  $\psi$  in  $\phi$  are substituted with  $\psi^*$ ,  $\phi$  does not change its extension.

Since, as we saw, it is desirable for the canonical language to be extensional, if a region of discourse is not extensional, then, according to Quine, we have reason to doubt its claims to describe the structure of reality. Thus, Quine is very reluctant to accept a non-extensional extension of the canonical notation.

<sup>&</sup>lt;sup>6</sup> In the following, I will discuss the Quinean skeptical attitude toward QML. There are several attempts in the literature that try to interpret Quine's criticism of QML, and they differ over many points. I will indicate (following Divers 2017b), for instance, one point over which interpretations of Quine's skepticism tend to diverge. However, it is not my aim here either to offer a detailed explanation of Quine's skepticism toward QML, or to discuss all the different understandings of it. I only aim to give an overall presentation of the Quinean criticism, in order to subsequently discuss Lewis's stance toward QML and, mainly, toward AE, on the understanding that there might be many authors who would interpret Quine's skepticism in a quite different manner.

At any rate, he certainly does not want to accept any referential opacity in the canonical notation.

Referential opacity is a particular kind of failure of extensionality, which regards singular terms. A context is referentially opaque if, by substituting different singular terms with the same extension, that is, different terms that refer to the same object, the extension of the whole sentence in which the substitution occurs, namely its truth-value, can be altered. By contrast, in a referentially transparent context if, for instance, something true is said about an object, nothing will change if we refer to that very same object with a different name. In a referentially opaque context, thus, singular terms do not occur referentially.

According to Quine, modal contexts are also opaque, and opacity prefigures the violation of the basic logic of identity. The well-known example he employs in order to illustrate the opacity of modal contexts is the following. From the true identity statement

(3) 9=the number of planets,

and from the true sentence

(4) 9 is necessarily greater than 5,

we obtain the sentence

(5) The number of planets is necessarily greater than 5,

which is false, despite being obtained by (4) for substitution of two coreferential singular terms – by virtue of (3). Opacity challenges the basic logic of identity, grounded in what is generally called 'the principle of the indiscernibility of identicals', the schema of which is given by (II): for any open formula  $\phi$ ,

(II)  $\forall x \forall y (x = y \longrightarrow \varphi x \leftrightarrow \varphi y)$ 

This principle, Quine (1953b, 172-173) claims, cannot be challenged. That is, the logic of the canonical notation must validate (II). Therefore, if modality gives rise to opaque contexts, it means that there is no place for modality in the canonical notation. After all, canonical notation is supposed to indicate to us the structure of reality. Thus, singular terms in sentences of canonical notation are supposed to ontologically commit us to the existence of the objects they refer to. Hence, from Quine's perspective, we cannot admit in our canonical notation referentially opaque contexts in which terms happen not to refer to their extensions.

However, according to Quine, "[u]ltimately the objects referred to in a theory are to be accounted not as the things named by the singular terms, but as the values

*of the variables of quantification*" (1953a, 144-145). For Quine, singular terms are eliminable by paraphrase. Thus, if opacity is a feature of modal contexts, then it must show itself in connection with variables of quantification as well as in connection with singular terms (see Quine 1953b, 172).

The criterion for referential opacity with regard to quantification is the following: "*a referentially opaque context is one that cannot properly be* quantified into (*with quantifier outside the context and variable inside*)" (Quine 1953b, 172). We can quantify into a context only if the terms referentially occur in that context, that is, only if they refer in that context to the objects to which they usually refer. Quotations are the opaque context *par excellence*. Trying to infer:

(6) ∃x "x>5"

from

does not make any sense. The existential quantifier in (6) is followed by no occurrence of its variable; that is, the "x" in "x>5" in (6) cannot be bound by the quantifier. The reason for this is that "9" in (7) does not refer to an object, that is to the number 9. Therefore, we are not allowed to apply an existential generalization to (7). Thus, it is not possible to quantify into a quotation context, because the terms that occur in that context do not refer to their objects. So, quotation contexts are opaque (see Quine 1953b, 158-159).

In the same way, Quine (1953a, 146-150; 1953b, 170-171) claims, it is not possible to quantify into modal contexts. So, from (4)

(4) 9 is necessarily greater than 5,

we cannot infer

(8)  $\exists x (x is necessarily greater than 5).$ 

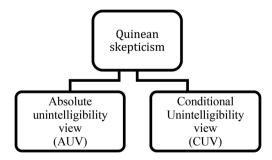
Indeed, we might infer (8) from (4), only if we considered the occurrence of '9' in (4) as referring to the object 9. However, in (4), 'to be necessarily greater than 5' is not a trait of the number 9, but depends on the manner of referring to it: it turns out true if we refer to 9 by "9", but false if we refer to 9 by "the number of planets" – as (5) shows. Thus, putting "x" in (8) in place of "9" in (4) does not make more sense than putting "x" in (6) for "9" in (7). In both contexts, "9" does not occur referentially, so we cannot quantify in such contexts: the existential quantifier cannot bind variables whose values are not ordinary entities. Therefore, since it is not possible to quantify into modal contexts, they are opaque contexts.

Accordingly, this is the source of the Quinean skepticism about QML: modality creates referentially opaque contexts; referential opacity is a symptom of the failure of the logic of identity, and such a failure would call for a devastating revision of the core of the non-modal part of the logic. Therefore, referential opacity is something that cannot be tolerated in the canonical notation. In other words, the canonical language should not be extended in order to also accept QML, which creates referentially opaque contexts.

# 4. Two interpretations of Quinean skepticism about QML

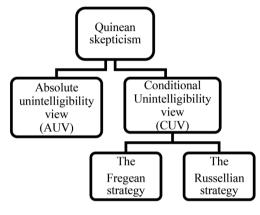
John Divers (2017b) points to a misunderstanding about the nature of Quine's complaint against QML. In the following Sections, I shall explain and explore such a misunderstanding in order to discuss, afterwards, Lewis's stance towards QML.

There have been at least two interpretative approaches to Quine's skepticism regarding QML. According to what one can take to be the most common interpretation of the Quinean skepticism, by virtue of the reasons explained in Section 3, Quine finds QML absolutely unintelligible or meaningless. I will call this interpretation "the absolute unintelligibility view" (AUV). A less common way of understanding Quine's position is that QML, according to him, is not absolutely unintelligible, but rather, it is unintelligible *if* modal contexts are treated as opaque. Let us name this interpretative perspective "the conditional unintelligibility view" (CUV). The CUV emphasizes that Quine did not believe QML to be absolutely unintelligible. Rather, he believed that it made no sense to quantify into modal contexts, as long as modal contexts are treated as opaque contexts. Therefore, the modal logician, according to this interpretation, *can* quantify into modal contexts, but she has to say that modal contexts are not opaque contexts after all.



Picture 1.

Quine himself illustrates two different ways that have been explored for making modal contexts referentially transparent. Clearly, if the strategies for showing modal contexts to be transparent are regarded as attempts to reply to Quine, then these strategies can be taken as supporting the CUV. Thus, the two following strategies might be seen as attempts to show that QML is intelligible, given that modal contexts are not opaque.



Picture 2.

The first strategy aiming to show that modal contexts are not opaque was suggested by Church and Carnap. We can call their strategy 'the Fregean strategy', by virtue of the fact that it employs the Fregean solution to deal with alleged opaque contexts. According to this strategy, modal contexts are not opaque, because quantification does not vary over extensional entities whose names fail to be interchangeable in modal contexts. Rather, quantification varies over a domain of special entities, that is, intensional entities. So, the domain of quantification is given by those entities that can only be selected by analytically equivalent conditions. In other words, names of intensional entities are supposed to satisfy the condition that any two of them naming the same intension would be interchangeable in modal contexts. The domain of quantification is thus given by only those objects whose names are interchangeable in modal contexts salva *veritate.* Following this strategy, since according to a given logic "to be is to be the value of a variable" (Quine 1948, 34), the logician is led "to hold that there are no concrete objects (men, planets, etc.), but rather that there are only, corresponding to each supposed concrete object, a multitude of distinguishable entities (perhaps 'individual concepts,' in Church's phrase)" (Quine 1947, 47).

According to the Fregean strategy, the object 9, for instance, is ruled out by the domain of the discourse, since it can be named by at least two names ('9'

and "the number of planets") which are not interchangeable in modal contexts. In place of 9, we have several intensional entities that broadly correspond to Fregean senses or Carnapian individual concepts: among these entities there are the-9-concept and the-number-of-planets-concept. Therefore, according to the Fregean strategy, necessity does not apply to objects like the number 9 independently of how they are specified.

A modal logic that confines its domain of discourse to intensions is supposed, thus, to be free of referentially opaque contexts. Indeed, the fact that the sentences (4) and (5) above have different truth-values no longer represents a violation of the principle of substitutivity of coreferential names. Indeed, the inference from (4) to (5) does not rely on the substitution of two names which refer to the same intension (see Quine 1953a, 150-152).

However, this strategy faces obvious problems from Quine's perspective. For instance, if our domain of discourse consists of intensional entities, then two names are interchangeable *salva veritate* only if they are terms of an analytically true statement of identity, that is, only if they are synonymous. But, notoriously, Quine (see, for instance, Quine 1951) was a great opponent of concepts such as analyticity and synonymy.

But what it is more important here is that, even though such problematic intensional entities were admitted, Quine claims, "the expedient of limiting the values of variables to them is after all a mistaken one" (1953a, 152). The reason is that, even in a domain of intensional entities, Quine claims, there can be examples that violate the principle of substitutivity. Even though the universe of discourse is given by intensional entities, we are not able to satisfy the requirement that "any two conditions uniquely determining x are analytically equivalent" (1953a, 152). Indeed, Quine (1953a, 152-153) suggests, take "A" as a non-analytic truth and "F" as a condition that uniquely determines x. Then, consider the condition "A  $\wedge$  Fx" that uniquely determines x, but it is not analytically equivalent to "Fx". Therefore, even though x is an intensional object, the principle of substitutivity fails. This means that the Fregean strategy, according to Quine, is not successful in making QML intelligible, because it does not make modal contexts free of their supposed opacity.

The second strategy that has been followed in order to guarantee the referential transparency of modal contexts and, thus, the possibility of quantifying into them, is the strategy proposed by Smullyan (1948; Quine 1953a, 154-155; 1953b, 171-172). Let us call this strategy "the Russellian strategy", by virtue of the fact that Smullyan invokes the Russellian theory of definite descriptions and his distinction of scopes of descriptions.

According to this strategy, we can maintain a non-objectionable domain of extensional entities. The crucial point of the Russellian strategy is that the con-

clusion (5) of the argument supposed to show the opacity of modal contexts is ambiguous. Indeed, recall (5)

(5) The number of planets is necessarily greater than 5.

Well, (5) might be read either as the false *de dicto* statement (9):

(9)  $\Box$  ( $\exists x$  (The number of planets  $x \land x > 5$ )),

or as the true *de re* statement (10):

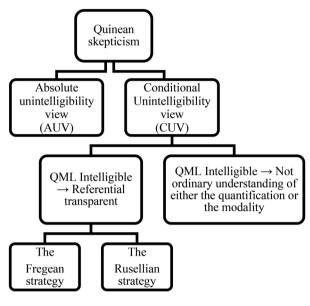
(10)  $\exists x \text{ (the number of planets } x \land \Box (x > 5)).$ 

If we recognize this ambiguity and privilege the *de re* reading, then it is no longer the case that, by substitution of two coreferential names ("9" and "the number of planets"), we go from a true statement (4) to a false one. Therefore, modal contexts can be treated as referentially transparent contexts after all.

Quine admits (1953a, 154) that the Russellian strategy, contrary to the Fregean strategy, solves the problem of the opacity of modal contexts and, so, makes QML intelligible. However, as we will see in detail in Section 4.1, Quine thinks that following the Russellian strategy comes with some price to be paid, namely, with the acceptance of what he calls "Aristotelian Essentialism" (AE).

Before dealing with how AE is supposed to stem from the Russellian strategy, I would like to point out that there is another way to interpret the Quinean skepticism, which is compatible with CUV. From Quine (1953a, 150), we learn that the combination " $\exists x \Box$ " is unintelligible when the quantification and the modality are understood in the usual way. Divers, in his explanation of the misunderstanding about Quine's complaint against QML, underlines this interpretation: "*What is not obviously intelligible is the characteristic construction when we bring to its understanding the conceptions of quantification and modality 'as ordinarily understood'*." (2017b, 197).

Therefore, it seems that, in opposition to AUV, there are two CUVs.



Picture 3.

According to the first CUV, as we saw, QML is intelligible only if modal contexts are treated as referentially transparent. According to the second CUV, QML is intelligible only if one of the quantification and the modality is not ordinarily interpreted.

Now, for Quine (1953a, 143), as we have seen, the standard understanding of quantification is that according to which the values of our variables are ordinary entities. On the other hand, according to him, the ordinary interpretation of modality understands modality as strict modality, that is, as analytic modality. This means that the second CUV says that QML is intelligible only if either the quantification is not interpreted as varying over ordinary entities or the modality is not read as analytic modality.

However, there is only an apparent bifurcation between the two CUVs: they are strictly connected. It can be easily seen, indeed, that both the attempts to guarantee the referential transparency of modal contexts (the Fregean and the Russellian strategies) end up with an extraordinary reading of at least one of the two components. In fact, they mirror two different ways of resolving the incompatibility of the combination of the ordinary understandings of such elements.

On the one hand, the Fregean strategy, as noted, departs from the ordinary understanding of quantification and proposes an understanding of it as varying over a domain of intensional entities. Divers (2017a) calls this strategy "the

language-dependence strategy". Indeed, according to this strategy, the values of our variables are entities whose nature stands in relation to ways of specifying them. And this is perfectly compatible with the ordinary understanding of modality as analytic, that is, as linguistic in character.

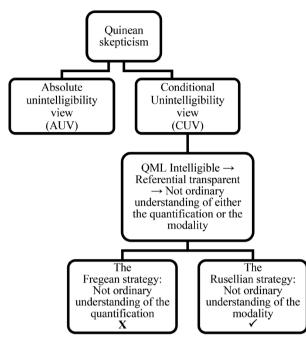
On the other hand, the Russellian strategy, while maintaining the ordinary understanding of quantification, must invoke a different understanding of modality, that is, an understanding of modality that is compatible with the language-independent character of the extensional entities over which the ordinary quantification varies. That is, a language-independent, non-analytic modality: it must invoke metaphysical modality. In fact, if we use quantification over extensional entities in modal contexts, then it no longer makes sense to interpret the modal operators as analytic modalities. Quine writes:

Essentialism is abruptly at variance with the idea, favored by Carnap, [C.I.] Lewis, and others, of explaining necessity by analyticity. For the appeal to analyticity can pretend to distinguish essential and accidental traits of an object only relative to how the object is specified, not absolutely (1953a, 155).

That is, the idea of properties necessarily had by objects in themselves is "abruptly at variance" with any interpretation of necessity which understands it as linguistic in character, rather than grounded in the nature of things. Thus, the modality that can make sense of such an idea is a modality that applies to objects independently of how they are represented, that is, the metaphysical modality. In other words, analytic necessity has, by definition, a linguistic character, that is, it is a kind of language-dependent necessity, so that it cannot make sense to apply this kind of necessity to the objects independently of how they are specified. Thus Divers (2017a) calls the Russellian strategy "the language-independence strategy".

So, the two attempts to achieve referential transparency in modal contexts rely on either an extraordinary reading of quantification (the Fregean strategy) or an extraordinary understanding of modality (the Russellian strategy). Therefore, it seems that an extraordinary reading of one among quantification or modality is a necessary condition for the transparency of modal contexts. Of course, it is not a sufficient condition. Indeed, only the extraordinary reading of modality (namely, the Russellian strategy), according to Quine, allows modal contexts to be referentially transparent.

Therefore, we can see that there is a strict connection between the two CUVs. Indeed, QML is intelligible only if modal contexts are referentially transparent, and modal contexts are referentially transparent only if the ordinary understanding of modality is dropped.



Picture 4.

### 4.1. Intelligibility at some costs

We have seen that, according to Quine, only the Russellian strategy succeeds in showing the intelligibility of QML. However, as anticipated, following such a strategy is not, for Quine, a free lunch. According to him (Quine 1953a, 155-156; 1953b, 172–174), making modal contexts referentially transparent and, so, making QML intelligible, comes with three prices to be paid. I will focus only on the third price, the most important for my purposes (for the discussion of the first two prices Quine predicted, I refer the reader to Quine 1953a, and Quine 1953b; for the discussion of how Lewis's theory behaves with regard to them, see Divers 2017a).

The third consequence that Quine thinks follows from the approval of QML is the acceptance of "Aristotelian Essentialism" (AE). Quine gives varies definitions of AE. Let us consider two of them:

This is the doctrine that some of the attributes of a thing (quite independently of the language in which the thing is referred to, if at all) may be essential to the thing, and other accidental. E.g., a man [...] is essentially rational and accidentally two-legged and talkative, not merely qua man but qua itself. More formally, what Aristotelian es-

sentialism says is that you can have open sentences – which I shall represent here as 'Fx' and 'Gx' – such that [...] ( $\exists$ x) (nec Fx. Gx. ~ nec Gx) (1953b, 173-174).<sup>7</sup>

### Alternatively,

An object, of itself and by whatever name or none, must be seen as having some of its traits necessarily and others contingently, despite the fact that the latter traits follow just as analytically from some ways of specifying the object as the former traits do from other ways of specifying it (1953a, 155).

Why is AE supposed to stem from the Russellian strategy, that is, from the strategy capable, for Quine, of making QML intelligible?

Well, if we are willing to treat modal contexts as referentially transparent contexts, this means that when we say that the property P is determined to be essential to an object a, if this is true, then P will be determined to be essential to a independently of how we refer to a. In other words, a, in itself, has the property P essentially. Indeed, one might change the name she uses to refer to, say, the number 9: she can choose "9" or "the number of planets". However, this does not matter, because the property of being greater than 5 will be determined as essential to the object, independently of how it is specified.

Moreover, as we already saw, if we use quantification over extensional entities in modal contexts, then it no longer makes sense to interpret the modal operators as analytic modalities. And it was said that the Russellian strategy invokes a metaphysical understanding of the modality.

Therefore, here we have AE: an ordinary object is claimed to have in itself, regardless of how it is represented, a property as a matter of necessity, and the necessity at stake is grounded on the nature of that object, rather than on our ways of referring to it.

However, AE is an unacceptable doctrine for Quine, for the idea of essences, at least on his account, has no serious scientific use. AE is, from Quine's perspective, an unacceptable doctrine: his view of reality does not include the notion of an object having in itself some properties essentially and others accidentally. In Hylton's words, according to Quine, "[...] *modern science, unlike Aristotelian science, simply has no place for the notion*" (Hylton 2007, 354). Therefore, according to this interpretation, Quine's conclusion is that since the canonical notation implies ontological commitments to what exists according to our best available theory of the world, and since there is no scientific use of a notion of necessity that inheres in things and not in language, then the canonical notation must not be extended in order to include QML which commits us to AE.

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<sup>&</sup>lt;sup>7</sup> Where "nec" stands for " $\square$ ".

In the following Sections, in order to study the relationship between Quine's criticisms of QML and AE on the one hand, and David Lewis's stand toward AE on the other, I will privilege the CUV. And, to sum up, according to the interpretation privileged in my reading, Quine believes that the canonical notation must not be extended in order to include QML for the following reasons: (a) referential opacity cannot be tolerated in the canonical language; (b) QML is intelligible only if modal contexts are treated as non-opaque; (c) the price for cleansing QML of referential opacity is, among other things, to accept AE; and (d) AE is, for Quine, an unacceptable doctrine.

The following Section will explore Lewis's stand toward the Quinean skepticism.

# 5. Lewis's stand toward Quine's skepticism

Lewis adopts an alternative interpretation of *de re* modal discourse that does not proceed through QML. We saw that there is no place in the Quinean canonical notation for *de re* modal sentences such as (1):

# (1) $\exists x \Box Hx$

(where "H" stands for the predicate "being human"). (1) translates in QML the essentialist sentence (11):

### (11) Someone is essentially human.

There is no place for (1) in Lewis's fundamental notation either, that is, in counterpart theoretic language. Quine and Lewis thus agree that there is no place for QML and, so, for *de re* modality in their fundamental languages.

However, Lewis builds a reductionist, non-canonical defense of *de re* modal predication. I think there are three important aspects in which the Lewisian reductionist, non-canonical defense of *de re* modality consists.

First of all, Lewis (1968) does not provide a formalization of modal discourse by means of modal operators. That is, he does not provide a non-extensional logic, as happens in the context of those theories that accept QML. Rather, Lewis offers an extensionalist interpretation of *de re* modal discourse given in a first-order logic with identity and, in so doing, he provides an extensional logic for the modal discourse. Given his metaphysical commitments to possible worlds and counterparts (parts of worlds), he reduces modal operators to quantifiers which range over such worlds and counterparts. Modal operators are thus eliminated from the Lewisian fundamental language. Lewis, hence, offers translations of modal formulas in an extensional (non-modal) fundamental lan-

guage. (11) is thus translated in counterpart theory (hereafter CT) by (12):

### (12) $\exists x (Ix@ \land \forall y \forall z (Wy \land Izy \land Czx \longrightarrow Hz))$

(where "*I*" stands for "to be in a possible world", "@" for "the actual world", "*W*" for "world" and "*C*" for "to be a counterpart"). (12), informally, says that there is an actual *x* such that every counterpart of it, in any world, is human.

The translation of (11) into CT is thus given in non-modal terms. Indeed, neither "counterpart" nor "world" nor "actual" are defined in modal terms. Thus, semantically speaking, there is no primitive modal predication, such as 'being essentially human', that is attributed to something actual. Therefore, the translation of (11) into CT does not require any semantically primitive modality. In other words, Lewis opens the possibility for a defense of *de re* modal predication without locating it in the fundamental language, namely, without making it a feature of the canonical notation of CT (see Divers 2017a). Accordingly, there is a place in CT for sentences that report the conditions under which *de re* modal sentences are true, even though modality is not a primitive feature of the canonical notation: CT allows for the formulation and the meaningfulness of essentialist sentences, by admitting their translations in non-modal terms.

Secondly, *de re* modal sentences are made true by non-modal facts. That is, in Lewis's view, the truth of an essentialist sentence does not commit one to fundamental modality in the realm of reality. Indeed, there is no primitive modality in Lewisian fundamental reality. In other words, metaphysically speaking, the truth of (11) does not require the postulation of any primitive modal property, such as "being essentially human", that is attributed to something actual. However, the metaphysics must be accommodated in order to provide for truth-conditions of essentialist sentences to be satisfied, without appealing to alleged fundamental modal features that objects have in themselves. In order to guarantee the truth of such sentences, other ontological commitments are required: the realm of being must be expanded, in Lewis's view, by adding a plurality of worlds and individuals (see Lewis 1986; Divers 2017a). So, for Lewis, the fact that someone is essentially human is reduced to the non-modal fact that someone shares the property of being human with all its relevant counterparts. Accordingly, there is no primitive modality in the nature that makes essentialist sentences true.

Therefore, the fact that there is no primitive modality in the Lewisian fundamental language mirrors the fact that there is no primitive modality in the Lewisian fundamental reality either. From Lewis's perspective, thus, there are no irreducible *de re* modalities either in the fundamental language of CT or in the fundamental reality.

Finally, it is important to note that, in order to be a "defense" of *de re* modal sentences, Lewis's theory must guarantee the truth of such sentences. That is,

Lewis's theory would not offer a defense of *de re* modal discourse, if *de re* modal sentences were always interpreted as false. Therefore, we should consider how Lewis's account of semantics fits with his general theory of interpretation. That general theory emphasizes the virtue of charity of truthfulness. According to Lewis, there is a rule of accommodation holding that "what you say makes itself true, if at all possible, by creating a context that selects the relevant features so as to make it true" (1986, 251). This is also true in *de re* modal contexts. For instance, the Kripkeans make claims of essentiality of origins (see Kripke 1980). When they make such claims, they speak truly in the context of their own speaking. Indeed, in that context, according to Lewis's general theory of interpretation (1986, 252), we are bound to project backwards the kind of counterparthood that must be selected in order to make their essentialist statements true. Therefore, for Lewis, given a *de re* modal sentence, if at all possible, we should take such a sentence to be true in the context of its utterance. That is, Lewis makes sentences such as (12) (which is the translation of a *de re* modal sentence in CT) come out true, in the context of their utterances.

So, this is how Lewis makes space for a reductionist, non-canonical defense of *de re* modality: in his fundamental language, there are essentialist sentences reduced to non-modal terms which are made true, in the context of their utterance, by non-modal facts.

To resume the terminology I used in the Introduction, Lewis defends what I called "metaphysically neutral essentialism". Indeed, as we have just seen, he provides a defense of *de re* modality: he accepts that there are sentences in CT that report the conditions under which attributions of non-trivial essential properties are true, and such sentences are made true in the contexts of their utterances.

A non-reductionist, canonical defense of *de re* modality would consist in accepting *de re* modal sentences in the canonical language which are made true by modal facts. By contrast, a reductionist, non-canonical defense of *de re* modality, the one Lewis provides, consists in accepting in the canonical language translations in non-modal terms of *de re* modal sentences which are made true by non-modal facts.

Therefore, Lewis accepts metaphysically neutral essentialism, by providing a reductionist, non-canonical defense of *de re* modality.

To sum up, both Quine and Lewis reject a non-reductionist, canonical defense of *de re* modal discourse: they both believe that there is no place in the canonical, non-reducible level for *de re* modal statements and that there are no fundamental essential properties that are attributed to objects in the realm of reality. However, Lewis, but not Quine, makes space for a reducible, noncanonical defense of *de re* modality.

### 5.1. Opacity

I said that CT is an extensional first-order language. Therefore, since CT is a fully extensional language, and since opacity is a particular kind of failure of extensionality, we might conclude that, in CT, *de re* modal discourse can be translated without incurring opacity. Thus, Lewis seems to take Quine's point. He adopts an extensional (non-modal) first-order logic for his fundamental language and there are no risks of opacity in such a language. This means that there is no need, from Lewis's perspective, for an extraordinary interpretation of either the quantification or the modality in order to solve the alleged opacity.

First of all, the quantification in CT (irrespective of whether it is over worlds or parts of them) can be read as ordinary, that is, as varying over extensional entities.

When it comes to modality, however, the matter is a bit more complicated. In one sense, we should say that there is no need for an extraordinary reading of modality, because modality just disappears from the fundamental language. Nonetheless, in another sense, we might say that the Lewisian canonical language provides translation of modal sentences in which the modality is metaphysical in character. In the non-canonical level, indeed, where modality is not analyzed, there is still a need for an extraordinary understanding of modality that is compatible with the language-independent character of the extensional entities over which the quantification over individuals varies. However, it is difficult to say whether such an appeal to an extraordinary reading of the modality is due to the attempt to solve the opacity that might reappear at the non-canonical level. The problem is that, for opacity to be well-defined, we need a clear criterion for what counts as a singular term in the language. And it is not obvious that there is such a criterion for natural languages. However, even though opacity should appear at the non-canonical level, it would turn out to be entirely superficial, that is, it disappears on analysis.8

Thus, it might be said that in the Lewisian fundamental non-opaque language, the modality is analyzed and quantification is understood as ordinary. At the non-canonical level (where, if opacity manifests itself, it is entirely superficial and analyzable), modality is interpreted as metaphysical in character and quantification is still interpreted as ordinary.

# 6. The Lewisian stance towards Aristotelian essentialism (AE)

According to the interpretation I privileged in this paper, Quine predicts that accepting QML in the fundamental notation implies a consequence that, from

<sup>&</sup>lt;sup>8</sup> I will return to this point in Section 6.1.

his point of view, is unacceptable, that is AE. Thus, on this reading, Quine's target is given by those theories that accept QML *in their fundamental notation*.

Let us assume that Quine is right about the consequence of QML. Lewis is said to reject AE. Let us also assume, for the time being, that it is correct to say that Lewis rejects AE (in the next Sections, this claim will be analyzed). Well, Lewis's solution of defending *de re* modality without accepting it in the fundamental notation makes Lewis's stand not susceptible to Quine's predictions. That is, the Lewisian rejection of AE would not be in contrast to the Quinean prediction, since Quine predicted that a defense of AE would have followed from the acceptance of *de re* modality in the canonical language. And Lewis is not committed to *de re* modality in his canonical language.

At any rate, recall the reasons why AE is supposed to stem from the acceptance of QML in the canonical language, according to Quine. The only way to make sense of QML in the canonical language is to treat modal contexts as nonopaque contexts. If such contexts are really referentially transparent, then when it is claimed that a property P is determined to be essential to an object a, if this is true, then P will be determined to be essential to a independently of how we refer to a. Moreover, the referential transparency of modal contexts calls for an extraordinary interpretation of modality, given an ordinary understanding of quantification. That is, modality is understood as metaphysical, non-linguistic in character. Thus, we obtain AE: an ordinary object is claimed to have in itself, regardless of how it is represented, a property necessarily, and the necessity at stake is grounded on the nature of that object, rather than on our ways of referring to it.

Now, CT, as we saw, is fully extensional and, being extensional, is nonopaque. However, Lewis is said not to accept AE. Two requirements have to be met in order to be committed to AE:

- On the one hand, it is required that the modality at stake is metaphysical in character;
- On the other hand, the properties determined to be essential to individuals are required to be independent of how those individuals are represented.

The reason why Lewis is believed to reject AE has nothing to do with the first requirement. Indeed, it was said that, at the canonical level, modality just disappears, while at a reducible level modality should be understood as meta-physical in character. Rather, Lewis is said to reject AE because he seems unable to meet the second requirement. That is, it is said that, for Lewis, individuals have *de re* modal properties according to how they are represented.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> To be precise, and as we will see later in this paper, on Lewis's view, which properties are determined to be essential is a matter of counterparthood given in terms of similarity and, as such, is a contextual matter, which is also determined, to some extent, by the way individuals are represented.

Therefore, Lewis is generally claimed to reject AE: it is said that, even though Lewis accepts metaphysically neutral essentialism, by providing a reductive, non-canonical defense of *de re* modality, he rejects AE.

In the following Sections, I shall claim that AE, as it has been described so far, seems to conflate three different theses that hold at three different levels: semantics; metasemantics; and metaphysics. I believe that, in order to understand Lewis's stance toward AE, we need to maintain a separation between these three different understandings of AE.

## 6.1. Lewis and the semantic understanding of AE

Broadly speaking, semantics is about the semantic values of expressions. Semantically speaking, AE might thus be intended as the thesis that the truthvalues of *de re* modal sentences must be context-independent. That is, AE might be interpreted as a thesis about the semantic constancy of the truth-values of essentialist sentences.

As I mentioned, Lewis rejects such a thesis: according to him, the truthvalues of *de re* modal statements might change according to different contexts. Let us consider sentence type (13):

(13) *a* is essentially human,

for any individual *a*. According to CT, (13) is true iff every relevant counterpart of *a* is human. The general form of the truth-conditions for an essentialist sentence type is thus incomplete: it needs to be completed with the input of a relevant counterpart relation. A counterpart relation between two individuals is any relation of similarity between them; counterparts of *a* are simply those things that are similar in any respect and to any degree to *a*. There is then the further question of which counterparts of *a* are relevant; *b* is a relevant counterpart of *a* iff *b* is similar enough to *a* under relevant respects.

It is a matter of context which respects of similarity are salient and which grades of similarity are enough under such respects. The relevant counterparts of *a* are therefore determined to a large extent by the contexts in which (13) is produced and evaluated. According to Lewis (1979; 1980), the interests and intentions of a speaker and an audience, background information, the standards of precision, the presuppositions, spatiotemporal location of utterances, norms of charitable interpretation, and objective salience are among the contextual factors that help to select the relevant counterparts of individuals. What helps to select the counterparts of individuals that are relevant in a particular context, among other factors, are thus also the ways in which those individuals are conceived or described.

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CT thus gives complete truth-conditions only for specific tokens of (13). In other words, in order to have truth-values for essentialist claims about a, we need to know which of a's counterparts are relevant, and this is determined for the greater part by the contexts in which the essentialist claims are uttered. Accordingly, for Lewis, different tokens of the same sentence type about a might be produced and evaluated in different contexts and, thus, evoke different relevant counterparts of a and have, hence, different truth-values.

Once the reasons why Lewis accepts that there are variations in truth-values across different tokens of the same essentialist sentence type, it is easy to see that he also accepts variations in truth-values across referentially equivalent essentialist sentences: truth-values might be also sensitive to substitution of coreferential expressions. Indeed, it seems evident that different coreferential expressions might evoke different relevant counterparts as well.<sup>10</sup>

Accordingly, if AE is interpreted as the semantic thesis that the truth-values of sentences that attribute essential properties to individuals are context-independent, in one or both of the above senses, then Lewis rejects AE. Therefore, the Lewisian acceptance of the inconstancy of *de re* modal statements might be a reason for thinking that Lewis rejects AE.<sup>11</sup>

### 6.2. Lewis and the metasemantic understanding of AE

AE might be interpreted as compatible with the semantic inconstancy of *de re* modal sentences. Indeed, AE might be understood as the following metasemantic thesis, where metasemantics, broadly, concerns the nature of the facts involved in the selection of the relevant semantic values: granting the semantic inconstancy of a *de re* modal statement A, and given a semantic explanation of such an inconstancy, the facts that are involved in the selection of the semantic values which are relevant to the truth of A in a context are independent of how we represent individuals.

<sup>10</sup> In Section 5.1, I said that, being an extensional language, CT does not manifest referential opacity. Now, I am saying that, by substitution of two coreferential names, the truth-value of the essentialist sentence in which the substitution occurs might change. Note, however, that the reason why the substitution of coreferential names in a sentence can alter the truth-value of that sentence, in Lewis's view, is that different names can evoke different interpretations of the predicate for counterpart relation that emerges when the sentence is analyzed in counterpart theoretic terms. Therefore, if we hold fixed the interpretation of the predicate for the counterpart relation, then the substitution occurs. Therefore, not only, as I previously said, it is difficult to define 'opacity' in a non-fundamental language, and, if there is really opacity at this level, it disappears from the fundamental language. What I am adding now is that it does not even seem appropriate to talk about opacity in this case.

<sup>11</sup> For instance, Paul (2004; 2006) regards Lewis as rejecting AE for precisely this reason.

It was said that, according to Lewis, in order to get the truth-value of an essentialist sentence in a context, we need to know which similarity relations figure in the content of the utterance of that sentence. Therefore, the semantic values that are relevant for the truth of an essentialist sentence A about *a* in a context are the counterpart relations of *a* that figure in the content of the utterance of A in that context.

Thus, AE might be understood as the thesis that no facts about how we represent individuals must be involved in the selection of the similarity relations that figure in the content of an utterance of an essentialist sentence.

Lewis rejects AE under this interpretation. And I think that this is the ordinary reason for regarding Lewis as rejecting AE. The reason for such a rejection is that, in Lewis's view: (a) the relevant counterparts that individuals have are a matter of which similarity relations are salient, (b) salience is a contextual matter, (c) which is also determined, to some extent, as we saw, by the way individuals are represented.

Therefore, according to Lewis, facts about representations are involved, to some extent, in the selection of the relevant counterparts of *a*. Therefore, if AE is interpreted as the metasemantic thesis that no facts about how individuals are represented are involved in the selection of the semantic values that are relevant to the truth of *de re* modal sentences in a context, then it is true that Lewis rejects AE.

At this point, it should be clear that Lewis can be seen as making a point friendly to Quine's take on essentialist matters. Indeed, by virtue of the rejection of both the semantic and the metasemantic readings of AE, it turns out that, for Lewis, different properties might be determined as essential to *a*, according to different contexts and, often, according to different ways of representing *a*. Therefore, in accordance with Quine (1953a), Lewis does not adopt an "invidious attitude" towards the distinction between the properties that deserve to be determined as essential and the ones that are characterized as accidental, namely the attitude the friends of essentialism are guilty of, on Quine's view. Nonetheless, as I am going to argue, Lewis offers a defense of AE, in its metaphysical reading. I will be back on this point when I shall draw the conclusion.

Now, before turning to the metaphysical understanding of AE, I would like to discuss one significant aspect of Lewis's rejection of the metasemantic understanding of AE. One might think that, since Lewis accepts that facts about how we represent *a* are involved, to some extent, in the selection of its relevant counterparts, there is a sense in which Lewis can predict all of *a*'s *de re* modal properties. For instance, a very common way of conceiving or describing Socrates is to represent him as a human being. The selection of the relevant counterparts

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of Socrates might be affected, in some context C, by this way of representing him. It is obvious that, if we represent Socrates as a human being and this way of representing him determines which relevant counterparts he has in C, then in C all the relevant counterparts of Socrates will be human. Thus, since all of Socrates's relevant counterparts in C are human, unsurprisingly, Socrates is determined to be essentially human in C. So, the thought goes, there is a sense in which the Lewisian does not "find out" which *de re* modal properties individuals have. And this seems to be a consequence of the Lewisian rejection of the metasemantic version of AE.

I think that the Lewisian rejection of AE, in its metasemantic sense, does not lead Lewis to accept the epistemic consequence that he is able to predict all the *de re* modal properties of individuals.

It might be the case, for instance, that in some context C' the reason why we select as Socrates's relevant counterparts only human beings is that we represent Socrates as a philosopher (so that all of his counterparts will be philosophers). Let us suppose now that there is some relation of metaphysical grounding between the two properties, such that being a philosopher is grounded, in some sense, in being human. *If* this were the case, it would not depend on our way of representing Socrates, but only on how worlds are made. That is, it is not up to us to establish whether or not a chair might philosophize. So, in C', whether or not Socrates comes out as essentially human is not something that can be predicted: it depends on whether or not being a philosopher is somehow grounded on being a human being. Therefore, in this context, the modal status of the property of being human would be something to 'find out'.

Moreover, even though in C, where Socrates is represented as a human being, there is a sense in which it can be predicted that the property of being human will come out essential to him, still there might be some other properties whose modal status cannot be predicted.

For instance, it might be the case that, by virtue of how worlds are made, all the counterparts we selected in virtue of being human also share with Socrates some properties other than being human. And such properties would be essential to Socrates in addition to the property of being human. However, these hypothesized properties would be something we did not predict. In other words, we selected only those individuals who are human beings; however, since it is, for the most part, an objective fact which properties individuals have in their worlds,<sup>12</sup> we do not know anything about which other properties, if any, all these individuals share with Socrates.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> I will return to this point soon.

<sup>&</sup>lt;sup>13</sup> Besides the trivial essential properties, like being *P* or not-*P*, that all individuals have.

In this respect, let us consider the following example. In the context C, in which we have selected all the counterparts of Socrates by virtue of being human, while we can predict that "being human" will be determined to be essential to Socrates, we do not really know which is the modal status of the property, say, "being non-alien" with respect to Socrates. According to Lewis (1986, 91, 92), alien individuals are: (a) individuals no part of which is a duplicate of any part of this world: (b) individuals who instantiate an alien property; and (c) individuals who do not instantiate any alien properties but, instead, combine in an alien way non-alien properties. Whether there are human counterparts of Socrates who are also aliens, I think, depends mainly on how the worlds are made. Indeed, it can be supposed that there is an individual a who is human (H) and that is also alien: a may combine in an alien way the non-alien properties H and, say, Q; or, maybe, a might have both the property H and an alien property. In these examples, a is human and also alien (according to the Lewisian definitions of "alien individual"). Whether or not such scenarios are possible depends on how worlds are made: it depends on whether or not it is possible to be H, while combining H with O in an alien way, or having H while also possessing an alien property. If these are genuine possibilities, then there are some worlds in which such possibilities are realized. However, from the fact that all of Socrates's counterparts are human, it cannot be predicted whether being non-alien is determined to be an essential or an accidental property of Socrates. Therefore, it is not up to us what properties are determined to be essential or accidental to Socrates, even though we rely on our ways of representing him in order to select his relevant counterparts. We only predicted, in this context, that Socrates is essentially human, but we have to "find out" which other properties, if any, Socrates shares with all of his relevant counterparts.

Therefore, the Lewisian rejection of AE, in its metasemantic sense, does not lead to the epistemic consequence that we are able to predict all the *de re* modal properties that Socrates has.

6.3. Lewis and the metaphysical understanding of AE

Metaphysics can be thought to concern the nature of the facts in the world, which are the truth-makers for sentences (the potentially truth-making properties, if we are going in for truth-maker talk). Therefore, metaphysically speaking, AE might be interpreted as the thesis according to which what makes essentialist sentences true are objective facts, independent of how we represent individuals.

It was said that, according to Lewis, an essentialist sentence like (14),

(14) Socrates is essentially human,

is translated in non-modal terms in CT: the translation of (14) in CT does not require one to postulate any primitive modality in the canonical language. Moreover, in Lewis's view, (14), if true, is made true by non-modal facts. Its truth, indeed, does not require the postulation of any metaphysical primitive modality either: (14), if true, is made true by the non-modal fact that Socrates shares the property of being human with all his relevant counterparts. That is to say, Lewis does not accept any essentialist primitives in his metaphysics either. So, in Lewis's view, *de re* modal facts are reduced to non-modal facts.

Given this, the thesis I want to defend in this Section is that such non-modal facts, which *de re* modal facts are reduced to, are independent of how individuals are represented. That is, granted that essentialist sentences about Socrates are not made true by modal facts, I want to show that they are made true independently of how we represent Socrates. In other words, I want to show that Lewis accepts AE, in its metaphysical understanding.

We saw that the relevance of some counterpart relation is always a contextual matter, sometimes influenced by our way of representing the individuals. However, what ultimately makes essentialist sentences true are facts that are independent of our ways of representing individuals. Let us consider two aspects.

Firstly, the obtaining of some counterpart relation is a matter that is independent of how we represent individuals. As Divers puts it, "[...] *what may change* [...] *are facts about which counterpart relations are relevant in a context, not the facts about the obtaining or otherwise of counterpart relations*" (2007, 18). Individuals have different relevant counterparts according to different contexts and so, sometimes, according to different ways of being represented. However, the obtaining of some counterpart relation is context-independent and, mainly, independent of our ways of representing those individuals. Let us see why that should be the case.

We know that counterparthood is a relation of similarity among individuals. Whether some similarity relation is relevant or not is a contextual matter that, sometimes, depends on how we represent individuals. Nonetheless, a similarity relation between individuals obtains independently of the ways in which those individuals are conceived or described. Indeed, similarity is defined in terms of properties sharing. The fact that two individuals have some properties in common, that they are similar in some way, does not depend, in general, on our ways of conceiving or describing them.<sup>14</sup>

<sup>14</sup> To be sure, in some special (maybe uninteresting) cases, the fact that two individuals share a property *does* depend on how they are represented. For instance, two individuals can be similar because they both have the property of being thought of by me or of being imagined by me, and so on. My arguments in this paper do not hold when the similarity relations are based on the sharing of these kinds of properties.

Secondly, it is not only that the obtaining of some counterpart relation is independent of how we represent individuals. Moreover, the fact that there are some properties that, say, Socrates shares with all his relevant counterparts is independent of how we represent Socrates. Indeed, which properties objects have in their worlds is, for the most part, a matter independent of how we represent them: it depends on how worlds are made.

Now, what is shown by the two points just made is that an essentialist sentence such as (14) is made true by facts in the worlds which are independent of how we represent Socrates. Indeed, we know that what would make sentence (14) true is the fact that all the relevant counterparts of Socrates are human. Let us suppose that in a context C Socrates's relevant counterparts are Socrates, *a* and *b*. Well, if (14) is true in C, this is the case by virtue of objective facts:

- objective facts of similarity, that is, facts of similarity that obtain independently of how Socrates is represented: it is an objective fact if Socrates, *a* and *b* are counterparts of Socrates, since it is an objective fact if they are similar to Socrates under some respects, being an objective fact if they share some properties with Socrates.
- the objective fact that objects have the properties they have: the fact that Socrates, *a* and *b* are human does not depend on our way of representing those individuals; that is, the fact they are all similar to Socrates because they are all human is an objective fact.

Therefore, essentialist sentences such as (14) are made true by (non-modal) facts, which are independent of how the individuals are represented.

Accordingly, Lewis accepts AE in its metaphysical interpretation.<sup>15</sup> And I think that this should not be underestimated when we attempt to understand Lewis's stance toward AE. Indeed, the point about AE, broadly understood, is to forbid context-dependence and, in particular, dependence on our ways of representing individuals whenever such dependences stem from attributions of essentiality. However, it has been shown that, in Lewis's view, the role of context is limited to semantics and metasemantics, and the role of facts about

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<sup>&</sup>lt;sup>15</sup> I have largely stressed, from the outset of the paper, that Lewis rejects the thesis according to which things have essential properties in themselves. However, based on the discussion of this Section, we can say that the properties that are determined to be essential are grounded on the nature of their bearers. Now, we know that, on Lewis's view, metaphysics must be accommodated in order to provide for truth-conditions of essentialist sentences to be satisfied, by adding a plurality of worlds, with all the commitments that, metaphysically speaking, this means. As a result, the properties that are determined to be essential are also grounded on the nature of such worlds, inasmuch they are also grounded on how these worlds are made. This might suggest that there is a sense in which Lewis's conception of AE, as it is defended in this paper, is even metaphysically stronger that the one discussed by Quine.

representations is limited to metasemantics. At the level of metaphysics, no facts about how we represent individuals are involved in the attributions of essentiality to some properties of individuals.

Now, Lewis claims that "[t]*he true-hearted essentialist might well think me a false friend, a Quinean sceptic in essentialist's clothing*" (1983, 42). In the light of what has been argued in this paper, I think that one way to understand this statement is as follows. On the one hand, for Lewis, facts about representation are relevant to the assessment of which properties deserve to be determined as essential, so that, as we saw, on his account and in accordance with Quine, we need not adopt some "invidious attitude" towards certain ways of characterizing an object as better revealing its essence. On the other hand, Lewis can still offer a defense of AE, if AE is read from a metaphysically perspective, since these facts about representation are not involved in the attributions of essentiality to some properties of individuals.

Note also that the Lewisian defense of AE, in its metaphysical sense, shows that the inconstancy of *de re* modal statements is compatible with the postulation of objective facts in the world that make essentialist sentences true. As Divers puts it: *"There is no need to postulate mind-dependent* [...] *essences in order to account for the inconstancy of de re modal predications and so (to that extent) the spirit of 'Aristotelian essentialism' survives"* (2007, 18-19).

In other words, we saw that the truth-value of sentence (14) ("Socrates is essentially human") might change according to different contexts. However, first, modal facts are reduced to non-modal facts. Second, such non-modal facts which are the truth-makers for (14) in a context C are context-independent and, mainly, independent of how Socrates is represented. Indeed, it is not a matter of context or of how Socrates is represented whether or not Socrates and the individuals that in C are determined to be his relevant counterparts exemplify the property of being human: it depends on how worlds are made. Finally, in C where (14) is true, it would be misleading, as I mentioned in Section 2, to call the property of being human an "essential property" of Socrates, since its exemplification (by Socrates and his relevant counterparts in C) acts as the truth-maker for (14) only in some context. Therefore, the properties picked up in a context by a truth-condition for an essentialist claim, namely the potential truth-making properties, are neither contextually instantiated nor should be called "essential". Simply put, in Lewis's view, there is no need to postulate context-dependent essential properties required for the truth of context-dependent essentialist claims. And, in this sense, AE survives in Lewis's metaphysics.

# 7. Conclusion

Lewis is said to accept metaphysically neutral essentialism, namely, the thesis that some non trivial properties are determined to be essential to some individuals. AE represents a stronger, metaphysically more robust conception of essentialism.

After having distinguished between three ways of understanding AE, and having claimed that Lewis rejects AE, when AE is interpreted either as a semantic or as a metasemantic thesis, I argued that Lewis accepts AE in its metaphysical sense. This is the case because, in Lewis's view, essentialist sentences are made true independently of how individuals are represented. In other words, even though Lewis analyzes essentialist claims as context-dependent, he does not need to postulate context-dependent essential properties. And, it is in this sense that AE survives in Lewis's theory.

# Acknowledgments

I am very grateful to John Divers, Pasquale Frascolla, Giorgio Lando and Daniele Sgaravatti who gave their time to help me improve this work.

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