Modal Fragmentalism

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Penultimate draft. Final version to appear in The Philosophical Quarterly

In this paper I will argue that there is a version of possibilism—inspired by the modal analogue of Kit Fine's fragmentalism—that can be combined with a weakening of actualism. The reasons for analysing this view, which I call Modal Fragmentalism, are twofold. Firstly, it can enrich our understanding of the actualism/possibilism divide, by showing that, at least in principle, the adoption of possibilia does not correspond to an outright rejection of the actualist intuitions. Secondly, and more specifically, it can enrich our understanding of concretism, by proving that, at least in principle, the idea that objects have properties in an absolute manner is compatible with transworld identity.

Keywords: fragmentalism, actualism, possibilism, concretism, quantified modal logic.

I Introduction

Fragmentalism is a non-standard version of A-theory originally presented by Kit Fine (2005). In the last few years different interpretations and developments of the view have been proposed.¹ In this paper, I'm going to explore and discuss an extension of fragmentalism to modality, which I will call Modal Fragmentalism (section 3). In particular, I will argue that Modal Fragmentalism is a version of concretism (the view that possible worlds are concrete entities) which can be combined with a *weakening* of the idea that everything there is actual. To clearly characterise the view, (i) I will discuss some crucial differences between Lewis's concretism and Modal Fragmentalism (sections 4, 5), and (ii) I will study how the latter reacts to the simplest quantified modal logic (section 6).

Before introducing the view, I would like to stress that in this paper I'm not going to argue *for* Modal Fragmentalism. I will simply try to prove that it is a coherent view which has been so far overlooked. Regardless of the motivations to *adopt* Modal Fragmentalism, there are two reasons why studying it is worth the effort. Firstly, proving that it is a coherent view can enrich our understanding of the actualism/possibilism divide (presented in section 2), by showing that, at least in principle, the adoption of possibilia does not correspond to an outright rejection of the actualist idea that everything which exists is actual. Secondly, but not less importantly, it can enrich our understanding of concretism. As we will see in detail, the Lewisian (1986) version of concretism maintains that, unless objects are world-bound, the idea that they have properties in an absolute manner (i.e. not relative to a world) and the idea that reality does not contain genuine contradictions cannot be held together. As I will argue, Modal Fragmentalism can keep the idea that objects have properties in an absolute manner

¹See for instance Lipman (2015, 2018), Loss (2017), Hofweber and Lange (2017), Simon (2018), and Iaquinto (2019).

while accepting that the same object can be located in more than one possible world. In doing so, it does not force us to accept the idea that reality contains contradictory facts like—say the fact that *Alice is and is not a philosopher*. Let us then start by presenting the actualism vs. possibilism debate and its connections with the simplest quantified modal logic.

2 Actualism, possibilism, and the simplest quantified modal logic

Actualism—in the way I will use the term in this paper—is the thesis that everything there is is actual.² As Linsky and Zalta (1994) point out, the actualist view is constituted by two different theses. According to the first thesis (Thesis I), the quantifier 'there is' should be understood as existentially loaded. It follows that within an actualist framework there is no reason to think of 'there is' as distinct from 'there exists'. In essence, the actualist picture is anti-Meinongian, basically embracing Quine's (1948) reading of quantifiers. Thus, actualism is often formulated as the view that everything which *exists* is actual. According to the second thesis (Thesis II), there are no non-actual objects (Linsky and Zalta 1994: 436). Possibilism, on the contrary, is the view that there are things that are non-actual.³ In other words, it requires an explicit rejection of Thesis II. As we will see in the next few lines, there are versions of possibilism that reject also Thesis I, while other versions accept it.

Notoriously, a good way to frame the differences between actualism and possibilism and to appreciate their metaphysical import is to study how they relate to the simplest quantified

²See, *inter alia*, Linsky and Zalta (1994: 436), Menzel (1990: 355), Adams (1974: 202), Plantinga (1976: 257). ³See for instance Menzel (2008) and Lycan (2002).

modal logic (SQML).⁴ Following Linsky and Zalta (1994), I will treat SQML as the combination of the simplest propositional modal logic K with classical first-order predicate logic, with the addition of the Barcan (1946) formula:

(BF)
$$\Diamond \exists x \varphi \to \exists x \Diamond \varphi$$

Many actualists—who I'm going to label as *standard actualists*—reject SQML. The main reason of this rejection is that SQML validates formulae that are incompatible with some actualist assumptions (Linsky and Zalta 1994: 436-438; see also Williamson 1998: 258). Consider for instance BF. From the premise that it is (metaphysically) possible that I have a sister, it follows by BF that there is an object that possibly is my sister. This is puzzling: I have no sister, so what is the entity that satisfies the property of possibly being my sister? "On the plausible assumption that one's parentage is essential to one" (Williamson 1998: 258),⁵ it is clear that no actual object can bear this property. This is evidence—standard actualists conclude—that BF is false (Linsky and Zalta 1994: 436-437; Williamson 1998: 258). Hence, whoever wants to adopt a possible world semantics within an actualist framework should give up SQML in favour of a semantics in which BF is invalid (Linsky and Zalta 1994: 437). The possibilist can easily avoid this metaphysical conundrum. As underlined by Linsky and Zalta, she might drop the assumption that 'there is' is existentially loaded (that is, she might reject Thesis I),

⁴Throughout this paper, I will assume no more than a minimal acquaintance with modal logic, setting aside all the unnecessary technicalities. For the formal details, the reader can refer to Linsky and Zalta (1994: 433-435).

⁵For a defence of origin essentialism see Kripke (1980), Salmon (1981), and Forbes (1985).

by introducing in her language an existence predicate such that it cannot be defined by using the quantifier 'there is'. This would allow her to say that by BF all that follows is that there is an object that possibly is my sister. In contrast to the actualist, nothing compels her to claim that this object also exists (Linsky and Zalta 1994: 435, 437).

Further worries arise in analysing the theorem:

(NE)
$$\forall x \Box \exists y \ y = x$$

Assuming that the quantifier 'there is' is existentially loaded, the formula says that for any object x, x necessarily exists: a striking conclusion, for it seems plausible that there are objects that exist contingently (Linsky and Zalta 1994: 437-438). Again, when it comes to offer a reading consistent with SQML, the possibilist seems to be in a better position than the actualist. Taking 'there is' to be existentially unloaded, she might read NE as simply saying that for all x, necessarily there is x. There is no reason why she should maintain that everything necessarily exists (Linsky and Zalta 1994: 435, 437). Thus, within the possibilist framework NE proves to be innocuous.

Here is another theorem of SQML:⁶

 $(BC) \quad \Box \forall x \varphi \to \forall x \Box \varphi$

NE is directly entailed by BC (Linsky and Zalta 1994: 437), so that in evaluating the latter the actualist is bound to face—once again—the problems just described in presenting the former.⁷

⁶BC (Barcan's Corverse) is the converse of this formula: $\forall x \Box \varphi \rightarrow \Box \forall x \varphi$, which is equivalent to BF. ⁷See also Williamson (1998: 258).

The possibilist—once again—has the resources to preserve BC, by assuming that objects can bear properties also in worlds in which they do not satisfy the existence predicate. Thus, BC will simply state that, if necessarily every object satisfies a given property, then every object necessarily satisfies that property (p. 435). In the light of the possibilist reading, 'every object' does not refer to everything which exists, but simply to everything there is.

Note that the possibilist has the resources to evaluate BF, NE, and BC as true even if—in accordance with one of the core ideas of actualism—she interprets 'there is' as existentially *loaded* (so endorsing Thesis I). Indeed, she might enrich the inventory of the world with *possible* objects, in addition to the actual ones (p. 435). In the light of the resulting view, which we can call *ontic possibilism*, it follows by BF that there is a possible (non-actual) object bearing the property of being my sister. In evaluating NE, the possibilist will opt for the reading according to which every object necessarily exists, instead of the reading according to which every object is necessarily actual. Thus, the fact that BC entails NE does not raise any concern. And BC can be read as allowing things to bear properties in possible worlds in which they are non-actual objects (p. 436).

While standard actualists usually reject SQML, attributing to it the unpalatable consequences just described, other philosophers—who I will call *non-standard actualists*—try to reconcile it with actualism. Roughly speaking, the move at the root of non-standard actualism is to enrich the ontology with actually existing entities able to play the same role played by non-actual entities in the possibilist interpretation of modal semantics. In particular, Linsky and Zalta (1994, 1996) and Williamson (1998, 2000b, 2013) reject the idea that concrete things are essentially concrete, so allowing for *contingently nonconcrete* entities. In Linsky and Zalta (1994: 432)'s words:

The abstract/concrete distinction is mistakenly seen as an absolute difference in the nature of objects. Thus, abstract objects are thought to be essentially abstract, and concreteness is thought to be part of the nature of concrete objects, something they couldn't fail to have (whenever they exist). We question these ideas by motivating and introducing what might be called 'contingently nonconcrete objects'. Contingently nonconcrete objects exist and are actual, and they shall replace 'possibilia'.

By inflating their ontology with contingently nonconcrete entities, non-standard actualists would have the resources to embrace the truth-conditions of modal formulae offered by SQML without appealing to non-actual entities.

Enriching the actualist ontology with entities that are by some means able to replace possibilia seems to be the only way to reconcile actualism and SQML. It may be that introducing contingently nonconcrete entities is not the only viable option. One might try to achieve a similar result by replacing possibilia with Plantinga (1974)'s abstract individualities (or noninstantiated haecceities).⁸ At any rate, an outright rejection of the idea that there are nonactual objects seems to require the inflation of the actualist inventory of the world, as far as

⁸Even though Plantinga (1976: 156-157) prefers a variable domain semantics that invalidates BF.

one is interested in keeping SQML. It seems also clear that allowing for possibilia is tantamount to rejecting actualism, at least as the latter has been so far described. That said, I will now argue that Modal Fragmentalism is able to *partially* vindicate the idea that everything there is is actual, since, as I repeat, it incorporates a weakening of actualism. Let us then analyse the view starting with a discussion of Kit Fine's fragmentalism.

3 Fragmentalism and modality

Standard tense realism is the view that irreducibly tensed facts, such as the fact that *Tim is sitting*, constitute a coherent reality in an absolute sense. Turning to a slightly more precise framework, I will follow Fine (2005: 270-272, 2006: 399-400) in treating standard tense realism as the conjunction of the following three theses:

- *Realism* Reality is constituted (at least, in part) by tensed facts.
- *Absolutism* The constitution of reality is an absolute matter, i.e. not relative to a time or other form of temporal standpoint.

Coherence Reality is not contradictory; it is not constituted by facts with incompatible content.

For reasons that here we can safely ignore, standard tense realism is incompatible with the following claim:

Neutrality No time is privileged; the facts that constitute reality are not oriented towards one time as opposed to another.⁹

⁹As Fine (2005: 272, 2006: 400) argues, the conjunction of standard tense realism and Neutrality leads to a

Fragmentalism is the non-standard version of tense realism that embraces both Absolutism and Neutrality while rejecting Coherence (Fine 2005: 280). In describing time, the fragmentalist gives up the assumption that reality is "of a piece". Namely, she maintains that it is divided up into maximally coherent collections of tensed facts, called fragments.¹⁰ All the moments of time are then reframed as fragments (Fine 2005: 308-310). While each fragment is taken to be internally coherent, the whole of reality is not. Now, there are different ways to articulate such a view.¹¹ In what follows, I will treat *obtainment* and *constitution* as two equally *fundamental* notions, while upholding Fine's idea that fragments are maximally coherent collections of tensed facts.¹² Within a standard framework, the two notions are intimately connected. In particular, the standard tense realist is willing to subscribe to the following principle:

(P) A tensed fact f obtains if and only if f constitutes reality.

In my view, the fragmentalist rejects (P). She accepts that a tensed fact obtains only if it conversion of McTaggart's (1908) Paradox.

¹⁰Properly speaking, the fragmentalist is not bound to adopt an ontology of facts. The "fact-talk" I'm endorsing here can easily be replaced by a language that exploits Fine's 'in reality' sentential operator; see Fine (2005: 268).

"Interesting proposals can be found in Lipman (2015), who exploits a primitive notion of *coherence*, and in Loss (2017), who interprets fragmentalism as a form of *subvaluationism*. For an intriguing taxonomy of the fragmentalist approaches, based on "how much incompatibility the fragmentalist thinks we can live with, [...] how "jagged" one's fragmentalism is", see Simon (2018).

¹²This approach has been firstly presented in Iaquinto (2019) and then further developed in Torrengo and Iaquinto (2019).

stitutes reality. Still, if a tensed fact constitutes reality, it is not trivial at all that the fact also obtains. This idea can be easily conjoined with both the assumption that tensed facts constitute reality in an absolute manner (viz., with the adoption of Absolutism) and the assumption that reality is incoherent (viz., with the rejection of Coherence): reality is constituted, in an absolute manner, by irreducibly incompatible facts, even though such facts can never obtain within the same fragment.¹³ To put it another way, while for the standard tense realist obtainment in the present is obtainment *simpliciter*, for the fragmentalist there is no obtainment simpliciter, but only *within a fragment*; yet, constitution is understood as absolute.

The fragmentalist treats the notion of constitution as quite similar to the generic notion that the standard tense realist has in mind when thinking of constitution, in that she maintains that when a tensed fact constitutes reality, the fact is real in an absolute manner. If the fact that *Tim is sitting* constitutes reality, then the fact that *Tim is sitting* is real absolutely speaking. The fragmentalist notion of obtainment, on the contrary, sounds quite exotic. So now the crucial question is: what exactly is it for a tensed fact to obtain within a fragment, as opposed to simply constitute reality?¹⁴ The thesis that a tensed fact obtains only within a fragment can be linked with the idea that when a fact obtains, the fact exists *relative to* a given fragment.¹⁵ If the fact that *Tim is sitting* obtains within a fragment, then the fact that *Tim is sitting* exists

¹³Cf. Fine (2005: 281).

¹⁴I would like to thank an anonymous referee for pushing me to answer this question.

¹⁵The close connection between obtainment and existence is attested in the literature. As Mulligan and Correia (2017) put it: "If a state of affairs obtains, then an obtaining state of affairs exists, a fact exists".

relative to that fragment. Notice that this latter claim should not be confused with the truism that if the fact obtains within the fragment, then it is part of (or belongs to) the fragment. The idea is that its very *existence* is limited to that fragment. This means that there can be fragments relative to which the fact literally lacks existence. There are then two principles the fragmentalist can adopt to articulate her conception of constitution and obtainment:

Constitution If a tensed fact f constitutes reality, then f is real.

Obtainment If a tensed fact f obtains within a fragment F, then f exists relative to F.¹⁶

Generally speaking, taking two notions to be equally fundamental does not prevent one from treating them as interdefinable. For instance, one can treat necessity and possibility as interdefinable (in the presence of negation) without being forced to maintain that, from a metaphysical point of view, one of the two notions is more fundamental that the other. Analogously, the fragmentalist might want to define, for the sake of theoretical simplicity, constitution as obtainment within some fragment or obtainment as constitution in a given fragment, without contradicting the assumption that the two notions are equally fundamental.¹⁷

¹⁶The fact that the notion of being real and the notion of existence relative to a fragment are taken to be two conceptually necessary conditions, respectively, of constitution and obtainment does not force the fragmentalist to say that they are also part of an *analysis* of the notion of constitution and of the notion of obtainment. In other words, it is compatible with the idea that constitution and obtainment are two fundamental notions. For a defence of an analogous line of though, applied to the relation between knowledge and belief, see Williamson (2000a: 43-44).

¹⁷I wish to thank another anonymous referee for raising this point.

Now, suppose that Tim is sitting and then standing. The fragmentalist will describe such a case by resorting to two different fragments, one in which the fact that *Tim is sitting* obtains, and another one in which the fact that *Tim is standing* obtains. The fact that *Tim is sitting* and the fact that *Tim is standing* constitute reality in an absolute sense, and so absolutely speaking they are equally real. But there is no fragment in which they obtain *together*, and so there is no fragment relative to which they both exist. This means that the contradictory fact that *Tim is sitting and standing* cannot obtain. Nor can it constitute reality. If a tensed fact is real, then there must be at least one fragment relative to which the fact exists. Otherwise, we would end up with a metaphysics where the fact—say—that Tim is sitting exists relative to no fragment but nonetheless is real: an unpalatable scenario, for it is hard to see how Tim can be sitting if there is no moment of time where he is so. It follows that the contradictory fact that *Tim is sitting and standing* cannot be real, since there is no fragment relative to which it can exist. This is a crucial aspect of the fragmentalist picture: the rejection of Coherence should not be understood as an invitation to accept contradictory facts (Fine 2005: 282). Given that reality cannot contain the contradictory fact that *Tim is sitting and standing*, there is no fact on which the truth of a contradictory claim like 'Tim is both sitting and standing' can supervene. This means that from a semantic point of view, the truth of two claims might not be enough to conclude that their conjunction is true as well.

To sum up, while the standard tense realist is allowed to treat constitution and obtainment as interchangeable notions, the fragmentalist adopts a more refined stance. For sure within the fragmentalist framework the relationship between the two notions is still close. As I repeat, if a tensed fact obtains, then it also constitutes reality. And if it constitutes reality, then there must be at least one fragment where it obtains. But since obtainment is never thought of as obtainment simpliciter (but rather as limited to a given fragment), constitution is not enough to guarantee the obtainment of a tensed fact in every fragment.

One might object that the idea that facts are absolutely real contradicts the claim that their existence is to be relativised to moments of time. My answer is that the interpretation of fragmentalism I'm proposing here should be understood as a form of metaphysical pluralism, that is, as a theory according to which there are two equally fundamental ways to describe reality. When it comes to tell what facts constitute reality, the fragmentalist focuses on the first of the two ways. When it comes to tell what facts obtain, instead, she focuses on the second one. This squares nicely with Fine's idea that within a fragmentalist framework, "in stating that a fact belongs to reality, we adopt *a general perspective*, but in stating that a fact obtains, we adopt *the current perspective*" (Fine 2005: 297, italics mine). The fragmentalist will think of these perspectives—so to say—as carving at the joints, as marking two metaphysically fundamental features of the temporal dimension: the absolute constitution of tensed facts and their limited obtainment. From the general perspective—the perspective centred on the temporal dimension as a whole—the fragmentalist will assess what facts constitute reality. From the current perspective centred on a given fragment—she will assess what facts obtain. Of course, these perspectives offer two profoundly different descriptions

of reality, so different that one might suspect that the perspective-talk is at risk of collapsing into a contradictory talk. But it should be clear that the fragmentalist can never adopt the two perspectives *at the same time*: either she focuses on the notion of constitution or she focuses on the notion of obtainment, *tertium non datur*. Thus, there is no way to end up with a description of reality where, at the same time, Tim's being sitting exists and does not exist. All she can say is that, from the current perspective, the fact that *Tim is sitting* can lack existence depending on the fragment we adopt, whereas from the general perspective it constitutes reality absolutely speaking.

Although Fine's theory rises in the context of the metaphysics of time, the fragmentalist approach can be extended to the treatment of modality. An extension of the view to the modal case has been briefly mentioned by Fine. However, the idea is not discussed in detail. As he underlines, both in the temporal case and in the modal one "we have... a certain aspectual feature...[—respectively, the tensed nature of facts and their being worldly (or contingent)—] and an associated form of relativity" (2005: 284-285)—the relativity being, respectively, to a time and to a world. By exploiting the analogy between times and worlds, we can reinterpret Realism, Absolutism, and Neutrality as follows (p. 285; Coherence will be left untouched):¹⁸

Worldly Realism	Reality is composed of worldly facts.
Worldly Absolutism	The constitution of reality is an absolute matter, i.e. not relative to a world.
Worldly Neutrality	No possible world is privileged, i.e. the facts that constitute reality are not

¹⁸See also Fine (2006: 400).

oriented towards one possible world as opposed to another.

We can now give the modal analogue of the standard tense realism vs. non-standard tense realism debate. As Fine (2005: 285) has it:

The standard realist will claim that there is a privileged world, namely the actual world, while the non-standard realist will treat all worlds on an ontological par (but still hold to the reality of worldly facts).

Call *Modal Fragmentalism* the non-standard realist view that rejects Coherence, while maintaining both Worldly Absolutism and Worldly Neutrality. The metaphysical picture is that the modal dimension is not "of a whole", but rather it is fragmented into maximally coherent collections of worldly facts—call them modal fragments. All the modal fragments are ontologically on a par. Given that here modal fragments are defined as collections of worldly facts and that many (if not all) of these facts have concrete entities as constituents, the fragmentalist will take each modal fragment to be as concrete as the one we inhabit. Modal Fragmentalism might prima facie recall Lewis's (1986) concretism. In fact, the two theories bear similarities, if only because both possible worlds and modal fragments are treated as concrete entities. However, there are (at least) two crucial differences.

4 Constitution and obtainment in the modal case

The first difference is that, just as the fragmentalist distinguishes between obtainment and constitution in describing time, the modal fragmentalist adopts an analogous distinction in

describing the modal dimension. She links the notion of constitution to the notion of being real, while treating obtainment as linked to the notion of existence relative to a modal fragment. Thus, she endorses the following modal versions of Constitution and Obtainment: *Modal constitution* If a worldly fact f constitutes reality, then f is real.

Modal obtainment If a worldly fact f obtains within a modal fragment F, then f exists relative to F. Although both the modal fragmentalist and the Lewisian concretist think of constitution as an *absolute* matter, for the latter facts obtain *simpliciter*, while for the former they obtain only *within a given modal fragment*. Facts that obtain within modal fragments different from the one we inhabit constitute reality in the same sense as facts that obtain in our modal fragment, that is, absolutely. However, within each modal fragment not all such facts obtain. This means that not all facts that constitute reality obtain in all the modal fragments. The Lewisian concretist, on the contrary, has no reason whatsoever to deny that if a fact constitutes reality then it also obtains *simpliciter*. To be clear about this point, consider the following version of the principle (P):

 (P^*) A fact f obtains if and only if f constitutes reality.

For the Lewisian concretist, the left-to-right reading of (P^*) is a metaphysical triviality: how can a fact obtain without ipso facto constituting reality? Also the modal fragmentalist is happy to accept the idea that constitution is a necessary condition for obtainment, provided that we read 'obtains' as 'obtains within a given fragment'. According to the Lewisian concretist, the right-to-left reading of (P^*) is fine as well: if a fact constitutes reality, then it also obtains. Consider for instance the fact that there are talking donkeys. Of course, the latter are not spatiotemporally related to the world we inhabit.¹⁹ But being spatiotemporally related to a world and being the constituent of an obtaining fact are two notions that should not be conflated, not even in the Lewisian framework. Even though talking donkeys are not part of the maximal connected object that we call our world, nothing prevents facts about their being spatiotemporally related to another world from obtaining in our world. To put it another way, the fact that talking donkeys are spatiotemporally unrelated to us should not be equated with the fact that they do not exist. All the Lewisian concretist can say is simply that, as a matter of fact, they are not part of our world, and not that they are not part of reality altogether.

In contrast to the Lewisian concretist, the modal fragmentalist will claim that when it comes to tell what facts *obtain*, it is correct to say that there is no non-actual entity "out there". There is no possible object located in a different modal region, since no worldly fact about its existence can obtain within our modal fragment. This is so because when it comes to focus on the facts that obtain (and not on the facts that constitute reality), she takes facts about the existence of a given object as irreducibly relative to the modal fragment it belongs to. Just as in the temporal case, the modal fragmentalist can adopt a form of "perspective"-talk. In stating that there are no possibilia, she adopts the current perspective—the perspective centred on the modal fragment we inhabit. This is the sense in which the quantifier 'there is' is employed in the above sentence 'there is no possible object located in a different modal region'. In stating that the objects located in all the other modal fragments constitute reality in an absolute

¹⁹More details on the role that spatiotemporal relations play in Lewis's conception of possible worlds can be found in Menzel (2017, § 2.1).

manner, instead, she adopts the general perspective—the perspective centred on the modal dimension.²⁰ For this reason, also the modal version of fragmentalism can be regarded as a pluralist metaphysics. From the general perspective, worldly facts about talking donkeys constitute reality in an absolute manner, and yet no fact about talking donkeys can obtain from the current perspective. For the same reasons discussed in the temporal case, although the descriptions of reality enabled by the two perspectives are profoundly different, there is no way to get a contradictory description of what there is: the two perspectives are never adopted *at the same time*.

Not only is it the case that the description of reality cannot be incoherent, it is also the case that reality itself does not contain contradictory facts, like the fact that *there are and there are not talking donkeys*. The modal dimension contains both modal fragments where the fact that *there are talking donkeys* obtain and modal fragments where the fact that *there are no talking donkeys* obtain.²¹ Since a fact obtains only if it constitutes reality, it follows that both the fact that *there are talking donkeys* and the fact that *there are not talking donkeys* costitute reality. And given Worldly Absolutism, they do so absolutely speaking. This is the sense in which Modal Fragmentalism rejects Coherence. But notice that there is no modal fragment is

²⁰A somehow similar distinction between the perspective centred on a world and the perspective centred on the modal dimension can be found in Solomyak (2013: 33-40).

²¹The expression 'the fact that *there are no talking donkeys*' should not be read as suggesting an ontological commitment toward negative facts.

internally coherent). Given that no fact can constitute reality without obtaining in at least one modal fragment, the fact that *there are and there are not talking donkeys* does not constitute reality. I will return on this point in section 5.

As anticipated in section 1, this first difference between the modal fragmentalist and the Lewisian concretist is particularly interesting in that it shows that the adoption of possibilia is not tantamount, per se, to completely rejecting the actualist intuition that if an object is not actual, then it lacks existence. The modal fragmentalist can at least partially vindicate it by insisting that within each fragment an actualist ontology holds. For the reasons just described, within her pluralist metaphysics the assumption that modal fragments constitute reality in an absolute manner does not conflict with the idea that, from the current perspective, everything there is is actual. In section 1 I pointed out that actualism can be regarded as composed by the following two theses: (I) the quantifier 'there is' is existentially loaded and (II) no non-actual objects exist. In the same spirit, Modal Fragmentalism maintains that, when the perspective is centred on the modal fragment we inhabit, the thesis that everything there is is actual should be understood as the claim that everything which exists is actual. Given a modal fragment F, although from the general perspective the objects belonging to all the other modal fragments constitute reality in an absolute sense, from the current perspective they simply do not exist in F, since facts about their existence cannot obtain. It follows that from the current perspective it does not make sense to claim that there are non-actual objects: if an object is not actual, then it does not exist.

Thus, the fragmentalist approach can partially vindicate actualism in a way that is simply unavailable to the Lewisian concretist. The latter works under the hypothesis that all facts obtain simpliciter and hence within every world; no distinction between being absolutely real and existing relative to a world is needed. Within her framework no *fundamental* current perspective can be employed to argue that, in a metaphysically robust sense, objects that are non-actual literally lack existence. The modal fragmentalist, on the contrary, opts for the idea that not every fact constituting reality obtains in every modal fragment. It is the notion of relative existence, which Modal Fragmentalism links to the notion of obtainment, that allows the fragmentalist to offer a way to account for reality profoundly different from but no less fundamental than the way offered by the adoption of the general perspective. Even if facts about talking donkeys are absolutely real when assessed from the general perspective, from the current one they literally lack existence relative to our modal fragment. I will return on this point in section 6, where I will discuss how Modal Fragmentalism behaves with respect to SQML.

One might wonder whether the fragmentalist perspective-talk is nothing but a variant of Lewis's double talk between what there is and what is actual (in the merely indexical sense of the term). I grant that there is a certain resemblance between the two things. As a matter of fact, the objects that are actual from the current perspective are the same as the objects that Lewis takes to be actual in the indexical sense. But it should now be clear that there is an important difference. For the Lewisian concretist, saying that an object is (indexically) actual is

tantamount to saying that the object is one of our worldmates, viz., that it is spatiotemporally related to us. For the modal fragmentalist, instead, saying that an object is actual is tantamount to saying that facts about its existence obtain within our modal fragment. As I stressed above, spatiotemporal relatedness and obtainment are notions that the Lewisian concretist should keep distinct. Of course, there is a sense in which, by way of quantifier restriction, the Lewisian concretist can account for ordinary claims like: 'Talking donkeys do not exist'. But when it comes to offer a metaphysically perspicuous reading of these claims, the Lewisian concretist and the modal fragmentalist take separate paths. From the current perspective, the modal fragmentalist reads the claim as *literally* true: talking donkeys are not part of reality; neither they are spatiotemporally related to us nor they exist relative to our modal fragment. The Lewisian concretist, instead, will offer a rephrasing of this type: 'Talking donkeys are not part of our world', from which one is not allowed to infer that talking donkeys lack existence. The only way the modal fragmentalist can offer a similar rephrasing is by equipping herself with a restricted notion of constitution which mimics that of indexical actuality by ranging only over facts that constitute reality locally, that is, by being part of our modal fragment. From this restricted general perspective, as we can call it, the claim 'Talking donkeys do not exist' can be finally read as 'Talking donkeys are not the constituents of facts that constitute reality locally', from which, in a Lewisian fashion, it does not follow that reality contains no facts at all about talking donkeys. The perspective-talk is introduced to make sense of the pluralist assumption that obtainment and constitution are two distinct and equally fundamental notions, while nothing similar can be said about the canonical double talk between what there is and what is (indexically) actual.

5 Counterpart theory and transworld identity

Let us now present a second crucial difference between the modal fragmentalist and the Lewisian concretist. Notoriously, Lewis's concretism is bound to adopt the so-called counterpart theory (1986, Ch. 4). The latter posits that objects are world-bound: their existence is limited to the world of which they are part.²² World-boundedness is required to maintain both the idea that objects have properties in an absolute manner (i.e. not relative to a world) and the idea that reality does not contain contradictory facts, for example the fact that *Alice is and is not a philosopher*. Suppose that Alice is a philosopher in our world. Under the reasonable hypothesis that Alice does not essentially have the property of being a philosopher, there is at least one world w in which a counterpart of Alice is not a philosopher in w? It is tempting to say that Alice has the property of being a philosopher relative to w. But the Lewisian concretist cannot opt for this move, for she maintains that the fact that *Alice is a philosopher* constitutes reality in an absolute manner, not relative to a given world. Thus, she resorts to Alice's counterparts in order to avoid the unwelcome conclusion that Alice—absolutely speaking—both has and does not have the property of being a

²²This does not mean that their existence is *relative* to worlds.

philosopher. She will say that whilst Alice is a philosopher, one of her counterparts is not.

In contrast to the Lewisian concretist, the modal fragmentalist drops Coherence; this means that she admits that both the fact that Alice is a philosopher and the fact that Alice *is not a philosopher* can constitute reality.²³ Since the two facts are part of two different modal fragments and they share Alice as their constituent, the modal fragmentalist will think of Alice as located in more than one modal fragment. Given Worldly Absolutism, the two facts constitute reality in an absolute sense. It is thus natural to assume, in line with the Lewisian concretist, that Alice bears properties in an absolute manner. But, in contrast to what would happen in the Lewisian framework, this is not enough to conclude that reality contains the fact that *Alice is and is not a philosopher*. Since the modal fragmentalist takes obtainment to be always limited to a given modal fragment, in allowing Alice to inhabit more than one modal fragment she is not forced to say that the fact that *Alice is a philosopher* and the fact that Alice is not a philosopher obtain together. From the current perspective, no fact like Alice is and is not a philosopher can be found. And given that, as seen above, a fact can constitute reality only if there is at least one modal fragment where it obtains, nor is she forced to admit that the fact can ultimately be found at the level of the general perspective. If a fact is real, then there must be a modal fragment relative to which the fact exists. Otherwise, in analogy to the temporal case, we would be forced to say that a worldly fact can be real even if it exists relative to no modal fragment. If Alice is a philosopher at all, she surely is so in at least one

²³Once again, please do not read expressions like 'the fact that *Alice is not a philosopher*' as suggesting an ontological commitment toward negative facts.

modal fragment. Thus, if the fact that *Alice is and is not a philosopher* were real, there should be a modal fragment relative to which it exists. But that cannot be the case, since all modal fragments are taken to be internally coherent.

Let me underline, once again, that here I'm not arguing *for* a theory that favours transworld identity to the disadvantage of the idea that reality does not contain incompatible contents. The idea that objects can be literally present at more than one possible world is an extremely complex topic, and it is still an open question whether it should be preferred to counterpart theory. Rather, my point is that the fragmentalist view is remarkable in that it shows, surprisingly enough, that the idea that objects have properties in an absolute sense does not necessarily require counterpart theory. At least in principle, one might maintain that there can be transworld identity between objects that bear properties in an absolute manner without being forced to admit contradictory facts, like the fact that *Alice is and is not a philosopher*.

There is another important lesson one can draw from the fragmentalist adoption of transworld identity. From a semantic point of view, Lewis's counterpart theory is incompatible with the idea that proper names are rigid designators,²⁴ that is, with the Kripkean (1980) tenet that an expression like 'Alice' picks out the *same* individual in all the possible worlds where Alice exists. According to Lewis (1986: 256) an expression like 'Alice' is at most a "quasi-rigid designator", in the sense that in any possible world containing a counterpart of Alice, the expression designates a *counterpart* of Alice, not Alice herself. It is then interesting to note

²⁴See Sullivan (2005) for a thorough discussion of this point.

that one can maintain that objects have properties in an absolute manner without opting for the quasi-rigidity of proper names. By dropping world-boundedness in favour of transworld identity, the modal fragmentalist has the resources to preserve Kripke (1980)'s semantic intuitions. Alice is literally located in more than one modal fragment, so the fact that 'Alice' proves to be rigid is nothing but a welcome conclusion.

6 Modal Fragmentalism and SQML

Further differences and analogies between Modal Fragmentalism and the other positions presented in this paper can be highlighted by discussing how the former reacts to the adoption of SQML.²⁵ As we saw in section 4, from the current perspective there is no non-actual object. This means that from the current perspective there is no entity able to provide a supervenience base for the truth of BF, NE, and BC. The fact that the latter do not hold from any current perspective is an important feature of Modal Fragmentalism, a feature that allows it to meet the desideratum of partially vindicating actualism. To put it differently, the fact that from the current perspective the modal fragmentalist lacks the metaphysical resources to account for their truth is exactly what we should expect from a theory able to vindicate, at least in part, the tenet at the root of actualism: from the current perspective, everything which exists is actual. Thus, unless one inflates the inventory of each modal fragment—in the same spirit

²⁵In what follows I will assume that, from a logical point of view, our fragmentalist models fragments in much the way that possible worlds are usually modelled in possible worlds semantics. For a formal presentation of SQML see n. 3.

as non-standard actualism—with surrogates for possibilia, from the current perspective the modal fragmentalist is simply unable to offer an adequate treatment of BF, NE, and BC.

There is, however, a way to account for the truth of these formulae. Remember that the modal fragmentalist can exploit the metaphysical resources offered by her *pluralist* view. The current perspective is only part of the overall metaphysical picture. In evaluating modal claims from the general perspective, she can follow the ontic possibilist (see above, p. 6) in treating modal operators as ranging over possible objects. In other words, in evaluating modal claims from the general perspective, modal operators can be treated as unrestricted quantifiers over possible worlds, in the same way as they are treated by the Lewisian concretist when she does metaphysics.²⁶ From the general perspective, it is perfectly coherent to claim that the truth of BF, NE, and BC supervenes on the facts that constitute reality. The idea that, from the premise that it is possible that I have a sister, it follows by BF that there is an object that possibly is my sister is a welcome conclusion, for reality is indeed constituted—in an absolute manner—by at least one modal fragment containing that object. NE will not be problematic either: in so far as our fragmentalist adopts the general perspective, NE can be read as stating that every object necessarily exists. Analogously, in accounting for the truth of BC our fragmentalist will accept that, from the general perspective, objects can have properties even in modal fragments where they are mere possible things. Sure, in contrast to the Lewisian concretist, at the level of the obtainment our fragmentalist is bound to deny the existence of such things. Still, from

²⁶Cf. Williamson (2013: 16).

the general perspective they do function as a supervenience base for the truth of BC, and this is the reason why the modal fragmentalist is ultimately able to make sense of its adoption.

I would like to underline that a similar strategy can be employed to deal with the case of Alice, discussed in section 5. Exploiting the metaphysical resources offered by the general perspective, the modal fragmentalist can argue that the truth of a claim such as: 'Alice could have lacked the property of being a philosopher' supervenes on the fact that *Alice is a philosopher*, which is part of the modal fragment we inhabit, and the fact that *Alice is not a philosopher*, which is part of at least one modal fragment different from ours.

It is important to underline that, in line with the pluralist assumption that there are two equally fundamental ways to describe reality, BF, NE, and BC are evaluated as true or false either from the current perspective or from the general one. There is no way to evaluate them independently of any perspective. Nor can they be evaluated from more than one perspective at a time. BF, NE, and BC are false from the current perspective and true from the general one. This, however, does not force the modal fragmentalist to conclude that there are true contradictions, since there is no perspective from which BF, NE, and BC can be evaluated as *both* true and false.

7 Conclusion

A more fine-grained taxonomy of the possibilist approaches is now available, based on how one reacts to Thesis I (the quantifier 'there is' should be read as existentially loaded) and Thesis II (there are no non-actual objects). A first option is to reject both of them. A second option, that leads to what we called ontic possibilism, is to reject Thesis II by introducing possible objects, while keeping Thesis I. A third option—the pluralist approach that we labeled Modal Fragmentalism—is to adopt both Thesis I and Thesis II from the current perspective, while maintaining that Thesis II is false from the general perspective. A more fine-grained taxonomy of concretism is now available as well, based on whether one is willing to uphold transworld identity while maintaining that objects have properties in an absolute manner. The Lewisian concretist rejects transworld identity in favour of counterpart theory, while the modal fragmentalist has the metaphysical resources to keep it.

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